# UTAH VALLEY UNIVERSITY

## *GRADUATE & UNDERGRADUATE CATALOG*

UVU

*FALL 2021-SUMMER 2022*

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# Welcome to Utah Valley University!

At UVU we encourage you to come as you are – there is a place for you here. You have a unique story, and your continued development of self, combined with the acquisition and implementation of knowledge, can put you on the path to success — academically, professionally, and personally.

As part of our mission ethos, we are champions of learning by doing. We call it engaged learning. This approach takes the best learning from textbooks, research, and class lectures and combines it with a myriad of opportunities for practical application. Since our founding, we have created connections that help our students expand their horizons and become better prepared to enrich society and the world around them. The world is dynamic, and we believe higher education should reflect that.

Each UVU student, with her or his unique characteristics and background, is important to the whole of the university and plays a crucial role in the vibrancy of our community. I invite you to be actively engaged in your life as students, enjoying the many extracurricular activities and athletic offerings on our campus as you complete your degree. Be assured that the seriousness with which you pursue your studies will be richly complemented and supported by a comprehensive network of invested faculty, staff, and administrators. Together, these women and men will ensure that UVU is a place of exceptional care, exceptional accountability, and exceptional results.

I encourage you to explore the pages of UVU's course catalog. Our wide range of offerings in certificate programs and associate, bachelor, and graduate degrees reflects our approach to higher education. This integrated model of education, combining career and technical education alongside more traditional academic degree programs, produces first-rate scholars and practitioners in highly sought-after fields. No matter your background or interests, there is a place for you at UVU. So, come as you are — bring your dreams.

Go Wolverines!

Best wishes,

Dr. Astrid S. Tuminez

# Academic Calendar 2021-2022

## Fall 2021[(1)]

| | | | |
|---|---|---|---|
| Faculty Return | Monday | August 16 | |
| Classes Begin | Monday | August 23 | Weekend classes begin Fri & Sat, August 27 & 28 |
| Labor Day Holiday | Monday | September 6 | |
| Fall Break Holidays -- Students[(2)] | Thursday - Saturday | October 14 - 16 | |
| First Block Classes End | Tuesday | October 12 | First block finals |
| Second Block Classes Begin | Wednesday | October 13 | |
| Thanksgiving Holidays -- Students[(2)] | Monday - Saturday | November 22 - 27 | |
| Classes End | Thursday | December 9 | Second block finals |
| Final Exam Preparation Day | Friday | December 10 | |
| Final Exams | Monday - Friday | December 13 - 17 | Weekend finals Fri & Sat, December 17 & 18 |
| Fall Semester Ends | Saturday | December 18 | |

## Spring 2022[(1)]

| | | | |
|---|---|---|---|
| Faculty Return | Monday | January 3 | |
| Classes Begin | Monday | January 10 | Weekend classes begin Fri & Sat, January 14 & 15 |
| Martin Luther King Jr. Day Holiday | Monday | January 17 | |
| Washington and Lincoln Day Holiday[(2)] | Monday | February 21 | |
| First Block Classes End | Wednesday | March 2 | First block finals |
| Second Block Classes Begin | Thursday | March 3 | |
| Spring Break Holidays -- Students[(2)] | Monday - Saturday | March 7-12 | |
| Classes End | Wednesday | April 27 | Second block finals |
| Final Exam Preparation Day | Thursday | April 28 | |
| Final Exams | Friday - Thursday | April 29 - May 5 | Weekend finals Fri & Sat, April 19 & 30 |
| Spring Semester Ends | Thursday | May 5 | |
| Commencement | Thursday | May 5 | |
| Convocation | Friday & Saturday | May 6 & 7 | |

## Summer 2022[(1)]

| | | | |
|---|---|---|---|
| Faculty Return | -- | -- | |

| | | | |
|---|---|---|---|
| Classes Begin | Wednesday | May 11 | Weekend classes begin Fri & Sat, May 13 & 14 |
| Memorial Day Holiday | Monday | May 30 | |
| First Block Classes End | Friday | June 24 | First block finals |
| Second Block Classes Begin | Monday | June 27 | |
| Independence Day Holiday | Monday | July 4 | |
| Pioneer Day Holiday | Monday | July 25 | |
| Classes End | Friday | August 12 | Second block finals |
| Final Exam Preparation Day | -- | -- | |
| Final Exams | -- | -- | Weekend finals Fri & Sat, July 15 & 16 |
| Summer Semester Ends | Friday | August 12 | |

***Note:*** *Other calendar options may be available on a limited basis for certain specialized courses.*

| | |
|---|---|
| [(1)] Approvals | Academic Calendar Committee |
| Academic Affairs Council | |
| President's Council | Approved 8/15/19 |
| Notifications | Board of Trustees |
| [(2)] No access to UVU computing resources | Fall Break = Friday 5 pm - Sunday<br>Thanksgiving Holiday = Wednesday 5 pm - Sunday<br>Washington and Lincoln DayHoliday = Friday 5 pm - Monday<br>Spring Break = Thursday 5 pm - Sunday<br>**Calendar questions?** Contact tiffany.evans@uvu.edu<br>**IT questions?** Contact operators@uvu.edu |

# Academic Policies & Standards

## Academic Year

The academic year consists of three semesters: fall, spring, and summer. Fall and spring semesters are each made up of 15 weeks of class work and one week for final exams. The summer semester is 14 weeks in length; most classes are offered in one of two seven-week blocks. The time in classes is adjusted to equal the class time of fall and spring semesters, but there is no final exam period during summer.

## Course Administration

UVU reserves the right to cancel any course at any time. Reasons for course cancellations include, but are not limited to, low enrollment in the course, space unavailability, instructor change, loss of instructor, and/or program changes. Students enrolled in the course will be contacted as soon as possible by the appropriate school or college when the university decides to cancel a course.

## Class Periods/Credits

All credit hours are computed in semester hours. Three hours of work per week are, on average, expected to earn one semester credit hour; however, one credit hour may include any of the following combinations of work:

1. One hour of lecture, plus a minimum of two hours of personal work outside of class, regardless of delivery mode (One hour of lecture is considered to be 50 minutes per week) ;
2. Three hours in a laboratory, internships, practica, studio work, or other academic work, regardless of delivery mode, with additional outside work in preparation and documentation;
3. Any other combination appropriate to a particular course as determined by the academic department.

All transfer courses taken on a quarter system will be converted to semester hours using a three to two credit ratio. For example, a three credit hour course from a quarter calendar institution transfers to UVU as two semester credits.

# Full-time Student Status

## Graduate

UVU considers graduate students registered for 9 credits or more per semester or summer to be full-time graduate students. A 9 credit hour minimum load is generally accepted by sponsoring agencies for certifying full-time status.

## Undergraduate

UVU considers students registered for 12 credits or more per semester or summer to be full-time students. A 12 credit hour minimum load is generally accepted by sponsoring agencies for certifying full-time status. Financial aid recipients receiving full benefits and students on scholarships are required to carry a minimum of 12 credits per semester.

For students attending only the fall and spring semesters, 15 to 18 credits per semester is generally required to complete associate degree programs within two academic years or bachelors degrees within four academic years, assuming all prerequisites are satisfied (See individual major requirements for exceptions).

## Credit Hour Loads in Excess of 20

Students who enroll in 21 or more credit hours in a semester must have approval from the deans of the appropriate schools and/or colleges.

## Year Classifications & Credit Hours

Freshman: 0-29 credit hours

Sophomore: 30-59 credit hours

Junior: 60-89 credit hours

Senior: 90 or more credit hours

# Grading Policies

Grades are determined by instructors, based upon measures determined by the instructor and department and may include: evaluation of responses, written exercises and examinations, performance exercises and examinations, classroom/laboratory contributions, mastery of pertinent skills, etc. The letter grade “A” is an exceptional grade indicating superior achievement; “B” is a grade indicating commendable mastery; “C” indicates satisfactory mastery and is considered an average grade; “D” indicates substandard progress and insufficient evidence of ability to succeed in sequential courses; “E” (failing) indicates inadequate mastery of pertinent skills or repeated absences from class; “UW” indicates unofficial withdrawal from class.

The following table indicates each grade variant and the equivalent grade points for that variation.

| One credit of: | Equals grade points: |
|---|---|
| A | 4.0 |
| A- | 3.7 |
| B+ | 3.4 |
| B | 3.0 |
| B- | 2.7 |
| C+ | 2.4 |
| C | 2.0 |
| C- | 1.7 |
| D+ | 1.4 |
| D | 1.0 |
| D- | 0.7 |
| E | 0.0 |
| UW | 0.0 |

The following grades are not computed in the GPA:

| Letter grade | Grade description |
|---|---|
| W | Official Withdrawal |
| I | Incomplete |

| Letter grade | Grade description |
|---|---|
| AU | Audit |
| CR | Credit Granted |
| NC | No Credit Granted |
| CEU | Noncredit—Continuing Education Unit |
| T | In Progress (Temporary Status) |

The GPA is determined by dividing the total grade points earned (credit hours times grade in points above) by the number of semester hours attempted.

Students may view final grades electronically on the myUVU system after the end of the semester. **All financial obligations to the Institution and "holds" on academic records must be resolved before college transcripts are issued.**

## Incomplete (I) Grades

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the course work because of extenuating circumstances. The term "extenuating circumstances" includes: (1) incapacitating illness which prevents a student from attending classes (usually more than five consecutive class days); (2) a death in the immediate family; (3) change in work schedule as required by employer; or (4) other emergencies deemed acceptable by the instructor.

If circumstances are deemed appropriate, the student may petition the instructor for time beyond the end of the semester to finish the work. If the instructor agrees, an "I" grade will be given. An Incomplete Grade Form indicating work completed and work to be completed must be signed by the student, instructor, and the department chairperson, and turned into the Registrar's Office at the end of the semester.

"I" grades should not be requested nor given for lack of completion of work because of procrastination or dissatisfaction with the grade earned. Per policy, students must be passing the course and have completed 70% or more of the course work in order to qualify for an incomplete.

Specific arrangements to remove an "I" grade must be made between the student and the instructor. In most circumstances, work to be completed should be finished in the first two or three weeks following the end of the semester in which the "I" was given. Failing to complete the "I" and replace it with the appropriate letter grade may negatively affect any financial aid.

**Incomplete work cannot be completed by retaking the class.** If such an option is preferred, the student must take the grade earned and then retake the class for a better grade. The grade for the later class will be calculated in the GPA. In all cases, **the "I" grade must be made up within one year.** If it is not, the "I" grade will change to an "E" on the transcript. "I" grades are not computed in the GPA.

## Repeating a Course

No additional credit is allowed for repeating a course in which the initial grade was passing unless the course number for the course ends in the letter suffix "R" or "Z" (a course designed to be repeatable for credit). For other repeated courses, the most recent grade will be used in the calculation of the GPA. Upon successful completion of the repeated course, the repeat is indicated on the student's transcript (E=Exclude, I=Include). All work will remain on the records, ensuring a true and accurate academic history. (Note: Although not used in computing the UVU overall GPA for UVU purposes, many graduate programs, such as law or dental school, include ALL grades in calculating an overall GPA for admissions criteria.)

Courses are not accepted from other institutions for the purpose of posting a repeat of a course already taken at UVU.

Board of Regents policy requires that students shall be charged at the full cost of the instruction tuition for repeating a course more than once, unless the institution determines that the repetition is a result of illness, accident or other cause beyond the student's control or unless the course is prescribed by the student's program of study. This affects all courses beginning January of 2003.

## Changing a Grade Other than an Incomplete

### Policy

Any student who has reason to believe that a grade assigned in a specific course was not justified has the right to appeal that grade.

### Procedure

Student Action—

Grades may be appealed **within one year of issuance** in the following manner:

First, the student shall approach the instructor of the course as soon as possible after receiving the final grade. They have the right to discuss the merits of their appeal in an informal and non-threatening environment.

Second, after obtaining feedback from the instructor regarding the rationale for assigning the original grade, and assuming dissatisfaction still exists at the conclusion of the first step, or if the original instructor is no longer available, the student has a right to submit a written appeal to the department chair, in a consultation setting.

Finally, if a mutual understanding cannot be reached in the **second** step, the student has the right to submit a formal written appeal through the Office of the Registrar to the University Academic Standards Committee, which exercises final authority in adjudicating the appeal.

## Faculty Action

**During the first year** after the issuance of a grade, an instructor for a specific class may submit a grade change form with proper documentation directly to the Records Office.

**During the second through fifth years,** the grade change form must be accompanied by an Academic Standards Petition filled out by the student and submitted by the course instructor or department chair directly to the registrar. If a grade change is requested and the faculty member who gave the original grade is no longer employed by UVU, the appropriate department chair may make the change if it is warranted.

**After five years,** a grade change may be considered only where evidence exists to prove that an error occurred in the recording of the original grade or extreme extenuating circumstances existed. In the latter case, an Academic Standards Petition with appropriate documentation may be submitted to the Office of the Registrar for possible consideration by the University Academic Standards Committee.

When the Records Office receives a signed change of grade form from an instructor, the new grade(s) are entered into the computer. An explanation of the transaction is entered into the student's record, including what the old and new grades are.

Withdrawal & Reinstatement

## Withdrawal from Classes

Students may drop and withdraw from classes according to the dates and deadlines posted on the Semester Student Timetable. Classes may be dropped and not appear on the transcript through the drop deadline. After the last day to drop noted on the Semester Student Timetable, a grade of "W" will appear on the transcript for all official withdrawals and students will be responsible for tuition and fees. A "W" grade could impact a student's satisfactory academic progress with the Financial Aid and Scholarships Office.

Withdrawing from a course after the last day to withdraw deadline may only be for extenuating circumstances and not solely for academic difficulty, and requires the signature of the department chair with a department approval stamp. Such changes to a student's schedule may adversely affect current and future financial aid, scholarships and/or refunds. Students are cautioned to see a financial aid advisor before attempting to completely withdraw from school.

If a student stops attending (but does not officially withdraw) **before the last day to withdraw,** they should receive a "UW."

If a student stops attending (but does not officially withdraw) **beyond the last day to withdraw,** they may receive the grade earned up to that point, or an "E", at the instructor's discretion.

"UW's" are calculated into the grade point average (GPA) as 0.00, the same as "E's" (failing grades).

# Administrative Drops and Withdrawals

Students may be dropped or withdrawn from classes by the administration if they: 1. register, but do not attend courses within the first three class periods of a semester; 2. register for courses for which they have not completed prerequisites; 3. neglect to pay tuition and fees for any given semester by the deadline published in the Student Timetable; or 4. other administrative reasons. Such changes to a student's schedule could affect financial aid, scholarships, and/or refunds.

# Withdrawal from the Institution

It is the responsibility of the student who withdraws from school to complete the online Leave of Absence process. If withdrawing (Leave of Absence) after the refund period noted in the Semester Student Timetable, a grade of "W" will appear on the transcript for all official withdrawals and students will be responsible for tuition and fees. A "W" (official withdrawal) grade could impact a student's satisfactory academic progress with the Financial Aid and Scholarships Office. Complete withdrawal from college may adversely affect financial aid and/or Veterans' benefits.

Simply stopping attendance does not qualify as an official withdrawal, and a student who does so may receive a failing grade.

# Reinstatement

Students who withdraw from UVU and then desire to be reinstated during the same academic semester may do so by obtaining clearance from the Registrar's Office and completing the late registration process.

## Student Military Leave Procedure

Students activated into military service during an academic semester for which they are currently enrolled have the following options to choose from, in addition to other alternatives provided by existing policy and regulation. The student is responsible to notify appropriate Institution officials regarding the implementation of the selected option.

1. A request to withdraw from school will be honored with a full refund of all tuition and fees paid. Non-punitive "W's" will be recorded on the transcript and the date of action maintained on the student's record.
2. Incomplete grades may be negotiated with individual faculty and/or departments based on realistic means of completing the required objectives of the course(s). Where recommended by the department (faculty), the time limit for completing the "I" may be extended. This option may include "home study" as a means of completing the required work with faculty approval and where practical.
3. Current grades (grades earned at the point of termination) may be issued at the discretion of individual faculty. This is also a negotiated option.

**In all cases, the student activated into military service is eligible for readmission.**

# Noncredit Continuing Education Unit (CEU)

Noncredit or Continuing Education Students are taking courses to pursue personal or professional interest, gain general knowledge, learn a new skill, upgrade existing skills, or enrich their personal understanding of a wide variety of topics. These courses do not offer college credit, but in some cases noncredit or continuing education students can earn continuing education units, certification or other evidence of class completion to meet personal or professional requirements. Noncredit course work cannot be substituted for a credit requirement or any required course on a degree pathway.

# College Credit

College credit at UVU may be obtained through the following methods: 1. UVU Credit (includes Cooperative Education); 2. Transfer Credit; 3. Challenge Credit; 4. Foreign Language Challenge Credit; 5. Advanced Placement Credit; and 6. CLEP (College Level Examination Program).

## 1. UVU Credit

UVU credit is obtained through admittance to UVU, registering for classes, and satisfactorily completing all required course work. Courses completed through this method will receive a letter grade that will be used in calculating Grade Point Average (GPA).

### Cooperative Education

Cooperative Education (Coop) offers another avenue for students to obtain UVU college credit. Students enrolled in cooperative education work as paid employees of a business, agency, or institution while enrolled at UVU in classes related to their career. Academic credit for cooperative work experience is granted according to the number of hours a student works during the semester using the following formula:

| Credit hours | Minimum hours of work |
|---|---|
| 1 | 75 |
| 2 | 150 |
| 3 | 225 |
| 4 | 300 |
| 5 | 375 |
| 6 | 450 |
| 7 | 525 |
| 8 | 600 |

Coop credits are registered for at the same time and in the same manner as UVU credits.

Courses completed through Cooperative Education will receive a credit/no-credit grade which is not included in the calculation of the GPA.

The maximum number of coop credits that may be applied toward a certificate is 8; a diploma is 14; an associate or bachelor's degree is 16 credit hours. Departments define how coop credit is applied to specific programs. Additional coop credit may be taken (but not applied toward graduation) with approval of the cooperative education director and the appropriate dean.

## 2. Transfer Credit

It is the student's responsibility to have official transcripts of any previous college work completed elsewhere sent to the UVU Admissions Office. Transcripts accepted as official by the UVU Admissions Office are automatically sent to the Transfer Credit Office for evaluation and posting. The Transfer Credit Office may require the student to supply the catalog, bulletin, or course outlines from previous schools attended to assist in determining the transferability of specific courses. Transfer credit may or may not apply to UVU graduation requirements, regardless of the number of credits transferred.

Transfer courses with grades below "C-" will not be accepted by UVU. Transfer courses are not calculated in the GPA. Individual departments reserve the right to impose limits on the age and grade level of transfer credit. There is no limit to the number of transfer credits that may be accepted; however, UVU graduation requirements such as residence, total credits, and GPA must still be met.

Transfer courses will not be accepted from other institutions for the purpose of posting a repeat on a course already taken at UVU.

Courses in religion will be evaluated on the basis of the particular orientation of the course as determined by the UVU Religious Studies Committee. In order to be considered, these courses must be listed on an official transcript from a regionally accredited institution and must demonstrate scholarly rigor and critical engagement with the subject matter.

### General Education for Transfer Students

For transfer students from any Utah State Higher Education institution, UVU shall accept at full value all General Education course work approved by the sending institution, provided it meets the minimum C- letter grade requirement, in any area specified by the Board of Regents document R470. These areas include Composition, Quantitative Literacy, Fine Arts, Humanities, Social and Behavioral Science, Biology and Physical Science. UVU shall require transfer students to complete any additional coursework needed to satisfy the unmet portions of the UVU General Education requirements. Previously completed General Studies course work shall be applied to assure the best possible fit with UVU's General Education requirements. As each transfer student's requirements may vary, see the Transfer Credit Office (BA 113 for specific requirements.

An AA or an AS degree earned at any USHE institution will meet the General Education requirements of UVU. The degree must include equivalents of UVU's English, Mathematics, and American Institutions requirements or the student will have to fulfill these requirements separately.

### Credit for ACT/SAT Scores

On May 12, 2015, Senate Bill 196 - Math Competency Initiative passed which mandated that the State Board of Education establish a qualifying score for ACT/SAT scores in order to award college credit for a mathematics course. This course must satisfy the state system of higher education quantitative literacy requirement. This initiative will go into effect as of the 2016-2017 school year. High School students who have graduated during the 2016 school year and onward will be eligible for QL 1900 based off of an ACT score of 26 or an SAT score of 660.

### U.S. Institutions outside of Utah

For transfer credit to be accepted by UVU, the institution from which credit is to be transferred must be accredited by one of the following regional associations:

- Middle States Association of Colleges and Schools (MSA)
- Northwest Commission on Colleges and Universities (NWCCU)
- North Central Association of Colleges and Schools (NCA)
- New England Association of Schools and Colleges, Inc./Commission on Institutions of Higher Education (NEASC-CIHE)
- Southern Association of Colleges and Schools/Commission on Colleges (SACS-CC)
- Western Association of Schools and Colleges/Accrediting Commission for Community and Jr. Colleges (WASC-Jr.)
- Western Association of Schools and Colleges/Accrediting Commission for Sr. Colleges and Universities (WASC-Sr.)

A completed associate degree (i.e. AA or AS) designed for transfer earned at one of these regionally accredited institutions will fill most of the UVU general education requirements if the degree includes a minimum of 30 semester credit hours of general education that is broad and representative of UVU's general education core. The completed AA or AS degree must include direct equivalents of UVU's English, Mathematics, and American Institutions requirements or the student must fulfill these requirements separately. If the courses within the transferable degree aren't considered to be transferable or general education courses, the classes and the degree may not be recognized and courses will be evaluated individually for transferability and equivalency.

Non-accredited institutions may be accepted on an exception basis by individual departments.

Military courses are evaluated using the ACE recommendations from the Guide to the Evaluation of Education Experiences in the Armed Services. Approved credits will be applied if they directly pertain to a student's individual undergraduate degree program.

### International and Foreign Institutions

The Transfer Credit Office, working with department academic advisors and faculty, is authorized to evaluate credit from foreign colleges, universities, and/or International Baccalaureate (IB) Diplomas after a student has been admitted to UVU. International students requesting transfer of credit from foreign institutions of higher education must submit a transcript from an approved Foreign Credentials evaluation Service. See the Transfer Credit Office (BA 113) for a list of these accepted services.

Transfer courses from international and foreign institutions are not calculated in the GPA.

## 3. Challenge Credit/Experiential Credit

(Equivalency Examination and/or Documentation of Earned Competency)

No more than 25 percent of the minimum credits required toward a bachelor's degree, and associate degree, diploma, or certificate of completion, may be awarded through experiential and/or challenge credit. Challenge credit and experiential credit are not eligible for use in a certificate of proficiency. Credit for courses that appear in the current catalog may be awarded to individuals who can prove through appropriate assessment and/or documentation that they have already acquired the equivalent knowledge and/or expertise required for successful completion of that course.

To receive experiential/challenge credit for a specific course, the student must

1. Be enrolled at the University.
2. For Challenge credit, complete a comprehensive examination (theoretical and/or applied) with at least a "C-" grade; or for Experiential credit, provide documentation of practical experience to the satisfaction of the department chairperson and dean showing course objectives have been met; or with the departmental approval, complete an advanced course with a grade of "C-" or higher (if deemed necessary by the department) as a validation procedure.
3. Pay, in advance, a nonrefundable processing fee.
4. After successful completion of requirements, pay the per-credit-hour fee.

A specific course shall be challenged only once, and a student shall not receive challenge/experiential credit for a course that the student is/or has been previously enrolled in and received a grade, including a "W or AU" grade.

Duplicate credit will not be awarded.
Grades shall be recorded only as "CR" (credit) and shall not be calculated in a student's university GPA.

## 4. Language Challenge Credit

Students may obtain an Experiential Language Credit Request Form in the UVU Languages and Cultures Department.

Students who have acquired proficiency in languages **offered at UVU** by means other than college courses (high school, foreign residency, etc.) may earn up to 16 credit hours. To qualify for these credits, a student shall complete a course in that language at a higher level than the credits for which they apply; and the grade in that course must be a “C-” or better.

To qualify for credit for language courses **not offered at UVU,** a student may, as an alternative, take the appropriate language test at any accredited four-year institution and provide UVU with the satisfactory (C- or better) test results. In this circumstance, the student must meet with the Languages and Cultures department chairperson to ascertain the maximum language credits that may be applied to any degree from UVU.

Proficiency tests to determine placement (not credit) in advanced courses are administered in the UVU Classroom Testing Center prior to the beginning of each semester. Students unsure of their language skills must take the test or receive permission from the course instructor before registering for advanced classes.

Students who qualify for credit under the above provisions (for example, they register for, and successfully complete, Spanish 2010 with at least a **“C-”** grade, thus qualifying for the credits for the previous courses—1010 and 1020) must petition for those credits (application forms are available in the Languages and Cultures Department) and pay a fee for each credit hour. No additional tuition will be charged for those credits. The credits will be listed on transcripts as **“CR”** and are not calculated in the GPA.

Additional information regarding language challenge credit and other policies are available from the Languages and Cultures Department.

## 5. Advanced Placement Credit

Students who complete an Advanced Placement Exam through CollegeBoard may earn up to 8 academic credits per test with a score of 3, 4, or 5, as per the policies set forth by the Utah State Board of Regents. Students having AP test scores of 3 or higher should contact the Transfer Credit Office to ensure posting of the results to their UVU transcripts.

Specific equivalencies and acceptance criteria are updated annually, upon departmental faculty review and approval.

If all **residence, credit, and grade point average** requirements have been met, there is no limit to the number of Advanced Placement credits that may be accepted; however, duplicate credit for tests and course work shall not be applied.

AP credit will be posted as a "CR" grade and will not be calculated in the GPA.

## 6. CLEP Credit (College Level Examination Program)

Students may receive college credit for CLEP exams as specified on the approved list in the Transfer Credit Office. Additionally, students intending to transfer to another institution from UVU should meet with their intended transfer institution to gain advance information on how that institution accepts CLEP credit.

CLEP credit will be posted as a **“CR”** grade and will not be calculated in the GPA.

The amount of credit given through CLEP subject examinations is determined by the appropriate departments. No more than 25 percent of the minimum credits required toward a degree may be awarded through CLEP and/or Challenge/Experiential Credit hours.

# Course Number System

0000-0999 Remedial or preparatory noncredit courses; may not be counted toward a certificate, diploma, associate, or bachelor’s degree. Technical, nontransferable courses may count toward a certificate.

1000-2999 Lower division (freshman and sophomore courses); courses designed as transfer courses; count toward a certificate, diploma, associate, and/or bachelor’s degree.

3000-5000 Upper division (junior and senior courses); courses designed to count toward a bachelor’s degree, or any other degree as required by department.

6000 Graduate courses; regular courses in master’s level programs.

Learning Enrichment courses with 1000 level numbers do not satisfy General Education requirements for the associate or bachelor’s degrees. These classes may count as electives for the Associate in Arts, Associate in Science, and Bachelor of Science degrees.

The letter suffix “R” indicates that a course is repeatable for credit (example: PES 161R). Course descriptions indicate the number of “repeats” allowed.

Variable and partial credit is indicated by letter suffixes of “A,” “B,” “C,” etc. (example: ACC 201A = 4 credits and ACC 201B = 2 credits). Changing the hours of credit for a variable-credit class after registration may be done only through the add/drop (class change) procedure. Such changes must be made prior to completion of that partial course.

“Honors” credit courses are identified on the transcript by an “H” following the course number (example: ENGL 225H).

Global/Intercultural credit courses are identified on the transcript by a “G” following the course number (example: ANTH 101G).

# Undergraduate Academic Standards

- **Academic Counseling Center**
- Office: LC 402

- Telephone: 801-863-8425

## Policy

Academic standing is determined by the grades a student earns at UVU. A student with the most recent semester grade point average (GPA) and cumulative GPA of 2.0 or higher on a 4.0 scale is in good academic standing. When a full- or part-time undergraduate student fails to maintain a semester or cumulative GPA of 2.0 on a 4.0 scale, the student shall be notified of progressive academic intervention actions.

Students placed on alert status, academic warning, academic probation, and continued academic probation remain eligible for all extracurricular activities as governed by the rules of the specific activity. This policy does not include nor preclude additional program requirements that may be mandated by specific departmental majors.

## Procedures

Academic intervention shall be applied progressively in the order described below.

### Alert Status

When a student is not making adequate progress towards course completion and the instructor is unable to resolve the issue with the student, the student may be placed on alert status. A registration hold may be placed on the student's record. The student must then meet with their academic advisor for guidance before the registration hold will be removed.

### Academic Warning

When the semester GPA falls below 2.0 and the cumulative GPA is 2.0 or above, the student shall be placed on academic warning regardless of alert status. A registration hold shall be placed on the student's record. The student must complete an academic success warning workshop and meet with their academic advisor before the registration hold will be removed.

### Academic Probation

When the semester and cumulative GPA both fall below 2.0, the student will be placed on academic probation. A registration hold shall be placed on the student's record. The student must complete an academic success probation workshop, develop an academic success plan, and meet with their academic advisor before the registration hold will be removed.

### Continued Academic Probation

If the student on academic probation fails to raise the cumulative GPA to a 2.0 or above in the subsequent semester, the student will be placed on continued academic probation. A registration hold shall be placed on the student's record and the student must prepare an academic success plan with their academic advisor as well as the academic standards counselor before the registration hold will be removed. The student may also be required to attend another academic success probation workshop and/or enroll in a college success class.

All students on continued academic probation will be required to submit an in-progress grade report to the Academic Standards Office in order to register for any subsequent semester(s). The student shall continue to receive advisement from the academic standards counselor, as well as their academic advisor, to monitor and promote academic progress.

### Academic Suspension

When on continued academic probation, a student receiving a semester and cumulative GPA below 2.0 in a subsequent semester shall be placed on academic suspension. The student shall be immediately dropped from enrollment in all current semester classes and a registration hold shall be placed on the student's record. The student shall be suspended for a minimum of one full semester. During this time the student is expected to resolve all academic problems that led to the academic suspension.

To re-enroll at the University, a student must submit a Petition for Academic Suspension Review to the Academic Support Committee. This committee will make suggestions for specific customized interventions to be approved by the Academic Standards Committee. A decision shall then be rendered as to whether, and under what conditions, the student may continue to study at the University. The student must complete the requirements set forth by the Academic Standards Committee before the registration hold will be removed.

### Academic Probation Returning from Academic Suspension

When the academic suspension petition is granted, the student is allowed to resume their academic studies under probation returning from suspension. This status allows the student to register for classes under the guidance of the Academic Standards Office, in conjunction with their academic advisor. As long as the student acquires a semester GPA of 2.0 or above in all subsequent semesters and abides by the conditions outlined by the Academic Standards Committee, the student may continue to enroll in classes. The student will remain on academic probation returning from academic suspension until the cumulative GPA is at or above 2.0.

### Academic Dismissal

When failing to comply with the conditions set forth by the Academic Standards Committee while on academic probation returning from academic suspension, the student shall be dismissed from the University and immediately dropped from enrollment in all classes. A registration hold shall be placed on the student's record.

The student may not re-enroll at the University or submit a Petition for Academic Dismissal Review for a minimum of one full calendar year from the date of academic dismissal. During this calendar year, the student may also be required to attend another institution and complete 18 credits with at least a 2.5 GPA. Upon review by both the Academic Support Committee and the Academic Standards Committee, a decision will be rendered as to whether or not, and under what conditions, the student may re-enroll at the University

Any student who returns to the University after being dismissed will be placed on academic probation returning from academic dismissal and will be required to follow the academic plan outlined by the Academic Standards Committee.

### Academic Probation Returning from Academic Dismissal

When the Petition for Academic Dismissal Review is granted by the Academic Standards Committee, the student is allowed to continue their academic studies on academic probation returning from academic dismissal. The student is allowed to register for classes under the guidance of the Academic Standards Office, in conjunction with their academic advisor. As long as the student acquires a semester GPA of 2.0 or above in all subsequent semesters and abides by the conditions outlined by the Academic Standards Committee, the student may continue to enroll in classes. The student will remain on probation returning from dismissal until the cumulative GPA is at or above 2.0.

When a student is unsuccessful at this level and does not have the ability to benefit from continuing with their education at the University, academic counseling will be provided by the Academic Standards Office to explore alternative pathways to success.

### Appeals

When the student's Petition for Academic Suspension Review or Petition for Academic Dismissal Review is denied by the Academic Standards Committee, the student may present an appeal to a hearing panel that consists of the Academic Standards Committee and a representative appointed by the President of the Utah Valley University Student Association (UVUSA). After review of the petition, the hearing panel will determine if the student's appeal is granted or denied. If the appeal is granted, the hearing panel shall determine the conditions for re-enrollment at the University.

If the student is unsatisfied with the hearing panel's decision, the student has the right to appeal in writing to the Vice President of Academic Affairs.

### Academic Renewal

For students who are challenged with a low GPA or for those who have experienced a period of low grades that does not reflect their academic potential, UVU offers academic renewal. A student is allowed to petition the Registrar for academic renewal only one time during his or her enrollment at the University. This process shall remove a limited amount of previous academic work from the student's GPA and from credit toward graduation. To be eligible a student shall meet the following conditions at the time the petition is filed:

1. The student must be currently enrolled at UVU.
2. A minimum of two years has elapsed since the most recent course work to be eliminated was completed.
3. The student has completed at least 30 semester hours of UVU course work with a minimum cumulative GPA of 2.50. These 30 hours shall have been completed after the course work the student is requesting to eliminate.
4. The student's cumulative GPA is below the level necessary for graduation in his or her current program of study. In most instances, this is a 2.0 cumulative GPA.
5. The requested course work has not been used toward an existing degree.

The student may request a maximum of two specific semesters/terms of academic course work be eliminated from his or her earned credits and cumulative GPA. Individual courses shall not be accepted.

If the petition qualifies under this policy, the student's permanent academic record shall be annotated to indicate that no work taken during the disregarded semester(s) and/or term(s), even if satisfactory, shall apply toward earned credits, GPA, academic standing, and/or graduation requirements. All work shall remain on the records, ensuring a true and accurate academic history. The words "Academic Renewal" and the affected semester(s)/term(s) shall be annotated on the student's transcript.

Academic renewal shall not be requested to earn or change academic honors status on a student's transcript.

Academic Renewal cannot be applied for either hours attempted/completed (quantitative Satisfactory Academic Progress), or cumulative GPA (qualitative Satisfactory Academic Progress) for Title IV (Federal Financial Aid) purposes. Students who are granted Academic Renewal at UVU will have the credit hours removed from their earned credits and GPA for academic purposes. However, for Satisfactory Academic Progress purposes, students are measured based on the original grades and not the changes due to academic renewal.

No exceptions shall be made to this policy. Students shall be aware that this policy may not be accepted at transfer institutions, and all credit, including those with academic renewal, may still be calculated by the transfer institution.

### Academic Distinction

The Dean's list recognizes those who have demonstrated outstanding academic performance during a term or semester. To be eligible:

1. The student must complete 12 semester hours or more in any semester and a commensurate number of hours in any term.
2. The student must earn a semester GPA of 3.6 or above.
3. The student must have a cumulative GPA of at least 2.0.

# Accreditation

**Utah Valley University is accredited by the Northwest Commission on Colleges and Universities.**

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has

available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

- **Northwest Commission on Colleges and Universities**
- 8060 165th Avenue N.E., Suite 100
- Redmond, WA 98052
- (425)-558-4224
- www.nwccu.org

The Northwest Commission on Colleges and Universities (NWCCU) is an independent, non-profit membership organization recognized by the U.S. Department of Education as the regional authority on educational quality and institutional effectiveness of higher education institutions in the seven-state Northwest region of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

In addition, some programs or majors have other specialized accreditation.

- **Specialized Accreditation, Certification, and Approvals**
- Web: www.uvu.edu/accreditation/specialized.html

Gainful Employment information is provided in compliance with the U.S. Department of Education's disclosure requirements for programs eligible for Title IV financial aid that prepare students for gainful employment in a recognized occupation as required in 34 CFR 668.6(b). All programs list the following information: CIP Code, Level of Program, Program Length, Tuition and required fees, Estimated costs for books and supplies, Debt at program completion, Program completion in Normal Time, Job Placement, and Related Occupations. Gainful Employment Program Disclosure is listed on all marketing materials for potential students.

# General Education

## General Education Information

Whereas a major provides students with specialized knowledge, General Education ensures that students have the breadth of knowledge that characterizes well-rounded and well-informed citizens. General Education provides the skills of analysis, problem-solving, creative thinking, and critical thinking that prepare students for an unknown and ever-changing future.

Completion of the UVU General Education requirements will fulfill the General Education requirements at all colleges and universities within the Utah System of Higher Education. However, certain majors, both at this institution and other Utah institutions, may require **specific** General Education courses. While UVU has not articulated these courses with higher education institutions outside the State of Utah, they will generally articulate to other regionally accredited colleges and universities in the United States. It is the responsibility of students to complete the appropriate General Education courses required by their departments regardless of the generalized list printed in this catalog.

**Note:** Students taking General Education courses without having declared a specific major are advised in the Academic Counseling Center, LC 402, telephone 801-863-8425. Students who have declared a specific major that is taught at UVU will be directed to the appropriate academic advisor upon completion of new student orientation and assessment activities.

### Department Articulation Agreements

In addition to General Education courses, many departments have articulated specific courses that transfer to help fulfill baccalaureate degree requirements. Information concerning these courses may be obtained from UVU department advisors or the Admissions-Transfer Services Office, BA 114.

## General Education Code System

General Education course designator codes (Attributes) aid students and transfer institutions to identify how General Education courses meet graduation requirements.

The following list identifies General Education core and distribution courses as they apply to the Associate in Arts/Science Degrees and Bachelor of Arts/Science Degrees, and can be used to search the registration menu:

AS - American Institutions

BB - Biology

CC - English Composition

FF - Fine Arts

HH - Humanities

LH - Foreign Language

PP - Physical Science

SS - Social Science

QL – Quantitative Literacy

XF - Must be taken with another course to equal FF (see department)

# General Education Requirements

Interstate Passport

The Interstate Passport enables successful transfer of a block of lower-level general education learning to other institutions participating in the Interstate Passport Network. Students who complete their Passport at Utah Valley University will not be required to repeat or take additional course work to meet lower-division general education requirements in the Passport's nine areas when they transfer to any other Passport institution. Utah Valley University will begin transcripting the Interstate Passport following the Fall 2016 semester. Students with an interest in achieving the Passport should see our website at http://www.uvu.edu/transfer/passport.html and contact their Advisor.

## Associate in Arts/Science Degrees and Bachelor of Arts/Science Degrees

These requirements satisfy the General Education requirements for both the Associate in Arts and the Associate in Science Degrees, as well as the Bachelor of Arts and the Bachelor of Science Degrees at UVU, taking into account adjustments that may be required by academic departments to fulfill their specific needs. Honors courses with the same prefix and number also satisfy distribution requirements. Total core and distribution is 35 credits.

# Core Requirements

**These courses provide basic skills in logic, math, written and oral communications, health, and fitness.**

| |
|---|
| **Complete the following for 6 credits:** |
| ENGL 2010/201H Intermediate Writing Academic Writing and Research |
| and |
| ENGL 1010/101H Introduction to Academic Writing |
| or |
| ENGH 1005 Literacies and Composition Across Contexts |
| **Complete one of the following for either 3 or 4 credits:** |
| Students should enroll in Mat 1030/MAT 1035 unless STAT 1040/STAT 1045 is recommended for their major or they are planning to enroll in courses requiring MATH 1050 as a prerequisite. |
| MAT 1030 Quantitative Reasoning/MAT 1035 Quantitative Reasoning with Integrated Algebra |
| or |
| STAT 1040 Introduction to Statistics/STAT 1045 Introduction to Statistics with Algebra |
| or |
| MATH 1050 College Algebra/MATH 1055 College Algebra with Preliminaries |
| or |
| MATH 1090 College Algebra for Business |
| or |
| One MATH course that requires MATH 1050 as a prerequisite |
| or |
| QL 1900 – awarded based on achievement of the following test scores:<br>AP Calculus AB: 3 or higher<br>AP Calculus BC: 3 or higher<br>AP Statistics: 3 or higher<br>IB HL Math: 5 or higher |

| |
|---|
| CLEP Pre-Calculus: 50 or higher<br>CLEP Calculus: 50 or higher<br>ACT Mathematics: 26 or higher<br>SAT Mathematics: 660 or higher<br>QL1900 satisfies the General Education math requirement; however, certain majors may require MAT 1030/1035, STAT 10401045, or MATH 1050 to be taken as a prerequisite for a higher level Math course. |
| **Complete the following for 5 credits:** |
| PHIL 2050/205G/205H Ethics and Values |
| and |
| HLTH 1100 Personal Health and Wellness |
| or |
| PES 1097 Fitness for Life |

## American Institutions

| |
|---|
| **Complete one of the following for 3 credits:** |
| POLS 1000 American Heritage |
| HIST 2700 and 2710 US History to/since 1877 |
| HIST 1700/170H American Civilization |
| HIST 1740 US Economic History |
| POLS 1100 American National Government |

# Distribution Requirements

**(18 CREDITS)**

From Science, Humanities, Fine Arts, and Social/Behavioral Science

## A. SCIENCE

All Majors must complete **One course of Biology (BIOL 1010 or BIOL 1610 highly recommended), One course of Physical Science and One additional course from either of those two areas** for a minimum total of 9 credits. One Lab Course is recommended.

### Biology

| | | |
|---|---|---|
| BIOL 1010/101H | General Biology | 3.0 |
| BIOL 1011 | Introduction to Bioinformatics | 3.0 |
| BIOL 1070 | Genetics | 3.0 |
| BIOL 1200 | Prehistoric Life | 3.0 |
| BIOL 1500 | Biological Anthropology | 3.0 |
| BIOL 1610 | College Biology I | 4.0 |
| BIOL 1620 | College Biology II | 3.0 |
| BIOL 204R | Natural History Excursion* | 3.0 |
| BIOL 2500 | Environmental Biology | 3.0 |
| BOT 2050 | Field Botany | 3.0 |
| BOT 2100 | Flora of Utah | 3.0 |
| BOT 2400 | Plant Kingdom | 4.0 |
| BTEC 1010 | Fundamentals of Biotechnology I Career Survey | 3.0 |
| HLTH 3400 | Human Diseases | 3.0 |
| MICR 2060 | Microbiology for Health Professions* | 4.0 |
| NUTR 2020 | Nutrition Through Life Cycle | 3.0 |
| ZOOL 1090 | Intro to Human Anatomy/Physiology | 3.0 |

| | | |
|---|---|---|
| ZOOL 2320/232H | Human Anatomy* | 3.0 |

*May be used as the third science only

### Physical Science

| | | |
|---|---|---|
| ASTR 1040/104H | Elementary Astronomy | 3.0 |
| ASTR 1050 | Investigations of the Solar System | 3.0 |
| ASTR 1060 | Investigations of Stars and Galaxies | 3.0 |
| ASTR 1070/107H | Cultural Astronomy in Our Lives | 3.0 |
| ASTR 1080 | Life in the Universe | 3.0 |
| CHEM 1010 | Introduction to Chemistry | 3.0 |
| CHEM 1110 | Elem Chem for Health Sciences | 4.0 |
| CHEM 1210 | Principles of Chemistry I | 4.0 |
| CHEM 1220 | Principles of Chemistry II | 4.0 |
| ENVT 1110 | Intro to Environmental Mgmt | 3.0 |
| GEO 1010/101H | Introduction to Geology | 3.0 |
| GEO 1020 | Prehistoric Life | 3.0 |
| GEO 1080 | Introduction to Oceanography | 3.0 |
| GEO 204R | Natural History Excursion* | 3.0 |
| GEOG 1000 | Intro to Physical Geography | 3.0 |
| METO 1010 | Introduction to Meteorology | 3.0 |
| METO 1060 | Fundamentals of Weather Forecasting | 3.0 |
| PHSC 1000 | Survey of Physical Science | 3.0 |
| PHYS 1010 | Elementary Physics | 3.0 |
| PHYS 1700 | Descriptive Acoustics | 3.0 |
| PHYS 1750 | The Acoustics of Music | 3.0 |
| PHYS 1800 | Energy You and Environment | 3.0 |
| PHYS 1850 | Aviation Physics | 3.0 |
| PHYS 2010 | College Physics I | 4.0 |
| PHYS 2020 | College Physics II | 4.0 |
| PHYS 2210 | Physics for Scientists/Engineers I | 4.0 |
| PHYS 2220 | Physics for Scientists/Engineers II | 4.0 |
| TECH 1010 | Understanding Technology* | 3.0 |

*May be used as the third science only

## B. HUMANITIES

One course minimum

| | | |
|---|---|---|
| AMST 2000 | Introduction to American Studies | 3.0 |
| ASL 202G | Intermediate American Sign Language II | 4.0 |
| CHIN 202G | Intermediate Chinese II | 4.0 |
| CINE 2150 | Critical Intro Cinema Studies | 3.0 |
| CINE 217G | Race Class and Gender in US Cinema | 3.0 |
| COMM 1020 | Public Speaking | 2.0 |
| COMM 1025 | Public Speaking Lab | 1.0 |
| COMM 1500 | Introduction to Mass Communications | 3.0 |
| COMM 217G | Race Class and Gender in US Cinema | 3.0 |
| ENGL 2030 | Writing for Social Change | 3.0 |

| | | |
|---|---|---|
| ENGL 2130 | Science Fiction | 3.0 |
| ENGL 2150 | Critical Intro Cinema Studies | 3.0 |
| ENGL 217G | Race Class and Gender in US Cinemas | 3.0 |
| ENGL 220G | Introduction to Literature | 3.0 |
| ENGL 2210 | Introduction to Folklore | 3.0 |
| ENGL 2230/223H | Myths/Legends in Literature | 3.0 |
| ENGL 2250/225H | Creative Process/Image Writing | 3.0 |
| ENGL 2300/230H | Shakespeare | 3.0 |
| ENGL 2310 | Technical Communication | 3.0 |
| ENGL 2510 | American Literature before 1865 | 3.0 |
| ENGL 2520 | American Literature after 1865 | 3.0 |
| ENGL 2600 | Critical Introduction to Literature | 3.0 |
| ENGL 2610 | British Literature before 1800 | 3.0 |
| ENGL 2620 | British Literature after 1800 | 3.0 |
| ENGL 376G | World Literature | 3.0 |
| FREN 202G | Intermediate French II | 4.0 |
| GER 202G | Intermediate German II | 4.0 |
| GRK 2020 | Intermediate Greek II | 4.0 |
| HUM 1010/101G/101H | Humanities Through the Arts | 3.0 |
| HUM 2010 /201G/201H | World History Through Arts I | 3.0 |
| HUM 2020/202G/202H | World History Through Arts II | 3.0 |
| HUM 203G | Art Form Focus I | 3.0 |
| HUM 204G | Art Form Focus II | 3.0 |
| HUM 2100/210H | Adventures Ideas Through 1500 | 3.0 |
| HUM 2200/220H | Adventures Ideas After 1500 | 3.0 |
| JPNS 202G | Intermediate Japanese II | 4.0 |
| LATN 2020 | Intermediate Latin II | 4.0 |
| PHIL 1000/100H | Introduction to Philosophy | 3.0 |
| PHIL 1250 | Intro to Logic and Critical Thinking | 3.0 |
| PHIL 1610 | Intro To Western Religions | 3.0 |
| PHIL 1620 | Intro To Eastern Religions | 3.0 |
| PHIL 2110 | Ancient Greek Philosophy WE | 3.0 |
| PHIL 2130 | Medieval Philosophy | 3.0 |
| PHIL 2150 | Early Modern Philosophy | 3.0 |
| PORT 202G | Intermediate Portuguese II | 4.0 |
| RUS 202G | Intermediate Russian II | 4.0 |
| SPAN 202G | Intermediate Spanish II | 4.0 |

## C. FINE ARTS

One course minimum

| | | |
|---|---|---|
| ART 1010 | Introduction to Visual Arts | 3.0 |
| ART 1020 | Basic Drawing Non Majors | 3.0 |
| ART 1050 | Photography I | 3.0 |
| ART 1340 | Sculpture I | 3.0 |
| ART 1350 | Ceramics I | 3.0 |

| | | |
|---|---|---|
| ART 1650 | Watermedia I | 3.0 |
| ART 2100 | Teaching Art for Children | 3.0 |
| ART 2815 | Historical Architecture and Interior Design | 3.0 |
| ARTH 2710 271H | History of Art to the Renaissance | 3.0 |
| ARTH 2720/272H | History of Art from the Renaissance | 3.0 |
| CINE 2311 | Film History I | 3.0 |
| DANC 1010 | Dance as an Art Form | 3.0 |
| DANC 2100 | Teaching Dance for Children | 3.0 |
| DANC 2110 | Orientation to Dance | 3.0 |
| EGDT 1720 | Architectural Rendering | 3.0 |
| MUSC 1010/101H | Introduction to Music | 3.0 |
| MUSC 102G | Introduction to World Music | 3.0 |
| MUSC 1030 | American Popular Music | 3.0 |
| MUSC 1100 | Fundamentals of Music | 3.0 |
| MUSC 2100 | Teaching Music for Children | 3.0 |
| THEA 1013 | Introduction to Theater WE | 3.0 |
| THEA 1023 | Introduction to Film | 3.0 |
| THEA 1033 | Acting I | 3.0 |
| THEA 2100 | Teaching Theatre For Children | 3.0 |
| THEA 2311 | Film History I | 3.0 |

## D. SOCIAL/BEHAVIORAL SCIENCE

One course minimum

| | | |
|---|---|---|
| AIST 180G | Introduction to American Indian Studies | 3.0 |
| ANTH 101G | Social/Cult Anthropology | 3.0 |
| ANTH 1020 | Biological Anthropology | 3.0 |
| ANTH 103G | World Prehistory | 3.0 |
| ANTH 180G | Introduction to American Indian Studies | 3.0 |
| BESC 107G | Multicultural Societies | 3.0 |
| CJ 1010 | Introduction to Criminal Justice | 3.0 |
| COMM 1050 | Introduction to Speech Communication | 3.0 |
| COMM 2110 | Interpersonal Communications | 3.0 |
| ECON 1010 | Economics As Social Science | 3.0 |
| ECON 2010 | Principles of Economics I | 3.0 |
| ECON 2020 | Principles of Economics II | 3.0 |
| ENTR 2500 | Creativity and Entrepreneurial Thinking | 3.0 |
| ES 1150 | Community Emergency Preparedness | 3.0 |
| FAMS 1150 | Marriage and Relationship Skills | 3.0 |
| FIN 1060 | Personal Finance | 3.0 |
| GEOG 130G | Survey of World Geography | 3.0 |
| GEOG 140G | Introduction to Human Geography | 3.0 |
| GEOG 2000 | Sustainability and Environment | 3.0 |
| GEOG 2100 | Geography of U.S | 3.0 |
| HIST 1500 | World History to1500 | 3.0 |
| HIST 151G | World History from 1500 to the Present | 3.0 |

| | | |
|---|---|---|
| HIST 1700/170H | American Civilization** | 3.0 |
| HIST 1740 | US Economic History** | 3.0 |
| HIST 2700 | US History to 1877** | 3.0 |
| HIST 2710 | US History since 1877** | 3.0 |
| HLTH 2600 | Drugs, Behavior and Society | 3.0 |
| HLTH 2800 | Human Sexuality | 3.0 |
| HLTH 3000 | Health Concepts of Death/Dying | 3.0 |
| MGMT 1010 | Introduction to Business | 3.0 |
| MGMT 2030 | Women in Business | 3.0 |
| MGMT 2110 | Interpersonal Communication | 3.0 |
| POLS 1000 | American Heritage** | 3.0 |
| POLS 1010 | Introduction to Political Science | 3.0 |
| POLS 1100 | American National Government** | 3.0 |
| POLS 2100 | Intro to International Relations | 3.0 |
| POLS 2200 | Intro to Comparative Politics | 3.0 |
| PRLG 1000 | Intro to American Law | 3.0 |
| PSY 1010/101H | General Psychology | 3.0 |
| PSY 1100 | Human Development: Life Span | 3.0 |
| PSY 2710 | Introduction to Brain and Behavior | 3.0 |
| PSY 2800 | Human Sexuality | 3.0 |
| SOC 1010/101H | Introduction to Sociology | 3.0 |
| SOC 107G | Multicultural Societies | 3.0 |
| SOC 1200 | Sociology of the Family | 3.0 |
| TECH 200G | Technology and Human Life | 3.0 |

**If not used as Core Requirement

# Additional Guidelines for Completion of the Associate in Arts/Science Degrees

The Associate in Arts and the Associate in Science Degrees are designed to complete General Education requirements and could complete lower division pre-majors for baccalaureate degrees at UVU or other colleges or universities.

The General Education courses shown above constitute the majority of the credits required for these degrees. In addition to the General Education requirements, these degrees require 25 additional credit hours.

Associate in Arts Degrees require 8 hours of these 25 hours to be from the same recognized foreign language.

See your specific academic department for further information on appropriate course work to complete a pre-major or the remaining 25 hours. The Academic Counseling Center (LC 402) has some specific outlines available to transfer to other institutions.

# Associate in Applied Science Degrees

This is a general outline. Refer to the department or Graduation Office for specific requirements. A total of 16 credit hours is required. Students must have a minimum of three credits in each area, except “F” (Physical Ed/Health/Safety/Environment).

## A. ENGLISH

Complete for 3 credits:

| |
|---|
| ENGL 1010/101H Introduction to Writing |
| or |
| MKTG 2200 Business Communication |

## B. MATHEMATICS

Complete for 3 credits:

| |
|---|
| MAT 1000 Integrated Beginning and Intermediate Algebra |

| |
|---|
| or |
| MAT 1010 Intermediate Algebra |
| or |
| Any Higher Mathematics course |
| or |
| Any approved Departmental Mathematics Course |

### C. HUMANITIES/FINE ARTS/FOREIGN LANGUAGE

Complete for 3 credits:

| |
|---|
| PHIL 2050/205G/205H Ethics and Values (Highly recommended) |
| or |
| Any approved Humanities, Fine Arts, or Foreign Language Distribution Course |

### D. SOCIAL AND BEHAVIORAL SCIENCE

Complete for 3 credits:

| |
|---|
| MGMT 3000 Organizational Behavior |
| or |
| Any approved Behavioral Science, Social or Political Science Distribution Course |

### E. BIOLOGY OR PHYSICAL SCIENCE

Complete for 3 credits: any approved Biology or Physical Science Distribution Course

### F. PHYSICAL ED/HEALTH/SAFETY OR ENVIRONMENT

Complete for 1 credit: any approved Physical Education, Health, Safety or Environment Course

## Transfer Information

For students transferring to four-year Institutions, Colleges, and Universities in the Utah System of Higher Education.

UVU courses numbered 1000 or above will transfer within the Utah System of Higher Education. However, the application of these courses toward graduation is determined by academic departments of receiving institutions.

For students transferring to colleges and universities in the Utah System of Higher Education **before** earning an Associate in Arts or an Associate in Science Degree, or a Bachelor of Arts or a Bachelor of Science Degree, a certified letter verifying completion of the UVU General Education requirements may be requested from the Graduation Office. This letter will cause the gaining institution (run by the State of Utah) to accept the completion of UVU General Education requirements as fulfilling all of the General Education/Liberal Education requirements of the gaining institution.

**Note:** Completion of an Associate in Arts/Science Degree waives only General Education requirements. It does not waive the necessary hours to graduate. A student transferring to another institution should check with that institution to see how their credits have been accepted toward their degree.

Private, Parochial, or Out-of-State Colleges & Universities

Since these schools are not bound by Utah State Regent's policies, colleges/universities outside the Utah System of Higher Education may have specific requirements and may not accept all courses available at UVU. Students should contact the institution they are transferring to in order to determine how their credits will be accepted.

## Brigham Young University

Brigham Young University accepts the Associate in Arts/Science Degrees for completion of its General Education requirements. Courses with grades of “D+” or lower will not transfer. Some departments at BYU have specific General Education course requirements that will still need to be taken at BYU. Individual departments at BYU should be consulted for exceptions.

**Note:** BYU has a limit on the number of transfer students admitted.

# General Information

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information,

or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator / Director of Equal Opportunity at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

# Mission

Utah Valley University is an integrated university and community college that educates every student for success in work and life through excellence in engaged teaching, services, and scholarship.

# Our Values

UVU's culture supports our mission of student success. Student success encompasses both terminal degrees and the holistic education of students, and we believe that we can fulfill this mission best in an environment that allows all individuals to thrive personally and professionally. To this end, UVU, operates in accordance with three core values: exceptional care, exceptional accountability, and exceptional results.

# Exceptional Care

We invite people to "come as you are" and let them know that "UVU has a place for you." Care means that we strive always to "see" the person in front of us — their strengths and weaknesses, struggles and triumphs, past and potential, and inherent dignity and worth. This does not mean that we set low expectations or make excuses for poor efforts. Instead, our commitment to exceptional care means that we set the bar high and provide challenging, honest conversations and feedback because we are deeply invested in seeing every member of our community succeed.

# Exceptional Accountability

We are strongly committed to working ethically and effectively. We approach each situation from a position of integrity, knowing that everything we do can help or hinder a positive student experience. We honor the resources and mandates we have been entrusted with and strive always to do our best to honor that trust. We respect each member of our community, seek to understand and fulfill our responsibilities, and recognize both individual and collective successes.

# Exceptional Results

We are committed to creating opportunity systematically for as many people as possible. Our engaged curricula, programs, and partnerships address the intellectual and practical needs of our service area and the larger community. We seek to prepare our students to thrive in a rapidly changing economy and an interdependent, complex world. We aspire to greatness in all that we do, while also measuring progress against rigorous metrics that show our students are becoming competent and ethical professionals, lifelong learners, and engaged citizens.

# Action Commitments and Objectives

## Include

Through open admission and other practices, UVU provides accessible and equitable educational opportunities for every student who wants to receive a rewarding postsecondary education.

- Objective 1: UVU integrates educational opportunities appropriate to both community colleges and universities.
- Objective 2: UVU provides accessible, equitable, and culturally diverse learning experiences and resources for students of all backgrounds, including those historically underrepresented in higher education.
- Objective 3: UVU fosters an inviting, safe, and supportive environment in which students, faculty, and staff can succeed.

## Engage

UVU delivers rigorous, meaningful, and experiential learning opportunities driven by a shared responsibility for student success.

- Objective 1: UVU faculty, staff, and students practice excellent, engaged teaching and learning activities as a community of scholars, creators, and practitioners.
- Objective 2: UVU develops relationships and outreach opportunities with students, alumni, and community stakeholders.
- Objective 3: UVU employees demonstrate a commitment to student success, professionalism, ethics, and accountability.

## Achieve

UVU champions a university experience that helps students realize their educational, professional, and personal aspirations.

- Objective 1: UVU supports students in completing their educational goals.
- Objective 2: UVU students master the learning outcomes of the university and their programs.
- Objective 3: UVU prepares students for success in their subsequent learning, professional, and civic pursuits.

# Roles

As a regional state university, Utah Valley University:

Provides quality academic learning opportunities for students through programs at the certificate, associate, baccalaureate, and graduate levels. To encourage responsible citizenship, emphasis is placed on engaged teaching and learning as well as scholarly work, research, creative achievements, career and technical education and community and professional engagement.

Provides access to higher education and offers a broad range of opportunities from developmental education through honors programs. The institution provides services designed to meet the educational and personal needs of students, to foster student success, to prepare students for meaningful lifework, and to provide access through a variety of modalities, including satellite campuses and the use of technology.

Promotes economic and cultural development to contribute to the quality of life of the region and state. The institution fosters economic development and provides a talent-force to meet the needs of a dynamic economy by offering credit and non-credit programs and services for individuals and organizations. UVU provides cultural experiences that enrich the community and offer significant and varied opportunities for continuous learning.

# Historical Development

Utah Valley University was established as Central Utah Vocational School in September 1941 with the primary function of providing war production training.

Post-war training needs found the school offering programs throughout the region and at the Utah County Fairgrounds. The three school districts within Utah County combined efforts to purchase a thirteen-acre site close to Provo High School.

In 1963, the name was changed to Utah Trade Technical Institute to emphasize its growing role in technical training. The name change to Utah Technical College at Provo in 1967 was accompanied by the authority to award the Associate in Applied Science Degree. The Associate in Science Degree was added in 1972.

The initial 185-acre Orem Campus was dedicated in 1977. In 1987, the name was changed to Utah Valley Community College and the Associate in Arts degree was added by the Utah State Board of Regents.

In 1993, the name was changed to Utah Valley State College reflecting the change in mission to offer high demand baccalaureate degrees.

The Utah State Legislature approved, in February 2007, a name change to Utah Valley University that became effective July 1, 2008. The Utah State Board of Regents approved the corresponding mission change in December 2007 to give authority to offer master level degrees; this also became effective July 1, 2008.

# Accreditation

Utah Valley University is accredited by the Northwest Commission on Colleges and Universities.

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

- Northwest Commission on Colleges and Universities
- 8060 165th Avenue N.E., Suite 100
- Redmond, WA 98052
- (425)-558-4224
- www.nwccu.org

The Northwest Commission on Colleges and Universities (NWCCU) is an independent, non-profit membership organization recognized by the U.S. Department of Education as the regional authority on educational quality and institutional effectiveness of higher education institutions in the seven-state Northwest region of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

In addition, some programs or majors have other specialized accreditation.

- Specialized Accreditation, Certification, and Approvals
- Web: www.uvu.edu/accreditation/specialized.html

Gainful Employment information is provided in compliance with the U.S. Department of Education's disclosure requirements for programs eligible for Title IV financial aid that prepare students for gainful employment in a recognized occupation as required in 34 CFR 668.6(b). All programs list the following information: CIP Code, Level of Program, Program Length, Tuition and required fees, Estimated costs for books and supplies, Debt at program completion, Program completion in Normal Time, Job Placement, and Related Occupations. Gainful Employment Program Disclosure is listed on all marketing materials for potential students.

# Graduation

**Graduation Office**
Office: BA 113
Telephone: 801-863-8438

Utah Valley University offers the following degrees: Master of Accountancy (MAcc), Master of Business Administration (MBA), Master of Computer Science (MCS), Master of Education (M.Ed.), Master of Science in Nursing (MSN), Master of Public Service (MPS), Master of Science in Cybersecurity (MS), Master of Social Work (MSW), Baccalaureate degrees, Associate in Applied Science (AAS), Associate in Arts (AA), Associate in Pre-Engineering (APE), Associate in Science (AS), Associate in Science in Business (ASB), Associate in Science in Nursing (ASN); Diplomas, and Certificates are also offered.

## General Graduation Requirements

Students are expected to familiarize themselves with the rules and regulations of both the University and their specific majors. Detailed information concerning graduation requirements is available in this catalog as part of department descriptions. Responsibility for satisfying all graduation requirements rests upon the student. UVU reserves the right to change graduation requirements at any time.

The University confers degrees, diplomas, or certificates upon students who meet both the General Education requirements of the University and the specific requirements of one of the academic departments.

### Credit Requirement

| Certificate/Degree | Number of Semester Credit Hours Required for Completion |
|---|---|
| Certificates of Proficiency | Less than 30 credit hours |
| Certificates of Completion | 30–33 credit hours |
| Diploma | 50 credit hours |
| Associate in Applied Science Degree | 63–69 credit hours (some disciplines may require more due to specialized accreditation) |
| Associate in Arts or Associate in Science degree | 60–63 credit hours |
| Specialized Associate's degrees | 68-85 credit hours |
| Baccalaureate degree (Bachelor of Arts, Bachelor of Science, and Professional Bachelor's degrees) | 120–126 credit hours, 40 of which shall be upper-division credits (level 3000 and above) |
| Graduate Certificate | 9–29 credit hours |

Please see the Graduate Studies section of the catalog regarding credit requirements for master degree programs.

## Grade Point Average Requirement

A minimum cumulative grade point average (GPA) of 2.0 (C) is required for graduation. In some programs specific course grades below 2.0 will not be accepted for graduation and some programs require a higher cumulative grade point average (see individual program requirements).

## Graduation Catalog Requirement

Candidates for graduation will be held to the requirements of the catalog under which they were admitted. Students have a maximum of 7 years to complete bachelor degrees and 5 years to complete associate degrees; 6 years are allowed for master degrees. In the case of bachelor degree programs, the seven year limit begins when a student is formally matriculated into the program. When students take longer than the given years to complete, they must have attended UVU during the Catalog Year to use those degree requirements towards graduation.

Programs that are no longer being offered may not be pursued by students who were not admitted or formally matriculated in that program during the accepted period of time. Students may not combine portions of different catalogs to fulfill graduation requirements. Once a catalog is selected, students must abide by all the graduation requirements specified within that catalog. Minors can only be sought if offered during that catalog year. Please see the Graduate Studies section of the catalog regarding catalog year requirements for master degree programs.

## Global/Intercultural Requirement

The Global/Intercultural requirement is a graduation requirement at the baccalaureate degree level. Courses that may be used to complete this requirement will be coded with a GI course attribute. The purpose of the Global/Intercultural requirement is to assist students to become better prepared to understand and participate in the global and cultural interdependencies that characterize our world. Students who take courses at another university and want to use them for the Global/Intercultural requirement must petition through the GI committee. See the Registrar's Office (BA 113) for further information. For a complete listing of the courses offered at UVU that fulfill this requirement, see the Course Descriptions section in the back of this catalog for course numbers ending in "G".

# Residence Requirement

Credit hours in residency (UVU credits) at a UVU campus, satellite, or branch campus, or through distance education or concurrent enrollment, are required for all certificates, diplomas, and degrees. Minimum hours are as follows:

1. Certificates of proficiency require 25% of total credit hours (rounded up);
2. Certificates of completion require 10 credit hours;
3. Associate degrees and diplomas require 20 credit hours;
4. Baccalaureate degrees require 30 credit hours (10 credits of those 30 shall have been completed within the last 45 credit hours earned for the degree).

# Multiple Degrees

Students may earn multiple certificates. Students may earn only one academic associate degree from Utah Valley University; either an Associate in Science or an Associate in Arts. With some exceptions, students may earn multiple Associate in Applied Science (AAS) degrees, specialized associate degrees, and baccalaureate degrees.

A second bachelor's degree may be awarded when all requirements for both degrees are satisfied, along with the following:

1. All UVU General Education requirements are satisfied;
2. Thirty semester hours beyond the original degree are completed;
3. Twenty semester hours of the 30 hours in item 2 above must be completed at UVU (resident hours);
4. Students must receive Dean's approval for a second bachelor's degree.

## Dual Baccalaureate Majors (One degree– with two majors)

A baccalaureate degree with dual majors may be awarded when students complete all requirements for two approved degrees from the approved dual majors list, but has not met the required 30 semester hours for a second degree beyond the original degree. The student shall receive a single baccalaureate degree; the diploma and transcript shall list both majors.

Other information regarding the dual major:

1. Students apply for graduation for one degree, and only one degree type, such as a Bachelor of Arts, or a Bachelor of Science;
2. In order to be awarded a dual major, both majors must be completed during the semester when (or prior to) applying for graduation
3. If Students have already graduated in one of the majors, they may not apply for a dual major.
4. After being awarded a dual major degree, students may not apply for graduation for one of the dual majors separately.
5. Students shall have no more than three course substitutions from the required courses for the two majors combined.
6. Students may not receive minors in either major, but may be awarded a minor from another area if all requirements are met.
7. Credits shall not exceed the 160 credit hour limit with the two combined majors.

# Degree Requirements

## Master Degrees

Please see the *Graduate Studies* section of the catalog regarding degree requirements.

## Bachelor of Arts/Science Degrees

Graduation requirements for the Bachelor of Arts/Science Degrees are:

- Completion of a minimum of 120 semester credits, or more if specified by program requirements;
- Overall grade point average of 2.0 (C) or above. Departments may require a higher GPA.
- Residency hours - minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours;
- At least 40 credit hours in upper division courses;
- Completion of General Education requirements. See General Education section above for specific courses required for graduation;
- Completion of specific departmental (major) requirements;
- Completion of Global/Intercultural Requirement course.

For a Bachelor of Arts Degree in programs offering the degree, students must complete 16 credit hours of course work from one language to include the 1010, 1020, 2010 and 202G levels, or transferred equivalents. Some ESL course work may be used to fulfill this requirement. See the ESL department for specific details.

**Note:** Academic departments may require specific General Education courses in addition to major requirements.

## Multiple Emphases

Students may earn additional emphases, with departmental approval under a specific bachelor's degree by completing the requirements for those emphases. Additional emphases shall appear on transcripts, but no additional diplomas will be awarded.

Associate in Arts/Science Degrees*

Graduation requirements for the Associate in Arts/Science Degrees are:

- Completion of a minimum of 60 or more semester credits;
- Overall grade point average of 2.0 (C) or above. Departments may require higher GPA;
- Residency hours - minimum of 20 credit hours earned through course attendance at UVU;
- Completion of General Education requirements. See General Education section for specific courses required for graduation;
- Completion of specific department (major) requirements.

**Note:** Academic departments may require specific General Education courses in addition to major requirements.

*The Associate in Arts Degree differs from the Associate in Science Degree in that a minimum of 8 credits must be earned in the same Foreign Language.

# Language Proficiency

A second language is required to obtain the Associate in Arts Degree. This language must be different from the student's native language. Language proficiency may be demonstrated by any one of the following methods:

- Eight credits of the same language taken at UVU or transferred from another college; or
- Application of foreign language challenge credit as described in the Foreign Language Challenge Procedures (available from the Languages Department Chair);
- Language credit does not apply to the General Education Humanities Distribution area (except for any 202G course) but will apply as elective credit in the Associate in Arts/Science Degree and as Humanities credit for the Associate in Applied Science Degree.

# Associate in Applied Science Degrees

Graduation requirements for the Associate in Applied Science Degrees are:

- Completion of a minimum of 63 semester credits;
- Overall grade point average of 2.0 (C) or above;
- Residency hours - minimum of 20 credit hours earned through course attendance at UVU;
- Completion of department General Education requirements;
- Completion of specific department major requirements.

# Diplomas

Diplomas require a minimum of 50 credits in a specialty area. Some programs offering Associate in Applied Science Degrees also offer diplomas. Not all departments offer diplomas. See specific department program listings for details.

## Certificates of Completion

Certificates of Completion require a minimum of 30 credit hours. Not all departments offer a Certificate of Completion. See specific department program listings for details.

## Certificates of Proficiency

Certificates of Proficiency vary in credit hours from 3-29 credit hours.  Not all departments offer a Certificate of Proficiency.  See Specific department program listings for details.

# General Graduation Information

## Application for Graduation

Graduation is not automatic. Prospective graduates must complete the online Graduation Application the graduation website (www.uvu.edu/graduation).  Applicants may also be required to fill out additional forms/surveys. The application must be completed by the Application deadline as listed below:

Application Deadlines

- Fall semester: First Friday in October
- Spring semester: First Friday in February
- Summer semester: First Friday in June

Graduation applications are processed each semester. Diplomas are mailed to graduates after final grades are reviewed and graduation requirements are verified as completed for all students at the end of the semester. Students failing to complete graduation requirements by the following dates for which they have applied must reapply for graduation. REQUIREMENT DEADLINES

- Fall semester: January 15th
- Spring semester: May 31st
- Summer semester: September 15th

Requirements may include, but are not limited to: all current semester grades, all "I" (Incomplete) and "M" (Missing) grades, grade changes, challenge and experiential credit, AP (Advanced Placement) credits, CLEP (College Level Examination Program) and DSST (DANTES Subject Standardized Tests) credit, transferred credit, required testing and departmental exceptions. All these items MUST be completed and submitted by

the above deadlines. Failure to comply will cause the student to have their graduation declined for that semester. Students will then have to apply for another graduation semester.

## Commencement

Commencement exercises are held once each year at the end of spring semester. Students who have completed their graduation requirements during the summer, fall, or spring of that academic year are invited to participate. Attendance is strongly encouraged, but not mandatory.

## Financial Holds

Candidates for graduation who owe money to UVU will not receive their diplomas until all debts are paid.

## Graduation with Distinction

Honors at graduation are available to students who meet the following minimum cumulative grade point averages: (Honors designations are computed on hours completed; 20 hours minimum for associate degrees; 30 hours minimum for bachelor degrees.) These Distinctions are awarded and based only upon GPA and are not related to participation in the UVU Honors Program.

### Associate Degrees

- Honors GPA 3.60
- High Honors GPA 3.80

### Bachelor Degrees

- Cum Laude GPA 3.60
- Magna Cum Laude GPA 3.80
- Summa Cum Laude GPA 3.90

**Note:** Please contact the Honors Program (LC 204) for information about the UVU Honors Program.

### Valedictorians

Each of the Colleges and Schools of the University will select a valedictorian from a list supplied by the Graduation Office of candidates graduating with honors during the academic year. The status of valedictorian is determined by each school and college, based on competitive criteria. Please check your school or college for requirements and details.

# Student Code of Conduct

## Purpose of this Policy

To advance the educational objectives of Utah Valley University, this Student Code of Conduct (“Student Code”) establishes standards and procedures necessary to maintain a community conducive to UVU’s three core values: exceptional care, exceptional accountability and exceptional results. This Student Code supports the intellectual, personal, social, and ethical development of all members of the community by promoting the values of civility, integrity, inclusivity, respect, and responsibility. Students at the university are expected to uphold these values through the exercise of their personal freedom and reasoned discourse. This Student Code also establishes the conduct expectations for students of Utah Valley University, outlines students’ rights and due process procedures for addressing alleged student violations of university policies, delineates the range of disciplinary sanctions for violations and establishes procedures for appeal of disciplinary sanctions.

## Policy

For a full version of this UVU Policy 541, please visit www.uvu.edu/policies, and click on Policy Manual.

Behavior which violates the Student Code of Conduct should be reported to the office of Student Conduct 801-863-5841 (non-emergency) or Campus Police 801-863-5555 (emergency).

### 4.1 Scope of this Policy

4.1.1 This policy applies to all students admitted to the University or enrolled in university courses, either full-time or part-time, and to all student conduct that occurs on university campus or at university-sponsored activities. It also applies to off-campus conduct, not otherwise protected by law, that adversely affects the university community and/or fulfillment of the University’s mission, values, and operations. The Dean of Students or designee shall decide whether the Student Code shall be applied to misconduct occurring off-campus on a case-by-case basis. If a student withdraws from the University while a disciplinary matter is pending, the University may continue to apply this Student Code and its processes for resolving that specific disciplinary matter.

4.1.2 The University may respond to allegations of student misconduct at any time even if the alleged misconduct occurs before classes begin, after classes end, during breaks within the semester, or during the break between semesters. The University may also institute its conduct proceedings

after a degree is awarded in the event misconduct is subsequently discovered. Where warranted, the University retains the right to revoke an awarded certificate, diploma, or degree.

4.1.3 All academic and behavioral misconduct complaints are subject to the due process procedures for investigation, resolution, and appeals as set forth in this Student Code, with the exception of sexual misconduct and protected class discrimination and harassment, which are exclusively subject to the procedures found in UVU Policy 162 Sexual Misconduct and UVU Policy 165 Discrimination, Harassment, and Affirmative Action.

## 4.2 Student Responsibilities and Rights

4.2.1 Nothing in this policy shall be interpreted to deny the rights of individuals protected by the U.S. Constitution, including their protected rights to freedom of speech and association, including as set forth in UVU Policy 161 Freedom of Speech.

4.2.2 The University expects all students to engage in responsible conduct, to obey the law, to maintain integrity, and to uphold high standards of individual honesty in all their actions and academic work. The University promotes an environment that values inclusivity and civility, and encourages students to be thoughtful and respectful in their dealings with other members of the campus community.

4.2.3 Students are responsible for knowing the information and procedures in this policy and other university policies applicable to students. The University publishes this Student Code in its catalog, online and in print, and in the University's Online Policy Manual. The University reserves the right to modify this policy. Alleged policy violations are governed by the policy version in place at the time of the alleged violation. However, Student Code procedures effective at the time of the reporting of the alleged violation will govern the investigation and resolution.

4.2.4 Students shall promptly participate in good faith in informal or formal student conduct investigations related to this policy. If the complainant or respondent fails to participate, the Student Conduct Office may make findings without the response of that party, potentially leading to an unfavorable outcome for that party.

4.2.5 As members of the university community, students have certain rights in addition to their constitutional rights and protections. Students should respect each other's rights. The University will endeavor to safeguard these rights for all.

4.2.5.1 Academic Evaluation. Students have the right to performance evaluation based on a written syllabus, to accurate information regarding changes in course programs or university requirements and reasonable accommodation of those already enrolled in a program or class(es), to receive academic credit and/or degrees when all specified requirements and coursework have been satisfied, and to make academic appeals including but not limited to grade changes and withdrawals. See UVU Policy 152 Accommodations for Individuals with Disabilities; UVU Policy 523 Grading; UVU Policy 601 Classroom Instruction and Management; UVU Policy 635 Faculty Rights and Professional Responsibilities.

4.2.5.2 Due Process. Students have the right to be protected from unreasonable decision-making by the University and to have access to University policies that affect them. The University is committed to providing students with balanced and fair systems of misconduct resolution. This Student Code is administrative in nature and is not a civil or criminal proceeding. Students are presumed not responsible for misconduct until responsibility is established by a preponderance of the evidence. Students' non-participation or silence during any process under this policy will not be used against them, but the University's decisions will nonetheless be made on the available information. The University complies with Utah State Board of Regents' Policy R256 Student Disciplinary Processes, which sets forth minimum standards of due process for student disciplinary processes related to behavioral (non-academic) misconduct matters that may result in either expulsion or a minimum ten-day suspension.

4.2.5.3 Freedom from discrimination. Students have the right to be treated fairly and with dignity regardless of race, color, national origin, age (40 and over), marital status, sex, sexual orientation, gender identity, gender expression, pregnancy, childbirth, or pregnancy-related conditions, disability, religion, genetic information, height, weight, veteran status, or other bases protected by applicable federal, state, or local law, and as revised in UVU Policy 165 Discrimination, Harassment, and Affirmative Action and UVU Policy 162 Sexual Misconduct.

4.2.5.4 Freedom from sex discrimination and sexual misconduct. Students have the right to be free from sex discrimination in UVU educational programs and activities, including but not limited to educational programs, employment, admissions, and university-sponsored activities, consistent with Title IX of the Educational Amendments of 1972. Sexual misconduct, including sexual harassment, sexual violence, sexual assault, relationship violence, and stalking, are types of sex discrimination prohibited by Title IX and/or UVU Policy 162 Sexual Misconduct. Students also have the right to a prompt and equitable response from the University when the University learns of any form of sex discrimination.

4.2.5.5 Freedom of Speech. Students have the right to free exchange of ideas and to artistic expression, the right to free speech, open discussion, inquiry, and academic freedom in the University and on the university campus without prior restraint or censorship, subject to limitations on unlawful/unprotected speech and to clearly stated, reasonable, and nondiscriminatory rules regarding time, place, and manner. See UVU Policy 161 Freedom of Speech.

4.2.5.6 Ombuds. Students have the right to access the University's Ombuds Office for consultation and assistance resolving matters of personal and school issues, including but not limited to concerns and conflicts regarding other students, faculty, university policies and processes, and housing disputes.

4.2.5.7 Privacy, Confidentiality, and Records. Students have the right to be protected from the University's improper disclosure of a student's educational record consistent with the Family Educational Rights and Privacy Act of 1974 and UVU Policy 542 Student Records Access. Students also have the right to inspect all records pertaining to themselves, which are not considered by the University to be private records of university personnel. Students are entitled to request corrections or expungement to educational records they consider inaccurate or misleading. Also see UVU Policy 635 Faculty Rights and Professional Responsibilities.

4.2.5.8 Student Government and Student Organizations. Students have the right to form and operate an organized student association or club within the guidelines prescribed by the University. Students also have the right to representation through student government on university committees, councils, commissions, and other formally constituted bodies that make general policy and procedure decisions directly affecting students or that govern student activities and conduct. See UVU Policy 532 Associated Student Organization and Club Membership.

## 4.3 Standards of Student Conduct

4.3.1 Students are individually responsible for their conduct. In addition, student organizations may be held collectively responsible for the conduct of their student members during student organization activities or while acting on behalf of or at the request of the student organization.

4.3.2 Students shall not engage in academic or behavioral (non-academic) misconduct as described in this section. Categories of prohibited misconduct include but are not limited to the following:

4.3.2.1 Abuse of student conduct process. Abuse or interference with university student conduct processes, including but not limited to falsification, distortion, or misrepresentation of information; failure to provide information or documents, or destruction of information or documents during the student conduct process; attempting to discourage an individual's honest participation in or use of the student conduct process; verbal or physical abuse and/or intimidation or any other retaliation of a party, witness, or other participant in a student conduct process; failure to comply with the sanction(s) imposed by the student conduct administrator; or influencing or attempting to influence another person to commit an abuse of the student conduct process.

4.3.2.2 Academic misconduct and other acts of dishonesty. All forms of academic misconduct and other acts of dishonesty, including but not limited to cheating, plagiarism, fabrication, and/or possessing or providing to the University any false, falsified, altered, forged, or misleading information, materials, documents, accounts, records, identification, or financial instruments.

4.3.2.3 Alcohol. Use, possession, distribution, being under the influence of alcoholic beverages or paraphernalia on the university campus or at university-sponsored events or activities, and other conduct prohibited by UVU Policy 157 Alcoholic Beverages, Unlawful Drugs, and other Illegal Substances. Alcoholic beverages may not, in any circumstance, be used by, possessed by, or distributed to any person under 21 years of age.

4.3.2.4 Animals. Animals on campus, or other conduct prohibited in UVU Policy 160 Animals on Campus. Service dogs or miniature horses that are trained to perform work or tasks related to a disability are permitted.

4.3.2.5 Damage or destruction. Unauthorized damage to or destruction of university property or the personal property of a member of the university community.

4.3.2.6 Discrimination. Protected class discrimination as defined by UVU Policy 165 Discrimination, Harassment, and Affirmative Action, including but not limited to negative or adverse conduct towards university employees or students in the terms or conditions of employment; university admission or education; access to university programs, services, or activities; or other university benefits or services on the basis of inclusion or perceived inclusion (in the case of disability, sexual orientation, gender identity, or gender expression) in one or more of the protected classes that has the effect of denying or limiting participation in university employment or in a university program or activity.

4.3.2.7 Disruptive behavior. Disruption, obstruction, or interference with university operations, teaching, learning, research, administration, other university activities, and/or other authorized non-university activities that occur on the university campus as defined in section 3.22.

4.3.2.8 Drugs. Use, possession, distribution, manufacturing, or being under the influence of illegal drugs or other controlled substances or drug paraphernalia, including abuse, misuse, sale, or distribution of prescription or over-the-counter medications, and other conduct prohibited in UVU Policy 157 Alcoholic Beverages, Unlawful Drugs, and other Illegal Substances.

4.3.2.9 Federal, state, or local law or regulation. Violation of federal, state, or local law or regulations that adversely affects the university community and/or the pursuit of its objectives.

4.3.2.10 Fire safety. Violation of local, state, federal, or university fire policies, including but not limited to causing a fire that damages university or personal property or that causes injury to another; improper use of university fire safety equipment; or tampering with or improperly engaging a fire alarm or fire detection/control equipment while on university property.

4.3.2.11 Gambling. Activities that violate state or federal law regarding gambling, including but not limited to risking anything of value for a return or risking anything of value upon the outcome of a contest, game, gaming scheme, or gaming device when the return or outcome is based upon an element of chance; and is in accord with an agreement or understanding that someone will receive something of value in the event of a certain outcome. Gambling includes a lottery and fringe gambling.

4.3.2.12 Harm to person(s). Intentional or reckless physical harm, threats, intimidation, hazing, bullying, cyberbullying, coercion, retaliation, and/or other conduct, including assisting in the foregoing, that threatens or endangers the health or safety of any person. Additionally, participation or cooperation by person(s) being harmed does not excuse the violation.

4.3.2.13 Misuse of computing facilities. Unauthorized use of computing facilities and other conduct prohibited in UVU Policy 441 Appropriate Use of Computing Facilities, including but not limited to attempting to gain access to any system or account without authorization from a system administrator; sharing passwords or accounts; copying or changing system files or software without authorization from a system administrator; using destructive or invasive software; displaying images, sounds, or messages that are obscene where others may be affected by them; consuming inordinate amounts of system resources; crashing machines or systems deliberately; and using the university computing facilities for disruptive or illegal activities.

4.3.2.14 Other policies. Violation of other written university policies, guidelines, or practices.

4.3.2.15 Retaliation. Reprisals or retaliation as defined in this Student Code and other applicable policies.

4.3.2.16 Sexual misconduct. Sexual misconduct, as defined by UVU Policy 162 Sexual Misconduct, includes but is not limited to acts and attempts of dating and relationship violence; domestic violence; discrimination based on sex, pregnancy, pregnancy-related conditions, sexual orientation, gender identity, or gender expression; hostile environment based on sex, pregnancy, pregnancy-related conditions, sexual orientation, gender identity, or gender expression (including intimidation and hazing/bullying); sexual harassment; sexual assault (including nonconsensual sexual contact or nonconsensual sexual intercourse); sexual exploitation (including engaging in sexual trafficking); and stalking.

4.3.2.17 Theft. Intentional and unauthorized taking of, attempted taking of, or maintaining possession of university property or others' personal or public property, including goods, services, or other valuables.

4.3.2.18 Tobacco. Smoking, vaping, or using electronic cigarettes or tobacco inside campus buildings and within 25 feet of entrances, windows, and air intake vents, or other conduct prohibited in UVU Policy 158 Tobacco.

4.3.2.19 Trademark/copyright violations. Unauthorized use (including misuse) of university or organizational names, logos, images, or other university trademarks or copyrighted materials, or other conduct prohibited by UVU Policy 135 Use of Copyrighted Materials.

4.3.2.20 Unauthorized access. Trespassing, misuse of access devices or privileges to university property, or unauthorized entry to or use of buildings or offices, including unauthorized possession, duplication, or use of any means of access to any university building (i.e., keys, proximity cards, etc.), or propping open or other unauthorized use of alarmed doors for entry into or exit from a university building.

4.3.2.21 Weapons. Unauthorized possession or use of a firearm, ammunition, explosives, dangerous weapons, or dangerous chemicals on university property. UVU students must adhere to Utah law regarding the lawful possession of permitted and concealed firearms on public university campuses.

4.3.2.22 Wheeled devices. Skateboards, roller blades, roller skates, bicycles, hoverboards, and similar wheeled devices are not permitted inside university buildings or on any stairways, structures, landscaped areas, or concourses, or other areas as prohibited by UVU Policy 403 Restrictions on the Use of Skateboards, Roller Blades, Roller Skates, Bicycles, Motorcycles, and Hoverboards.

## 4.4 Non-University Legal Cases

4.4.1 University student conduct processes may apply to a student charged with conduct that potentially violates both the law and this Student Code (that is, if both possible violations result from the same alleged conduct). Processes under this Student Code may be carried out before, after, or at the same time as civil or criminal cases at the discretion of the Dean of Students or designee or as otherwise required by law. Determinations made or sanctions imposed under this Student Code are not subject to change when civil or criminal charges addressing the same alleged incident or act are dismissed, reduced, or resolved in favor of or against the student.

4.4.2 When a student is charged by federal, state, or local authorities with a violation of law, the University will not request special consideration for that individual because of their status as a student. If the alleged offense is also being processed under the Student Code, the University may advise off-campus authorities of the existence of the Student Code and of how such matters are typically handled within the university community. The University will cooperate with law enforcement and other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators (provided that the conditions do not conflict with campus policies or sanctions).

## 4.5 Reporting, Investigations, and Disciplinary Proceedings

4.5.1 Reports of any suspected or alleged violation(s) of the Student Code shall be made to the Student Conduct Office.

4.5.2 In responding to reports of alleged violations of the Student Code, the University shall provide prompt, fair, and impartial investigations and disciplinary processes. During these processes, both complainant and respondent shall be provided equitable rights and opportunities, including notice and an opportunity to be heard, as outlined in section 5.0.

4.5.3 The University may sanction any student who violates this Student Code and other applicable university policies, up to and including expulsion from the University.

4.5.4 If a student has been disciplined for serious violations of institutional policies regarding sexual misconduct, sex discrimination, harassment, or other serious misconduct resulting in suspension or expulsion, the University may enter a notation on the student's transcript in accordance with the Family Educational Rights and Privacy Act.

4.5.5 The University prohibits retaliation as defined in this policy. The University shall take steps to prevent retaliation and respond to threats or acts of retaliation, up to and including expulsion from the University. Individuals who deliberately make false or malicious accusations of violation of this Student Code or other applicable university policies may be subject to disciplinary action, up to and including expulsion from the University. However, a no-violation finding does not in itself constitute proof of a false or malicious accusation.

## 4.6 Interim Measures

4.6.1 The Director of Student Conduct or designee may institute interim measures before the final resolution of an alleged incident of misconduct, including ensuring the safety and well-being of members of the campus community, preservation of university property, or if the student poses an ongoing threat of disruption or interference with the operations of the University. Interim measures may include but are not limited to

4.6.1.1 University issued no-contact directive(s);

4.6.1.2 Providing an escort;

4.6.1.3 Making reasonable adjustments to exams, assignments, and/or providing alternative course completions options in collaboration with faculty;

4.6.1.4 Making adjustment to class schedules, including the ability to transfer course sections or withdraw from a student course without penalty;

4.6.1.5 Making adjustments to living, transportation, and working situations;

4.6.1.6 Limiting a student's or organization's access to certain university facilities or activities pending resolution of the matter;

4.6.1.7 Interim suspension, which may include denial of access to campus (including classes) and/or all other activities or privileges for which the student might otherwise be eligible, as the Dean of Students or designee may determine to be appropriate.

4.6.1.8 Any measure deemed necessary and appropriate by the student conduct administrator in compliance with this policy.

4.6.2 Interim measures do not replace the student conduct process, which will still proceed in a timely manner.

## 4.7 Sanctions

4.7.1 The University may sanction any student who violates this policy, up to and including expulsion from the University. Sanctions are intended to educate students on the effects of their behavior and invoke change in future decision making. Sanctions shall be applied in a fair manner and be assigned in accordance with two criteria: (1) educational value for the student found in violation of this policy; and (2) the sanction being commensurate and consistent with the type of violation and any prior misconduct. Except in urgent circumstances where there is significant threat of harm, disruption, or of undermining the integrity of the educational environment, the student conduct administrator shall not impose irreversible sanctions (i.e., denying access to class, final exams, or other student programs).

4.7.2 One or more of the following sanctions may be imposed upon students for violation(s) of the Student Code or other university policies.

4.7.2.1 Academic sanctions. Sanction of academic nature including but are not limited to failing grades, reduced grades, and/or redoing academic exercises.

4.7.2.2 Disciplinary no-contact directive. Specified parameters restricting communicative contact and/or physical proximity with a university community member or campus entity.

4.7.2.3 Discretionary sanctions. Educational meetings or interventions, behavior agreements, work assignments, essays, service to the University, or other related alternative, educational and/or restorative remedies.

4.7.2.4 Expulsion. Permanent separation of the student from the University.

4.7.2.5 Fines. Fines may be imposed as published on the Student Conduct Office website.

4.7.2.6 Group sanctions. Sanctions imposed upon student organizations found to have violated the Student Code as listed above, including loss of all privileges or status.

4.7.2.7 Loss of Privileges. Denial of specified privileges for which the student might otherwise be eligible for a designated period of time.

4.7.2.8 Probation. A written reprimand for violation of specified standards. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to violate any university standard(s) during the probationary period. Probation may also include specific conditions that the student must meet.

4.7.2.9 Restitution. Compensation for loss, damage, or injury. This may take the form of appropriate service and/or monetary or material replacement.

4.7.2.10 Revocation or withholding of degree. Revocation or withholding award of a degree or certificate otherwise earned.

4.7.2.11 Suspension. Separation of the student from the University for a definite period of time, after which the student is eligible to return. Conditions for readmission will typically be specified at the time of the suspension.

4.7.2.12 University-sponsored housing sanctions. Removal, probation, or reassignment.

4.7.2.13 Warning. A written notice to the student that the student is violating or has violated university standards of student conduct as laid out in this policy and that the misconduct must not be repeated.

# Policy

## 5.1 Reporting

5.1.1 While all members of the university community are encouraged to report any suspected violation(s) of the Student Code to the Student Conduct Office, university employees are required to report any suspected student violation(s) of the Student Code to the Student Conduct Office within 24 hours of learning of the alleged violation. The Student Conduct Office will then forward the report to the appropriate student conduct administrator as outlined in section 5.8.1.

5.1.2 While all members of the university community are encouraged to report any suspected violations of UVU Policy 162 Sexual Misconduct or Policy 165 Discrimination, Harassment, and Affirmative Action, university employees (except licensed counselors and health providers, as provided in Policy 162) are required to report any suspected violations of Policy 162 to the Office of Equal Opportunity and Affirmative Action/Title IX within 24 hours of learning of the alleged violation. Any reports of such violations that may be received by the Student Conduct Office will be immediately reported to the Office of Equal Opportunity and Affirmative Action/Title IX.

5.1.3 Individuals may submit reports of alleged violations of the Student Code or other university policies through several methods listed on the Student Conduct website at https://www.uvu.edu/studentconduct/report, including options for reporting anonymously.

5.1.4 Reports made through tip/crisis reporting methods designated on the student conduct website will be forwarded to the UVU Police, Associate Dean of Students, Director of Crisis Services, and other individuals as needed for an effective response. Each report will be individually assessed to determine the nature, severity, and likelihood of harm to members of the university community and the appropriate response.

## 5.2 Amnesty

5.2.1 The University encourages all community members to proactively assist others whose health or safety are at risk. The University will not pursue student conduct process against a reporting student, a complainant, a respondent, or witness for personal involvement in minor policy violations, including but not limited to the use of alcohol, marijuana or other drugs, at or near the time of the incident as long as the reporting student's behavior did not place the health or safety of any other person at risk. The University may, however, initiate an educational discussion with any student regarding their personal involvement in minor policy violations.

5.2.2 If the same person or student organization repeatedly requests amnesty for substantially similar minor policy violations, the student conduct administrator may deny amnesty to that person or student organization.

## 5.3 Safe Harbor

5.3.1 Students who have a drug or alcohol addiction may be granted safe harbor from discipline. If a student self-reports their own addiction to the appropriate university officials before the threat of drug testing and/or discipline, the University may decide not to initiate a conduct complaint. A written action plan by the student may be used to track cooperation with the safe harbor program. Failure to follow the action plan may nullify the safe harbor protection and the University may initiate student disciplinary processes.

## 5.4 Collective Violations by Student Organizations

5.4.1 When violations of this Student Code occur at events sponsored or co-sponsored by a student organization, its officers and membership may be held collectively and/or individually responsible when:

5.4.1.1 The student organization's leader(s) or officer(s) gave consent to, or encouraged, the behavior; or

5.4.1.2 The student organization's leader(s) or officer(s) knew or should have reasonably known about the behavior.

5.4.2 Hearings for student organizations follow the same student conduct process as for individuals. In any such action, determinations as to violations and sanctions may be made collectively to the student organization and/or individually and will be proportionate to the involvement of each individual and the student organization.

## 5.5 Confidentiality and Recordkeeping

5.5.1 University personnel involved in student conduct processes shall maintain confidentiality to the extent allowed by the Utah Government Records and Management Act (GRAMA), the federal Family Educational Rights and Privacy Act (FERPA), the federal Health Information Portability and Accountability Act (HIPAA), and other applicable laws governing record protection and/or mandatory reporting.

5.5.2 The Student Conduct Office strives to maintain confidentiality throughout the investigation and appeals hearing process.

5.5.3 The Student Conduct Office is responsible for maintaining appropriate records directly related to alleged violations, investigations, findings, sanctions, etc. as described in section 5.15 If complaints are found to be without merit, records of the complaint and processes will not be entered onto a student's disciplinary record, but the Student Conduct Office will keep record of the case in its internal databases.

5.5.4 Complainants, respondents, witnesses, and any other participants in the conduct process are prohibited from recording interviews, hearings, and other meetings before, during, and after the disciplinary process.

## 5.6 Support Persons and Advisors

5.6.1 As required by Utah State Board of Regents' Policy R256 Student Disciplinary Processes, in matters of behavioral (non-academic) misconduct where the University believes in good faith, based on facts known by the University at the time or when additional facts are discovered later, that the student conduct matter may result in expulsion or a minimum ten-day suspension, the additional protections provided in this section apply. Students may waive any rights described in this section. This section does not apply to UVU Police Department law enforcement activities.

5.6.1.1 Before interviewing the student, the investigator or representative of the Student Conduct Office shall notify the student in writing of the allegations (including the time and place of the alleged misconduct, where available) made against the student and of the student's right to have a support person or advisor throughout the process who may be, but need not be, an attorney. This notice will be given at least 24 hours before a student is interviewed about the student conduct matter. If a student wishes to seek counsel from a support person or advisor, the University shall reschedule the interview, giving the student reasonable time to obtain a support person/advisor.

5.6.1.2 In meetings and interviews under section 5.12 and section 5.13 of this policy on behavioral (non-academic) misconduct matters, student complainants and respondents may be accompanied by a support person/advisor of the student's choice, who may be an attorney. During such meetings or interviews, the support person or advisor may only advise the student and may not actively participate in the investigation or process.

5.6.2 During any appeals hearing undersection 5.14 of this policy, student complainants and respondents may each have a support person/advisor of their choice, who may be an attorney, advocate for them.

5.6.3 A support person/advisor may not be an employee of the University who would have a conflict of interest in serving in the support person/advisor role. Support persons/advisors must be willing to agree maintain the confidentiality of student conduct investigation and appeals hearing processes.

5.6.4 The University may proceed with the investigation and hearing processes in a timely fashion without the complainant or respondent if that party fails to respond or declines to participate. The University may set reasonable deadlines and move forward with processes regardless of whether a party and/or a party's support person/advisor is able to accommodate those deadlines.

## 5.7 Preliminary Review

5.7.1 After receiving a report of an alleged violation of the Student Code or other applicable university policies, the student conduct administrator shall promptly conduct a preliminary review to determine if interim measures are needed, if a violation of the Student Code is alleged, and if an investigation is necessary to resolve a genuine dispute of material facts.

5.7.2 If the student conduct administrator determines that no violation of the Student Code has been alleged and/or there's no genuine dispute of material facts, the administrator shall issue a written notice of this decision to the respondent, complainant (if required by law), and the Student Conduct Office.

5.7.3 A preliminary review dismissal shall be final with no additional internal appeals available to the parties.

5.7.4 If the student conduct administrator determines that a violation of the Student Code or other policy has been alleged and that an investigation is necessary to resolve a genuine dispute of material facts, then the Administrator may proceed with an investigation of the alleged violation.

5.7.5 The student conduct administrator shall report the complaint to the Director of Student Conduct or designee.

5.7.6 At the recommendation of the student conduct administrator, the Director of Student Conduct or designee may apply an interim measure to a student or student organization or invoke other safety measures, as provided in section 4.6, pending the outcome of the investigation and subsequent proceedings.

5.7.6.1 The Dean of Students or designee will notify the student in writing of this action, including a brief description of the reason for the interim measure. When required by law, such as in sexual misconduct cases, applicable notices will be provided to both complainants and respondents. A student who receives an interim suspension may request a meeting with the Dean of Students or designee to present information and/or reasoning as to why the interim measure is inappropriate or unnecessary.

5.7.6.2 At the discretion of the Dean of Students or designee, and in collaboration with faculty and/or the appropriate academic dean(s), alternative coursework options may be approved to minimize impact on the student during any interim measure.

## 5.8 Delineation of Authority

5.8.1 For purposes of this policy, the Dean of Students shall delegate authority for the investigation, resolution, decision-making (including appeals), and sanctions based on the type of misconduct as defined in section 3.1 and 3.2 as follows:

| Type of Misconduct | Student Conduct Administrator | Student Conduct Appeal Decision Maker |
|---|---|---|
| Academic | Faculty member of course in which misconduct occurred | Academic dean of college/school or designated chair of department in which misconduct occurred |
| Behavioral | Director of Student Conduct or designee | Dean of Students or designee |

## 5.9 Informal Resolution

5.9.1 Informal resolution may include an inquiry into the facts but typically does not include an investigation. Informal resolution is flexible and includes options such as mediating an agreement between the parties, separating the parties, referring the parties to counseling programs, negotiating an agreement for disciplinary action, conducting targeted preventive educational and training programs, or providing remedies for the individual harmed by the offense. Informal resolution also includes options such as discussions with the parties, making recommendations for resolution, and conducting a follow-up review after a period of time to ensure that the resolution has resolved concerns effectively.

5.9.2 Because each alleged violation is different, the student conduct administrator shall tailor each resolution to the specific facts of the case, including determining whether the alleged violation is appropriate for informal resolution. Informal resolution may result in resolutions such as behavior agreements and/or sanctions combined with educational or restorative measures.

5.9.3 Informal resolution is encouraged to resolve concerns at the earliest stage possible with the cooperation of all parties involved. Participation in the informal resolution process is voluntary. Informal resolution may be appropriate for anonymous and/or third-party reports, or when respondents accept responsibility for their violations. Information resolution may be inappropriate when one or both of the parties are reluctant to participate in good faith, or when there are allegations of violent behavior.

5.9.4 Any unsuccessful informal resolution, including but not limited to noncompliance with the informal process, may be referred for student conduct hearing.

5.9.5 After concluding informal resolution, the student conduct administrator shall notify the complainant and respondent in writing of the resolution that was agreed upon.

5.9.6 Participation in informal resolution does not prohibit either party from terminating informal resolution and/or requesting an investigation at any point during the informal resolution process. Where a report is closed after informal resolution, the matter may later be reopened at the discretion of the student conduct administrator when requested by the complainant and/or if the student conduct administrator determines there is good cause to do so.

## 5.10 Investigation

5.10.1 If the student conduct administrator determines an investigation is necessary, the University shall conduct a reliable and impartial investigation by interviewing relevant witnesses, collecting relevant documentary evidence, and preparing a written summary of findings. The purpose of the

investigation is to establish whether there is a reasonable basis, based on a preponderance of the evidence, for concluding that the alleged violation of the Student Code has occurred. The University reserves the right to engage an outside investigator to conduct the investigation if it is determined there is a conflict of interest or other compelling reason to do so.

5.10.2 If a student withdraws from the University before the completion of an investigation and hearing, the University may continue to investigate and apply this process for resolving the specific disciplinary matter in the student's absence. If a respondent is found to have violated university policy, the University may restrict the respondent's readmission on terms or under circumstances it may prescribe at the time of the finding.

5.10.3 Complainants, respondents, and witnesses shall be treated with respect throughout the investigation process, disciplinary process, and other proceedings.

5.10.3.1 Accordingly, the University endeavors through this policy and diligent effort to secure the following for complainants and respondents:

5.10.3.1.1 Reasonably prompt and equitable resolution of allegations for respondents and complainants,

5.10.3.1.2 Freedom from retaliation for making a good faith report or for participating in any investigation or proceeding under this policy.

5.10.3.1.3 Timely and equal access to allegations for respondents and complainants, and the opportunity to respond to information that will be used against them in any disciplinary proceeding.

5.10.3.1.4 The opportunity for complainants and respondents to offer information, present evidence, and identify witnesses during an investigation.

5.10.3.1.5 Interim measures made available for complainants, respondents, and witnesses, and the opportunity to request modifications necessary for physical and/or emotional safety.

5.10.3.1.6 Timely notice of meetings where complainants' and respondents' presence is necessary.

5.10.3.1.7 Simultaneous notification to complainants and respondents, in writing, of the results of any proceedings.

5.10.3.1.8 The opportunity for complainants and respondents to articulate concerns or issues about proceedings under this policy.

5.10.3.1.9 Reasonable time for complainants and respondents to prepare responses, as permitted under this policy.

5.10.3.1.10 Written notice to complainants and respondents of any necessary extensions of timeframes under this policy.

5.10.3.1.11 Reasonable accommodations for all participants in the student conduct process who have a disability and who request disability accommodations. Such requests may be made to the student conduct administrator, who will refer such requests to the appropriate ADA coordinator and then implement approved accommodations.

## 5.11 Notices to Complainants and Respondents

5.11.1 The student conduct administrator will give written notice to:

5.11.1.1 Complainant(s) of their options to report to other campus and community authorities as applicable, when complainants allege a violation of the Student Code to the student conduct administrator.

5.11.1.2 Complainants and respondents, if the student conduct administrator's inquiry advances beyond preliminary review according to section 5.7, of the time and place of alleged policy violation(s), which policies were allegedly violated, and how those policies were violated. The student conduct administrator will also provide the parties with written notice to appear at a pre-hearing meeting. If additional violations are later alleged, a further notice shall be provided to the complaining and responding students.

5.11.1.3 Complainants and respondents of their ability to participate in campus investigations and/or student conduct processes by providing relevant information and recommending relevant witnesses. If students choose to not participate in the process, the case may proceed without them and a decision may be made without any input from the student.

5.11.1.4 Complainants and respondents of their right, in behavioral (non-academic) misconduct matters, to be accompanied by a support person/advisor of their choice, who may but need not be an attorney, throughout the student conduct process. Students must notify the student conduct administrator at least five school days in advance of the pre-hearing meeting of their support person/advisor's identity and the nature of the student's relationship to the support person/advisor. The University has the right to disqualify a support person/advisor when their participation would create a conflict of interest or a potential disruption in the student conduct process.

5.11.1.5 Complainants and respondents of how to request information for disability accommodations and/or language translation services.

## 5.12 Pre-Hearing Meeting

5.12.1 The student conduct administrator will conduct a pre-hearing meeting with the respondent. The complainant and/or others may be invited to attend the same or a separate pre-hearing meeting, depending on the circumstances. If any party chooses not to attend, the pre-hearing meeting may still proceed.

5.12.2 The pre-hearing meeting will occur promptly after the student conduct administrator determines, after preliminary review, that an investigation/pre-hearing is necessary.

5.12.3 Parties will be given the opportunity to present relevant information in response to the alleged misconduct before and during the pre-hearing meeting.

5.12.4 The pre-hearing meeting and outcomes will be shared with the parties to the extent allowed by law, but will otherwise remain confidential.

5.12.5 If the respondent does not admit to the alleged violation(s) and/or the allegations cannot be resolved by mutual consent, the matter will be considered in a student conduct hearing.

5.12.6 If the respondent accepts responsibility for the violation, but sanctions are not agreed to, sanctions will be determined in a student conduct hearing.

5.12.7 During the pre-hearing meeting, investigation, or other pre-hearing processes in behavioral (non-academic) misconduct matters, the complainant's and/or respondent's support person/advisor may only advise the student and may not actively participate.

## 5.13 Student Conduct Hearing

5.13.1 Allegations of misconduct and/or sanctions not resolved during the pre-hearing meeting will be referred to a student conduct hearing, which will be scheduled as promptly as possible after the pre-hearing meeting. The student conduct administrator may delay the hearing if further investigation is needed or other circumstances require a delay. Hearing proceedings may be conducted over the course of multiple meetings.

5.13.2 The participating parties will receive notice of hearing meetings and access to all evidence to be considered at the hearing at least five school days in advance.

5.13.3 Student conduct hearings will be conducted according to the following procedures:

1. The student conduct administrator will conduct the student conduct hearing with the respondent. The complainant and/or others will be invited to attend the hearing. If either party fails to attend the hearing without good cause and without prior notice to the student conduct administrator, the hearing may proceed. Neither party is required to participate in the hearing for the hearing to proceed. The University reserves the right to modify hearing procedures to protect the safety of all parties involved.
2. Student conduct hearings and outcomes will be shared with the parties to the extent allowed by law, but will otherwise remain confidential.
3. Student conduct hearings will be conducted by the student conduct administrator.
4. In behavioral (non-academic) misconduct matters, the complainant and respondent have the right to be assisted by a support person/advisor of their choice during the Student Conduct Hearing and during any subsequent appeal hearings. Parties must notify the student conduct administrator at least five school days in advance of the hearing of their support person/advisor's identity and the nature of their relationship to the support person/advisor (including whether the support person/advisor is an attorney). The University has the right to disqualify a support person/advisor when that person's participation would create a conflict of interest or potentially disrupt the student conduct process. (If the complainant or the respondent do not provide the required information about their support person/advisor at last five days in advance, the support person/advisor may attend but shall not participate in the hearing.) Support persons/advisors may give opening statements, advise students throughout the hearing, question witnesses as allowed by the student conduct administrator, and present a closing statement. Support persons/advisorsmay not serve as witnesses. Neither the Rules of Civil Procedure nor the Rules of Evidence apply to these hearings.
5. If the complainant, respondent, and/or other witnesses have concerns for their personal safety, well-being, or fear confrontation during the hearing, they may request other reasonable means of participating. the student conduct administrator will determine whether the proposed means are reasonable.
6. Reasonable efforts will be made to accommodate the schedules of all participants in the hearing. Typically, no more than one extension will be granted.
7. In student conduct hearings involving more than one respondent, the student conduct administrator may permit separate or joint student conduct hearings concerning each student.
8. The complainant, respondent, and the student conduct administrator may arrange for witnesses to present relevant information during the student conduct hearing.
9. Records, exhibits, and written statements will be accepted if deemed relevant by the Student Conduct Administrator.
10. All procedural questions are subject to the final decision of the student conduct administrator.
11. After all pertinent information has been received, the student conduct administrator shall deliberate on all available information and determine, based on a preponderance of the evidence, whether the respondent hasviolated the Student Code.
12. The respondent and complainant will receive prompt notice of hearing decisions in writing to the student's university email address, or hand-delivered, typically within five school days of the hearing date, unless circumstances require delay. The notice will include whether the policy was violated, actions taken to resolve the complaint, and any applicable sanctions to both respondents and complainants to the extent allowed by law.
13. A finding of not-in-violation will resolve the matter with no further action or appeals.
14. Disciplinary sanctions may be imposed upon respondent(s) found in violation of the Student Code and communicated to the respondent in a written sanction letter. Elements of the sanctions may be imposed either singularly or in combination with other sanctions. Sanctions do not take effect until the completion of the appeal process, if any, unless otherwise specified by the student conduct administrator.

## 5.14 Appeal Process

5.14.1 Respondent(s) or complainant(s) may appeal a decision or sanction of the student conduct administrator to the Student Conduct Appeal Panel within five school days of the decision. These appeals shall be in writing and shall be delivered to the Student Conduct Office via email or postal mail. Untimely requests will not be considered absent extraordinary circumstances. Activities such as graduation, study abroad, internships/ externships, business travel, or educational, sabbatical, or extracurricular activities generally do not in themselves constitute extraordinary circumstances.

5.14.2 When requesting the appeal, the respondent or complainant must identify in the written request at least one or more of the following grounds for appeal:

1. New evidence unavailable to the party during the investigation has been discovered that could substantially impact the investigation, findings, and/or resolution.

2. Substantial departure from the procedures outlined in this Student Code or that the process was unfair and/or biased, which substantially impacted the outcome of the investigation or hearing. The duration of the investigation or severity of the sanction are not considered procedural errors.
3. Findings lacked substantial evidence such that no reasonable person would reach the same conclusion as the student conduct administrator.
4. The sanction imposed is substantially disproportionate to the severity of the violation (i.e., too severe or not severe enough).

5.14.3 Unless the appeal panel (the composition of which is explained below) determines by majority vote that one or more of the grounds stated in 5.14.2 has been met and that modifications to the original decision should be recommended, the student conduct administrator's decision or sanction shall be upheld.

5.14.4 While an appeal is pending, the student conduct administrator may impose interim measures.

5.14.5 The Student Conduct Office shall promptly convene a three-member appeal panel from the Policy 162/165 review panel pool. The appeal panel will include one faculty, one staff, and one student.

5.14.6 Panel members must be in good standing with the University and must not have any relevant conflict of interest. The student conduct administrator will notify the parties of the panel members' identities and appeal procedures in this policy. Within 3 school days of receiving this notice, parties may request in writing that a review panel member be disqualified based on bias or conflict of interest and explain the reasons for this request. If the Student Conduct Office, in consultation with the Office of General Counsel, confirms a bias or conflict, a new panel member shall be selected.

5.14.7 The Office of General Counsel will appoint an impartial attorney to preside over the appeal hearing as hearing officer. This attorney must have no prior involvement in either advocacy or investigatory matters related to the conduct matter. The hearing officer will ensure order, fairness, due process, efficiency, and civility at the hearing, and ensure a relevant and sufficient evidentiary record for the panel's consideration. To advance this aim, the hearing officer may set time limits proportionate to the complexity of the case; exclude irrelevant and unduly repetitious exhibits, witnesses, questions, statements, or other information; and exclude material deemed privileged under the law. Formal rules of evidence do no apply. The appeal panel shall consult with the hearing officer during the appeal process regarding legal, procedural, policy, and other questions as needed. The hearing officer, in consultation with the panel, will review and respond to any pre-hearing questions or objections from the parties related to hearing matters.

5.14.8 Once the panel is confirmed, they shall promptly determine, based on a preponderance of the evidence, whether the appeal request meets one or more criteria under section 5.14.2.

5.14.9 The Student Conduct Office shall then notify parties in writing of the appeal hearing panel's determination and, if a hearing is warranted, of the appeal hearing date, which will be scheduled promptly.

5.14.10 The hearing officer may conduct a pre-hearing conference to formulate or simplify the issues; obtain admission of fact and documents that will avoid unnecessary proof; arrange for the exchange of proposed exhibits; outline expectations for the hearing; or agree to other matters that may expedite the orderly conduct of the hearing.

5.14.11 The complainant and respondent will be allowed to attend the entire appeal hearing, excluding deliberations. In behavioral (non-academic) misconduct matters, the complainant's and respondent's support person/advisor, if any, will be allowed to attend the entire appeal hearing, excluding deliberations. Admission of any other person to the appeal hearing shall be at the discretion of the hearing officer.

5.14.12 The scope of the appeal hearing and the standard of review shall be limited to those stated in section 5.14.2. Along with written notice of the hearing date, the Student Conduct Office shall provide the review panel and parties copies of a summary of the case (where applicable), written findings, sanction letter, the written request for appeal, and any additional opposition statements already provided by the parties.

5.14.13 The appeal hearing is an opportunity for the parties to be heard by the appeal panel in person about the issues and criteria being considered for the appeal, including addressing the information in the summary of the investigation, any supplemental statements or new evidence unavailable during the investigation, any written impact or mitigation statements, to identify witnesses for the panel's consideration, and to respond to any questions from the appeal panel.

5.14.14 In behavioral (non-academic) misconduct matters, the respondent and complainant have the right to be assisted by a support person/ advisor of their choice, who may be, but need not be, an attorney and who may participate during the appeal hearing. Parties must notify the Student Conduct Office at least 5 school days in advance of the hearing of their selected support person/advisor and the nature of their relationship to the support person/advisor (including whether the support person/advisor is an attorney). The University has the right to disqualify a support person/ advisor when their participation would create a conflict of interest or would create the potential for disrupting the student conduct process. If the complainant or the respondent do not provide the required information about their support person/advisor at least five days in advance, the support person/advisor may attend but shall not participate in the appeal hearing. Support persons/ advisors may give opening statements, advise students throughout the hearing, question witnesses as allowed by the hearing officer, and present a closing statement. Support persons or advisorsmay not serve as a witness. Neither the Rules of Civil Procedure nor the Rules of Evidence apply to these hearings.

5.14.15 Documents, evidence, other statements, and requests for the appearance of witnesses to be considered at the hearing may be made by the panel, respondent, complainant, and/or student conduct administrator, and must be submitted in writing to the Student Conduct Office at least 5 school days before the hearing, and must include explanations of how each document or request is relevant to the reasons for the appeal. Only witnesses and other evidence that are relevant to the section 5.14.2 bases for appeal may be considered by the appeal panel. It is the responsibility of the party requesting a particular witness to invite that witness to attend the hearing.

5.14.16 In the event that any party fails to attend the appeal hearing without good cause and prior notice to the Student Conduct Office, the appeal panel may proceed with the hearing. Neither party is required to participate in the hearing for the appeal panel to proceed.

5.14.17 The hearing, except for deliberations, will be audio recorded by the appeal panel chair, who will give the recording to the Student Conduct Office. A copy of the audio file and/or transcription will be made available for review by either party upon request. Participants are prohibited from recording interviews and other meetings before and after the hearing.

5.14.18 Each party has up to 60 minutes to present their portion of the case (opening statement, testimony of the party and party's witnesses, questioning the other witnesses if any, and closing statement). The hearing officer will keep track of time.

5.14.19 The hearing officer will begin the hearing by asking the student conduct administrator to provide an oral summary of the investigation process, findings, and conclusions contained in the case summary and sanction letter.

5.14.20 The respondent and complainant shall each have the opportunity to make a personal statement, relevant to the scope of the appeal and bases for the appeal, including the personal impact of the alleged misconduct and/or sanction, the relief sought, and mitigating or aggravating information. In behavioral (non-academic) misconduct matters, each party's support person/advisor shall also have the opportunity to make an opening statement relevant to the scope of appeal. Each party, or their respective support person/advisor, may call witnesses that the hearing officer deems relevant to the scope of the appeal, question witnesses through the hearing officer, present evidence, and make concluding remarks.

5.14.21 The panel may question any party and witness. Only the person to whom a question is directed may answer (for example, support persons/advisors shall not be permitted to answer the appeal panel's questions on a party's behalf.)

5.14.22 Panel deliberations and voting shall occur in closed session from which all other persons are excluded. The hearing officer shall be present during the deliberations but shall have no vote. A majority vote by the members of the panel who attended the hearing shall decide whether the appealing party has shown one or more bases for appeal stated in section 5.14.2.

5.14.23 The panel shall provide the Student Conduct Office a summary of their findings and recommendation(s) regarding whether and how to uphold, modify, or remedy the conduct and/or sanction decision or process within 5 school days of the appeal hearing. The Student Conduct Office will promptly provide the recommendation(s) to the appropriate dean or designee as outlined in section 5.1.1.

5.14.24 The student conduct appeal decision maker, in consultation with the Office of General Counsel as needed, is responsible for reviewing the recommendations of the appeal panel, all the information that was available to the appeal panel, and determining whether to (1) remand the investigation to the original or an alternate student conduct administrator for additional investigation; (2) affirm the student conduct administrator's original decision; (3) adopt the sanction and resolution recommendation(s) of the appeal panel; and/or (4) determine an alternative outcome. If the matter is remanded for further investigation, the appropriate student conduct administrator shall promptly investigate and provide a written summary of the new evidence considered and/or changes to the findings, if any, to the student conduct appeal decision maker, who shall then determine sanctions or resolutions.

5.14.25 The student conduct appeal decision maker shall promptly notify the respondent and complainant in writing of their decision and the rationale for the outcome. The decision of the student conduct appeal decision maker is final, with no additional internal appeals available.

## 5.15 Records

5.15.1 The Student Conduct Office shall submit and maintain for confidential storage all Student Conduct Office records, including investigation findings, informal remedies, disciplinary action, and any subsequent appeals. Student Conduct records shall typically be retained for ten years after a student's graduation or withdrawal.

5.15.2 Records documenting informal resolution and or remedies and investigations resulting in no-conduct violation shall also be submitted to and maintained by the Student Conduct Office, but will not be entered in to a student's permanent disciplinary record with the University.

5.15.3 Student Conduct disciplinary records are educational records as defined by FERPA and shall be private. Access shall be limited to university officers on a need-to-know basis. Disciplinary sanctions resulting from serious violations of institutional policies regarding sexual misconduct, sex discrimination, harassment, or other serious misconduct resulting in suspension or expulsion may be notated on the student's official transcript. Additionally, the University may disclose to an alleged victim of any crime of violence or non-forcible sex offense the final results of a disciplinary process conducted by the institution against the alleged perpetrator of that crime, regardless of whether the institution concluded a violation was committed.

5.15.4 Transcript notations regarding suspension and/or expulsion shall not contain any information about the underlying conduct, but will state that formal disciplinary action resulting in suspension and/or expulsion has been imposed. If a student withdraws from the University before the completion of an investigation and prior to a final determination, an updated transcript will be sent to any transferring institutions if suspension and/or expulsion are determined.

5.15.5 Transcript notations for suspension shall remain on a student's transcript for the duration of the suspension, and typically not longer than one year after the suspension period. Transcript notations for expulsion will typically remain on a student's transcript indefinitely.

5.15.6 Students may apply to the Dean of Students or designee to have their disciplinary records and/or transcript notation removed. Factors relevant to the decision to retain or remove specific records and/or transcript notations include the amount of time that has elapsed since the infraction, whether the student has graduated, and the seriousness of the infraction and the resulting sanctions.

# Student Services

## Advising

See Advising.

# Academic Standards

See Academic Standards.

# Academic Tutoring

See Academic Tutoring.

# Accessibility Services

**Services for Students with Disabilities**
Office: LC 312
Telephone: 801-863-8747
Web: Accessibility Services

The Accessibility Services Department serves Utah Valley University students and the community by providing access to the campus and curriculum for individuals with disabilities to facilitate, support, and encourage their academic success, their retention and ensure their academic rights. Services are available to students who have documentation substantiating various conditions (including a physical, psychological, or learning disability) and may include: sign language interpreting, testing accommodations, text in audio format, note taking, adaptive equipment, transfer of printed material to Braille, and other individualized services.

# Alumni Association

**Office: AL 003**
**Telephone: 801-863-8179**
**Web: uvualumni.org**

The Utah Valley University (UVU ) Alumni Association connects the 185,000+ strong alumni community to current students, the University, and to each other in support of UVU's mission on student success. Through Academic Colleges and Schools Networks, Industry and Regional Networks, Affinity Communities, Career Development, and Volunteering, our alumni are active participants in the life of UVU. As students, you are our future alumni and lifelong members of the Wolverine family. Details about Alumni-Student programs can be found at uvu.edu/alumni.

# Campus Connection

Located: SC 106f
Telephone: 801-863-8797Email: campusconnection@uvu.edu
Web: Campus Connection

Hours:

- Monday - Thursday 8 a.m. - 8 p.m.
- Friday 8 a.m. - 5 p.m.
- Saturday 9 a.m. - 2 p.m.
- Holiday hours may vary

Campus Connection is the place to go to get your UVU OneCard/UVU Plus Card (Student ID) and information on all student activities sponsored by or held at the Utah Valley University Campus along with the following services:

## UVU OneCard/UVU PlusCard

The card will allow discounted access to most student activities and athletic events. The card allows access to services provided by the library, PE Issue Room, and athletic facilities. It also offers discounted entrance into selected community events, activities, and dances. Student fees entitle each student to one UVU OneCard for the duration of his/her enrollment at UVU (minimum of 5 years). Students should save their cards even if they skip a semester or a year or two, because the card is automatically validated when registration is paid. Replacement cards are $15, some exceptions may apply.

UVU PlusCard is everything the UVU OneCard is PLUS it becomes your UCCU Debit Card all in one. Just go to the Campus Connection site.

The UVU GreenBucks Account is a debit account made available for students to deposit funds at Campus Connection or online at onecard.uvu.edu (VISA, MasterCard, and Discover cards are accepted to put money on the UVU OneCard). With these funds on their card, students can make purchases on campus for food, books, postal services, and special event tickets. When the UVU GreenBucks is used in Dining Services, students receive a 5% discount. For more details, call Campus Connection 801-863-8797 or go to SC 106f.

## UTA Transit Pass

All UVU students are eligible to receive a free UTA Transit Pass. Patrons must be registered for at least one class of the current semester AND have a UVU ID Card before the pass can be activated. Students are also eligible to have dependent passes for their spouse or any children between the ages of 6 and 24. Replacement dependent cards are $15 and can be obtained from the Campus Connection desk or by requesting them online.

## Other Services

Tickets and SmithsTix for various campus and community events; faxing domestic and international; campus lost and found; passport photos; monitoring and placement of all temporary signage; general information. See uvu.edu/campusconnection for more up to date information.

## US Post Office

Located: SC 104
Telephone: 801-863-6067
Email: campusconnection@uvu.edu

Hours:

- Monday - Thursday 8 a.m. - 8 p.m.
- Friday 8 a.m. - 5 p.m.
- Saturday 9 a.m. - 2 p.m.
- Holiday hours may vary
- Mail pick-up:
- Monday - Friday 2:45 p.m.
- Saturday 12:45 p.m.
- Holiday mail pick-up times may vary

The US Postal Service is also available across the hall from Campus Connection. Stamps (singles, books, and rolls), Packaging Products, Express, Priority, Media-Mail, Bound Printed Matter, Global Priority, Global Express, Global Air Mail, Registered, Certified, Delivery Confirmation, and so forth, are available. Cash, Check, Credit, Debit Cards, UVU GreenBucks and UVU ProCards are accepted. Index codes are not an acceptable form of payment. Go to https://www.uvu.edu/postoffice/for more information.

# Campus Recreation & Wellness

Located: SL 211
Telephone: 801-863-5553
Web: Campus Recreation

The Department of Campus Recreation & Wellness includes recreational portion of the Student Life & Wellness Center (SLWC), SLWC Bowling Alley/Gaming Center, The Project Climbing Wall, and Wellness Programs, Intramurals and Club Sports, Rodeo and Outdoor Adventure Center departments.

Through our various services and programs, we offer a variety of engaging recreational, health and wellness opportunities for UVU students and staff. Our mission is to enrich the quality of life for students, faculty and staff by providing a broad range of recreation, wellness, and student engagement opportunities that complement the academic experience. We actively promote the pursuit of a balanced, healthy lifestyle to our diverse university community.

# Care about Childcare at Utah Valley University

Program Director: Joyce Hasting
Office: EE 009
Telephone: 801-863-8557
Email: jhasting@uvu.edu
Web: Care About Child Care

Care About Childcare at Utah Valley University is a resource and referral agency to assist persons seeking licensed childcare and preschool programs. They provide childcare referrals in Utah, Summit, Wasatch and Juab counties. A free personalized list of available child care can be found online at careaboutchildcare.utah.gov, and by calling the referral line at 801-863-8589 or toll free 1-800-952-8220. Their program also provides technical assistance to persons wanting information about child development and child care. One of the most important services they offer is to help child care programs, improve their professional development by providing low cost professional child care courses. The program also offers grants, program coaching and technical assistance to early child care learning professionals. All of their services are offered in both English and Spanish to community members, students, parents, early childhood professionals and programs.

# Career Development Center

Office: LC 409
Telephone: 801-863-6364
E-mail: careerdevcenter@uvu.edu
Web: Career Development Center

Hours:

- Monday, Thursday and Friday 8 a.m. – 5 p.m
- Tuesday, Wednesday 8:00 a.m. – 6 p.m.

Through comprehensive career counseling services, and by fostering community, regional, and national employer relationships, the Career Development Center promotes individual career success and employment potential for students and alumni.

Our services include access to:

- Handshale at uvu.edu/cdc for students and employers (online job posting, job search, submitting resumes, scheduling interviews, etc.)
- Off-campus full-time, part-time, summer and temporary job openings and internships
- Counseling on career planning and preparation including Career Exploration (through various Career inventories)

- Training and online workshops for writing resumes, interviewing, networking, negotiating and more
- Labor market, salary and career employment information
- Career Lab walk in hours 9 a.m. - 4 p.m., Monday - Friday
- Job Search Strategies
- Interview Preparation/Mock Interviews
- Career & Internship Fairs
- Part-Time Job Fairs
- Local, national and international employers recruiting on campus
- Group and class presentations on career related topics
- Career options for different majors

# Center for Global and Intercultural Engagement

CO-Directors Michelle Kearns and Janet Colvin
Location: LA 114
Telephone: 801-863-8357Email: cgie@uvu.edu
Web: Center for Global and Intercultural Engagement

- Hours: Monday - Friday 9 a.m. - 5 p.m.

The Center for Global and Intercultural Engagement (CGIE) supports the University efforts to prepare globally competent citizens. To accomplish these objectives, CGIE collaborates closely with colleges, schools, and other units across campus to create a community of students, staff, and faculty that share multicultural and international knowledge, attitudes, experiences, and efforts. We are committed to fostering an inclusive atmosphere for all students and to preparing them for an increasingly complex, diverse, and globalized society. CGIE is comprised of three programs.

1. Office for Global Engagement (GEO): GEO facilitates international academic and co-curricular engaged learning experiences through study abroad and exchange programs, diplomacy, and intercultural events. Our programs include Study Abroad and other international travel opportunities, Global Initiatives, Visiting Scholars, and Dignitary & Global Events. GEO liaisons with the General Counsel for International Agreements, the UVU Internships office for international internships, and with the Office of Engaged Learning for the G/I Distinction program. We serve as the central hub for the UVU's affiliate membership with the United Nations Department of Global Communication, UN Academic Impact, and the Fulbright Program.
2. Multicultural Student Services (MSS): Our programs provide a full range of support services targeting historically underrepresented populations with an eye toward inclusion of all students across campus. The mission is to promote educational opportunities and intercultural enrichment for diverse students, LGBTQIA+ students, and the wider campus community. Our programs aim to nurture student achievement and develop relationships that support student success, academic growth, retention, and completion of educational programs. Services include general academic advising and cultural navigation, registration and financial aid help, student leadership opportunities and support, multicultural club advisement and support, academic and social events, and initiative programs that provide specific resources for students who identify under the African diaspora, Latino/a/x, LGBTQIA+, Native American, and Pacific Islander student populations.
3. International Student Services (ISS): Our programs provide advisement and support on visa, employment, and academic issues for UVU's international student population. Students with questions regarding immigration, visa, or related issues may visit one of our advisors in LA 114. ISS activities including orientations each semester for all new international students, managing the federally mandated Student and Exchange Visitor Information System (SEVIS) to ensure that all international students at UVU are legally "in status," and providing a variety of services designed to promote the academic success of our international students.

# Center for Social Impact

Office: SC 105
Telephone: 801-863-8786
E-mail: socialimpact@uvu.edu
Web: Center for Social Impact

Welcome to the Center for Social Impact! We develop active citizens who make social impact in our communities. We work in six pathways of social impact: direct service, community-engaged learning and research, social entrepreneurship, policy and governance, community organizing and activism, and philanthropy. Come join the Social Impact Fellows, go on an Alternative Spring Break, be a Social Impact Scholar, launch a project in the Impact Incubators, or take a service-learning class! For more information on all the ways you can make an impact, visit uvu.edu/socialimpact.

# Dean of Students/AVP Student Life

Alexis Palmer
Office: SL 201
Telephone: 801-863-8311
Web: Student Life

The Dean of Students is committed to creating resources, programs, initiatives, and events that support and advocate for students. Student Life supports the holistic development of students by collaborating with campus and community partners in providing intellectual, physical, emotional, social, and civic experiences.

# Dining Services

Office: SC 201
Telephone: 801-863-8664

Web: Dining Services

Dining Services provides a variety of food options on campus, and is always working to expand our variety of options for our customers.The mission of the department is centered to students and their dining enjoyment and benefit. For a list of locations and operating hours, visit the Dining Services website.

# First-Year Advising Center

Location: LC 402
Telephone: 801-863-8425
Email: firstyear@uvu.edu
Web: First Year Advising

Hours:

Fall/Spring/Summer

- Monday - Thursday, Friday 8 a.m. – 5 p.m.
- Tuesday, Wednesday 8 a.m. - 6 p.m.

The First-Year Advising Center (FAC) provides free, holistic academic advising services to new students, students who have yet to earn 30 credit hours, and any undecided students pursuing a associate's degree of university studies. Our advisors provide a personalized support experience for students as they transition to studies at UVU.

# First-Year Experience (FYE)

Office: LC 405
Telephone: 801-863-4000
E-mail: success@uvu.edu
Web: First Year Experience

UVU's First-Year Experience (FYE) program is designed to help new students make a smooth and successful transition to college life. Participation in the following FYE programs will help students build a foundation of success:

- Jumpstart Orientation
- Personalized Academic Advisement
- Freshman Reading Program
- Freshman Convocation
- Department of Student Leadership and Success Courses, degrees, and Programs
- StartSmart Emails
- Freshman Celebration

# Fulton Library

Telephone: 801-863-8265
Fax: 801-863-7065
Web: Fulton Library

Hours:

- Fall/Spring
  - Monday - Friday 7 a.m. - midnight
  - Saturday 8 a.m. - 7 p.m.
  - Sunday 1 p.m. - 9 p.m.
- Summer
  - Monday - Friday 7 a.m. - 9 p.m.
  - Saturday 9 a.m. - 5 p.m.
  - Sunday 1 p.m. - 9 p.m.

Director: Lesli Baker
Office: FL 503e
Telephone: 801-863-8286

The Fulton Library has friendly librarians and staff waiting to help! In-person and online research help is available to assist students and faculty with locating the information and resources they need. The library houses hundreds of thousands of materials both online and inhouse, including books, films, journals, newspapers, audio/visual equipment for checkout, and much more. UVU ID cards are accepted for checking out materials at all college and university libraries in the state. Interlibrary Loan service quickly gets materials not available at the Fulton Library from other libraries for free. The Fulton Library is a dynamic space that hosts two open computer labs with specialized software, a family study room, group study rooms, the Writing Center, a copy center, a deaf studies lab, the Assistive Technology Center, the Office of Teaching and Learning, the Center for Constitutional Studies, and an art gallery. It is also home to Mom Fulton's Café and the Bingham Gallery, which contains the Roots of Knowledge stained glass exhibit.

# Housing and Residence Life

Office: SL 214
Telephone: 801-863-8659
E-mail: housing@uvu.edu
Web: Housing

Hours:

- Monday - Friday 9 a.m. - 5 p.m.

The Department of Housing and Residence Life provides students with a variety of housing services including: an annual Student Housing Booklet, resources for married, graduate and international students, information on available housing scholarships and state and national housing laws. Information concerning local housing options, is available on our website, in the Housing Office, or through email.

Utah Valley University does not own, manage, or approve any student housing. The University works closely with local student housing complexes to provide accurate and up-to-date information on all housing options listed within the local area, so that students can choose the most suitable housing while attending UVU.

Should disputes between a Landlord and a UVU Student Tenant arise, a free mediation service is available through the Office Student Conduct and Conflict Resolution located in SL 212b. To schedule an appointment for mediation services, please call 801-863-7237. The Office of Housing and Residence Life does not provide legal counsel regarding housing.

# Intramural and Club Sports

Director: Dustin LaMont
Manager: Alex Gebers
Office: SL 213
Telephone: 801-863-5568
E-mail: dustin.lamont@uvu.edu
E-mail: agebers@uvu.edu
Web: Intramurals

The Intramural Sports Program is one of the largest co-curricular activity programs that complement the formal academic curriculum. It offers extensive opportunities to currently enrolled Utah Valley University students, faculty, staff and their spouses/partners in a number of competitive and structured activities each year. Participation in the program is voluntary and determined by interest.

Participation can provide one with opportunities to have fun, learn new sports, meet people from other cultures, test one's physical ability as well as offer a break from routine. Team sports generally take on a league structure and a post-season tournament to determine champions. Special events range from one day to several day tournaments. In most events, skill levels and divisions are established to allow competition for men's, women's, co-ed and Mixed teams at various skill levels.

The Intramural Sports program strives to provide programming for all levels of ability and experience. Our aim is to serve the recreational needs of the majority of the student body and not just the athletic minority.

Club Sports bridge the gap between intramural and intercollegiate athletics by providing competition at specialized levels, participation in tournaments, and opportunities to practice. Although some clubs remain solely recreational, most are highly competitive.

UVU Club Sports offers a structured environment to practice and play the game students' love.  Participation in Club Sports allows individuals to engage with the University in a unique way.  Club Sports are managed and run by the participants themselves, including coach selection, travel, fundraising, scheduling, practices, and participant development.  Club Sports are meant to enhance the individual learning experiences through involvement, commitment, and working in a team setting.

A competitive spirit of fair play and good sportsmanship is encouraged in order to provide all with a wholesome recreational experience. Participants and staff are asked to conduct themselves in a manner consistent with, and in support of, those values set forth by Utah Valley University.

# Learning Strategies Support

See University College.

Lockers

Office: FC 100 (Facilities Complex)
936 S. 400 W., Orem (Next to Parking Services)
Telephone: 801-863-8130

Hours:

- Monday - Friday 7 a.m. - 5 p.m.

Lockers are available for student use in the Gunther Technology Building and are rented through the Facilities/Physical Plant Office. Locker rentals are $5 per semester or $13 per year. This fee is non-refundable. Renewal of lockers needs to be completed before the end of the semester to avoid locker changes and clearance of contents. The renter is responsible for any damages to the locker(s).

## Math Lab

See Math Lab.

## National Student Exchange

Office: LC 409q
Telephone: 801-863-6219
E-mail: sue.stephenson@uvu.edu

National Student Exchange (NSE) is a domestic “study away” experience that fits into university initiatives for globalization and diversity. NSE embodies the overall mission of Utah Valley University by providing high impact meaningful Engagement Opportunities for its students. The National Student Exchange, which is a service within the Career Development Center, provides opportunities for undergraduates, to study for up to one calendar year at another NSE member university and pay UVU tuition rates or the in-state tuition rate of the host school.

With more than 200 colleges and universities from which to choose, students can find a campus that is “custom” to individual degree plans, with just the right combination of courses, facilities, and environment to meet unique personal and academic needs and interests. Spending time at another campus will allow students to grow academically and personally. Students will develop a greater appreciation for the different regions, cultures, and people. NSE extends beyond the borders of the United States to include U.S. territories as well as Canadian provinces. Students participate in order to:

- Broaden personal and educational perspectives
- Explore and appreciate new cultures
- Widen university boundaries
- Take courses not offered at the home campus
- Learn from different professors
- Access courses with different perspectives
- Explore new areas of study
- Experience personal growth
- Live in a different geographic area
- Acquire life skills
- Investigate graduate or professional schools
- Look for future employment opportunities
- Become more mature, independent and resourceful

NSE participants have found their exchanges culturally enriching, academically rewarding, and one of the most significant experiences of their undergraduate education. Since its founding in 1968, more than 100,000 students have had the opportunity to break out of their comfort zone, and experience life from a different point of view.

Students will need a 2.5 cumulative GPA and one-year of university work to join these students who have been placed in life-changing exchange situations which challenged their thinking, expanded their educational and personal experiences, and encouraged them to take healthy risks.

After graduation, when you look back at your college days, NSE can be one of those memorable highlights! Don’t let this rare opportunity pass you by!

## Ombuds

Office: SL 212b
Telephone: 801-863-7237
Web: Ombuds

Within the UVU community misunderstandings and disagreements needing resolution occur. The UVU Ombuds is a mediator and resource who is familiar with campus policies, student’s rights and responsibilities, and can help find useful options within these guidelines. In order to serve as a mediator, as opposed to an advocate, the Ombuds neutrally and objectively listens to all problems and works with the parties involved to find a solution. The Ombuds may be used as a resource for help in a variety of difficult situations. The Ombuds can help with:

- University related or personal issues
- Interpersonal conflicts
- Sexual Harassment
- Academic complaints and conflicts
- Housing/Landlord disagreements
- Discrimination complaints
- Grading procedure disputes
- School policy and procedures
- Others

All services are offered free of charge.

## Outdoor Adventure Center

Office: SL 216
Telephone: 801-863-7052

Web: Outdoor Adventure Center

Hours:

- Fall Semester
  - Monday - Friday 9 a.m. - 5 p.m.
  - Saturdays 9 a.m. - 1 p,m,
- Spring Semester
  - Monday - Friday 9 a.m. - 5 p.m.
  - Saturdays 8 a.m. - 1 p,m,
- Summer Semester
  - Monday - Friday 9 a.m. - 5 p.m.
  - Saturdays 9 a.m. - 1 p,m,

The Outdoor Adventure Center provides students, staff, faculty and the community an opportunity to learn from the vast outdoor classroom. We offer participants a chance to experience nature while also learning how to protect and preserve the natural environment. Opportunities range from clinics, adventure outings, and afternoon activities. We also offer equipment rentals and retail items that will help get you outside! We collaborate with different academic departments in offering experiential education outside of the classroom, call us today if you are interested in planning an activity for your students. Come in today and let us help with your next adventure. For a list of rental prices visit www.uvu.edu/oac/rentals.

# Parking and Transportation Services

Located: 936 S. 400 W., Orem
Telephone: 801-863-8188
Web: Parking Services

Hours:

- Monday - Friday 7 a.m. - 5 p.m.

Parking permits are required to park anywhere on the UVU main campus and west campus. UVU uses license plate reader technology and assigns a digital permit to your vehicle license plate at the time of permit purchase. Parking permits are available in our office at 936 S. 400 W. or online through the link found at uvu.edu/parking - there is also information on the site regarding parking maps, regulations, and other information to assist you in parking on campus. We can also be contacted by phone at 801-863-8188 Monday through Friday 7 am to 5 pm.

**Parking for People with Disabilities**

Only those vehicles carrying distinctive (logo) license plates for people with disabilities or temporary/permanent permits obtained from the Utah State Division of Motor Vehicles at 150 E. Center in Provo plus a valid UVU handicapped parking permit shall be allowed to park in stalls for the disabled. If all disabled stalls are full in a given area, those displaying a disabled permit may park in the nearest available stall.

**Student and Employee Parking**

Students and employees operating vehicles on University properties must adhere to all state, local, and university traffic/parking regulations. To park on campus, students and employees must obtain a valid parking permit from Parking Services. Employees and Students will need to provide their vehicle information e.g. license plate number, make and model before a permit can be issued to them. Permits are not required to park in any employee or student lot after 5 p.m.

**Visitor Parking**

Visitors operating vehicles on University property must adhere to all state, local, and university traffic/parking regulations. There are three visitor pay lots on campus.

- Park at one of our two metered lots
- Park at one of our eleven pay-by-phone lots
- Purchase a Day Pass online and park in the outlying parking lots of L9, L10, M28, or M29.

If you are visiting campus, you will need to use one of our pay lots when you park on campus.  There are thirteen pay lots throughout campus. The L1 pay lot at the front of campus is $1 per hour and has a 2 hour maximum limit for short term parking. The Parking Garage in the middle of campus is $1 per hour with a 2 hour minimum. Both of these lots have parking meters that will accept all major credit cards (we transitioned to a cashless system) or you can use the totally contactless Passport phone application. The remaining 11 pay lots require payment through the phone application only.

Our Day Pass can be purchased by faculty, staff, students, or guest. The cost is $5 per day and it allows access to our parking lots, L9, L10, M28, M29.

Payment is required in all of our pay lots between 5 a.m. and 10 p.m., seven days a week

If you have any questions regarding parking on campus, please contact the Parking Services Office at 801-863-8188.

# Physical Education Services (Issue Room)

PE Services Director: Sam Atoa
Office: RL 119
Telephone: 801-863-8567

Assistant Director: Ashley Iosefa
Office: RL150 (Issue Room)
Telephone: 801-863-8628

The Rebecca Lockhart building serves as the home for many Physical Education classes, Intercollegiate Women's Volleyball, and Men's Wrestling.

Facilities included are: men's/women's locker rooms, one main basketball floor, a single lane indoor track, one aerobic/dance area, a martial arts room, weight room, cardio machines,  a motor learn lab, dance rooms, and various faculty/staff offices.

UVU PE Issue t-shirts are used for the Physical Education Facilities. You must have your UVU ID card or valid ID to check out the issue clothing. Lockers are available to rent each semester. For additional information and hours of operation, please refer to the PE Issue room (RL 150) or call 801-863-8628.

# Printing Services

See Printing Services

**Offset Printing**

Located: AX-130
Telephone: 801-863-8415

**Graphic Design**

Located: AX-121
Telephone: 801-863-8415

**Library Copy Center**

Located: LI-209
Telephone: 801-863-7003

**Digital and Speciality Printing**

Located: AX-121
Telephone: 801-863-7093

Printing Services provides offset printing, digital printing, specialty printing, and graphic design services for the UVU community. The digital printing center is located in the Auxiliary Services Building room 131. Offset printing and bindery operations are located in AX-131. Printing Services also provides specialty printing services including wide format printing, laminating, mounting, and engraving. This facility is located in the AX building room 130, adjacent to the digital printing facility. For questions regarding services, capabilities, pricing, or scheduling, contact our main office at extension 8415 or contact the department director at extension 8371.

# Sorensen Student Center

Office: SC 105
Telephone: 801-863-8612

Located in the heart of the Orem Campus, the Wilson W. Sorensen Student Center represents the center for campus life. The Center provides students, faculty, staff, and guests a setting for informal associations, special events, banquet and workshop facilities, social and cultural activities, and the everyday amenities such as food, books, and supplies. Services and activities provided by the Student Center include the following:

**UVU Campus Store**

Located: SC 102
Telephone: 801-863-8641

**Campus Connection** (UVID and proximity card, information, and box office services)

Located: SC 106
Telephone: 801-863-8797

**Center for Social Impact**

Located: SC 105
Telephone: 801-863-8786

**Dining & Catering Services**

Located: SC 201
Telephone: 801-863-8664

**Food Court**

Located: SC 111

**Office of Student Affairs**

Located: SC 209
Telephone: 801-863-6158

**Ragan Theater** (400 seat facility for multi-purpose event and program functions)

Located: SC 216
Telephone: 801-863-8612

**Scoops Ice Cream Shop**

Located: PS 101

**Student Center Administration & Scheduling**

Located: SC 109
Telephone: 801-863-8612

**Student Health Services** (medical services, mental health therapy)

Located: SC 221
Telephone: 801-863-8876

**U.S. Postal Services**

Located: SC 104
Telephone: 801-863-6067

**Utah Community Credit Union**

Located: SC 101j
Telephone: 801-223-7595

**Conference Room Facilities**

Grande Ballroom: SC 106a
The Commons: SC 106
Center Stage: SC 108
SC 206a, SC 206b, SC 206c,
SC 206g, SC 206h, SC 213a,
SC 213b, SC 213c, SC 214

# Student Action Learning

Director: Grant Flygare
Office: LC 205
Telephone: 801-863-6227
Web: Student Action Learning

Student Action Learning creates and implements activities and expeditions for student centered learning (out of the classroom, hands-on, experience-centered learning). Action Learning works collaboratively with students, faculty and professional community partners to bring about a full and exciting student life experience.

Students can develop leadership skills by becoming an Action Learning Leader, creating learning expeditions connected to specific interests, or as a Zone Manager, facilitating day time activities on campus that are centered on student interests.

# Student Computing

Office: LA 003V
Telephone: 801-863-5852
Web: Student Computing

Student Computing has been established to provide computing resources and technical support services that enhance the educational experience of the students of UVU. These services include: The Open Student Computer Labs, Campus Kiosks, Hallway printing, Various Academic labs, Student printing (lab printing, mobility printing, and print.uvu.edu.

The Open Student Computer Labs are available to all currently registered UVU students on a first-come, first-serve basis. No charge is required for the use of the computers. Lab Assistants are available to provide support and to help keep the equipment running. These labs contain 254 computers and have Internet access and E-mail as well as popular application software to assist students with their class work. There is also tables set up for students to bring their own personal device to charge as needed and get assistance from the Lab Assistants.

## Info Commons Lab

Located: FL 1st Floor
Telephone: 801-863-6932

Hours:

- Monday - Friday 7 a.m. - midnight
- Saturday 8 a.m. - 7 p.m.
- Sunday 1 p.m. - 9 p.m.
- Check with lab assistant for holiday and summer hours

The “InfoCommons” lab is located on the bottom floor of the Fulton Library. With 124 workstations, and 20iMac Desktops, this is the largest open lab on campus.

## Campus View Lab

Located: FL 2nd floor
Telephone: 801-863-5634

Hours:

- Monday - Friday 7 a.m. - midnight
- Saturday 8 a.m. - 7 p.m.
- Sunday 1 p.m. - 9 p.m.
- Check with lab assistant for holiday and summer hours

The “Campus View” lab is located on the second floor of the Fulton Library, with 39 workstations, it is overlooking the café and study area.

## Computer Loft

Located: SC 215
Telephone: 801-863-6081

Hours:

- Monday - Friday 7 a.m. - 11 p.m.
- Saturday 8 a.m. - 5 p.m.
- Closed Sunday
- Check with lab assistant for holiday and summer hours

The “Computer Loft” lab is located upstairs from the bookstore and across from the Ragan Theater and has 56 workstations

## Fishbowl Lab

Located: SC 116
Telephone: 801-863-8390

Hours:

- Monday - Friday 8 a.m. - 6 p.m.
- Check with lab assistant for holiday and summer hours

The “Fishbowl" is located at the junction of the Student Center, Losee Center and Woodbury Business building and has 29 workstations.

## Wasatch Campus Lab

Located: NG 107
Telephone: 801-863-7147

Hours:

- Monday - Thursday 8 a.m. - 8 p.m.
- Friday8 a.m. - 4:30 p.m.
- Saturday 8 a.m. - 5 p.m.
- Check with lab assistant for holiday and summer hours

## Wasatch

Located: WC 206 (Heber)

Telephone: 801-863-6628

Hours:

- Monday - Thursday 6 a.m. - 9 p.m.
- Friday 7 a.m. - 7 p.m.
- Saturday 8 a.m. - 5 p.m.

Student Computing has also put in place Open lab Computers in the hallways throughout campus, with printing capabilities.

For information on Student computing, tutorial videos, list of software available to students, and print and charging station locations visit the Student Computing site, also follow us in Facebook, Instagram, and Twitter @uvusc

# Student Government

**Utah Valley University Student Association (UVUSA)**
Office: SL 122
Telephone: 801-863-8652
Web: UVUSA

Every student is a member of the Utah Valley University Student Association (UVUSA). Student government/student council is the governing body of UVUSA and has multiple ways for students to get involved! The program offers a variety of volunteer, appointed, elected positions where students can influence and enhance the social and academic culture of the University. Student leaders can participate on campus committees, plan events and activities, and advocate for student needs and issues.

Information on ways to get involved with UVUSA/Student Government can found at uvu.edu/uvusa or by visiting their office in SL 122.

# Student Health Services

Office: SC 221
Telephone: 801-863-8876
Web: Student Health

Student Health Services is designed to assist students with a variety of health issues. Our purpose is to provide students with opportunities to improve their health through basic medical care, psychological services, suicide prevention and awareness, and learning disability assessment. We offer life enhancing services that increase the safety, productivity and life experience of the individual and the campus. Through our services we enhance the personal development and lifelong opportunities of UVU students.

## Therapy Services

Personal Counseling, Emotional Support, Learning Disability Testing and Referral

Student Health Services offers short-term counseling to assist students through stressful and crisis situations affecting their performance in school and personal relationships. We provide assessment and treatment for a variety of mental health concerns such as anxiety, depression, eating disorders, trauma, grief, substance abuse and relationship issues.

The therapists are experienced professionals who offer support in an atmosphere of understanding and confidentiality. Programs offer individual assessment, individual, couples and group counseling and referral to campus and community resources. To set an appointment with a psychological professional, please contact us at 801-863-8876.

## Medical Services

Student health is promoted through a complete offering of medical and psychiatric services. We are able to write prescriptions, do lab work, medication management, physical exams, sutures and treat many other medical conditions. We treat a variety of acute and chronic illnesses and injuries. We are staffed by medical doctors, nurse practitioners and medical assistants.

Students currently enrolled at UVU or any of its satellite campus locations are eligible for medical care on the Orem Campus. To set an appointment with a medical professional, please contact us at 801-863-8876.

## Suicide Prevention

For staff or classroom training please contact us at 801-863-8876. Crisis counseling is available at Student Health Services. If you are currently in a suicide crisis please notify the front desk for priority scheduling. In the case of an emergency or outside of our business hours, please call 911 or 801-863-5555.

# Student Media & Publications

Office: SL 214
Telephone: 801-863-6498

Student Media and Publications is UVU's home of The UVU Review, the independent student newspaper. Students interested in producing news, writing, photography, graphic design, advertising sales, video broadcast content, web page content and design should come for practical experience

and learning. These nationally award winning student media are produced year around. If you're interested in receiving hands on experience producing media publications visit us in SL 214. Call Media Coordinator 801-863-6498 for additional information.

# Student Success/UV Mentor Program

See University College.

# Testing Services

Office: Wolverine Service Center–North Entrance

Testing Services assists students, faculty, and the community. It is divided into three branches: Assessment, Classroom Testing, and the Proctored Exam Center.

**Assessment Center**

Located: WS 101
Telephone: 801-863-8269
See: Testing Services

The primary responsibility of the Assessment Center is to provide assessment testing for various courses. Testing sessions for are conducted throughout the day, some require an appointment while others do not. Check our website for details at uvu.edu/testingservices, and take special note of our hours, as they do change at different times during the year.

New students must meet one of following assessment requirements:

- ACT/SAT Scores
  - English: Not older than 5 years.
  - Math: Not older than 2 years.
- New Student Assessment (some students may need to take the ALEKS or Accuplacer exam)
- Transfer Credit
  - Completed English Composition and Algebra at another college/university, with a C or higher (verified by official college transcripts mailed directly from your previous institution to UVU Admissions).
  - Another function of Testing Services is to administer screening instruments, standardized tests, and other assessment instruments required by University programs and departments. Some of these include the GED, CLEP, ACT, EMT and POST tests. Certification testing for different programs offered by UVU and the surrounding community is also available. Students can obtain information on tests in the office and hours of operation by calling 801-863-8269 or by visiting the web page at: uvu.edu/testingservices.

**Classroom Testing Center**

Located: WS 112
Telephone: 801-863-7461

The Classroom Testing Center (CTC) is located in the Wolverine Service Center (WS 112). The CTC provides testing services enabling students to take participating instructors' exams in the center on a flexible schedule. The CTC is generally open six days a week Monday - Saturday. Students can obtain test schedules and scores by logging into chitester.uvu.edu and use UV Link user name and password to log in. Highlight the exam name and click on View test score(s).

**Proctored Exam Center (PEC)**

Located: WS 111
Telephone: 801-863-8544

The Proctored Exam Center (PEC) provides testing accommodations to UVU students with disabilities as well as services for distance education students who need to have a test proctored from another university or college. Students with disabilities requiring assistance MUST obtain a letter from the Accessibility Services Department before being eligible to use the PEC. Scheduling an individual appointment for testing is required for both parties. For scheduling information and further assistance, call 801-863-8544.

# TRIO College Prep Programs

- See TRIO

**Educational Talent Search & Upward Bound**

**Talent Search**

Director: Michael M. Campbell
Telephone: 801-863-8569
E-mail: campbemi@uvu.edu

Coordinator: Rebecca Ayala
Telephone: 801-863-7216

Administrative Support: Kasha Farmer

Telephone: 801-863-7414

Talent Search serves young people in grades six through twelve. In addition to counseling, participants receive information about college admissions requirements, scholarships and various student financial aid programs. This early intervention program helps young people to better understand their educational opportunities and options. UVU services Orem, Provo, Wasatch, South Summit, Duchesne, and Uintah.

**Upward Bound**

Director: Michael M. Campbell
Telephone: 801-863-8569
E-mail: campbemi@uvu.edu

Coordinator: Alex Atwood
Telephone: 801-863-8570

Administrative Support: Kasha Farmer
Telephone: 801-863-7216

Upward Bound helps young people and adults prepare for higher education. Participants receive instruction in literature, composition, mathematics and science on college campuses after school, on Saturdays and during the summer. UVU services students from Orem, Provo, Wasatch, Duchesne and Uintah.

# TRIO Student Support Services (SSS)

Office: LA 012
Telephone: 801-863-8541

TRIO Student Support Services (SSS) is a federally funded program. The purpose of TRIO SSS is to:

- Increase the retention and graduation rates of eligible students
- Foster an institutional climate supportive of the success of low-income and first generation college students and individuals with disabilities through a variety of services such as:
  - needs assessment testing
  - individual education planning
  - academic, career, and transfer counseling
  - tutoring
  - cultural events
  - SLSS 1100 Stress Management--Hardiness and FIN 1060 Personal Finance
  - workshops and guest presentations

To be eligible to receive TRIO SSS services, a student must meet all of the following requirements:

- Is a citizen or national of the U.S. or meets the residency requirement for Federal student financial assistance
- Is enrolled at UVU or accepted for enrollment in the next academic semester
- Has a need for academic support, as determined by UVU's TRIO SSS Department, in order to successfully pursue a post-secondary educational program

Meets at least one of the following criteria:

- Low income
- First generation college student
- Has a disability which inhibits the learning process

Eligible students are selected into UVU's TRIO SSS program based upon their academic need and upon their ability to benefit from the services offered. Space is limited, so students are advised to apply early.

# Turning Point (Community Education)

Director: TBA
Office: HP 116
Telephone: 801-863-7580
Web: Turning Point

The Turning Point Program is a community and university resource, which provides access to numerous services to help individuals' complete educational goals, build personal relationships, master communication skills, and explore varied career options in the workforce. Dedicated to quality support service, this program increases the emotional, social, and economic well-being of all participants.

Class offerings include:

- Managing Life Transitions I: Personal & Professional Development
- Managing Life Transitions II: Relationships
- Anger Management
- Back to School

- Marriage and Pre-Marriage Workshops

Additional Turning Point Services:

Professional Clothing Source, GED referrals, mentoring, referrals to community and campus resources, and reduced tuition for low-income individuals who qualify.

## Tutoring & Academic Skills Services

See University College.

## UCCU Center

Office: EC 012
Telephone: 801-863-8768
Web: UCCU Center

The UCCU Center is a multipurpose facility serving the University and the community. The UCCU Center hosts a variety of local and special performances, sports events, educational seminars, concerts, conventions, trade shows, lectures and other community gatherings.

Some events that are hosted here include basketball games, circus performances, business trade shows and expos as well as various types of concerts. The events center is an excellent choice for hosting any kind of event.

## Athletics

The mission of UVU Athletics is to provide a wide range of athletic programs that are highly competitive and nationally recognized on a consistent basis. The department seeks to provide the individual athlete with the opportunity to improve athletic skills and abilities while obtaining an exceptional quality education with the best facilities and coaching staff available, to benefit the athlete in future academic, athletic, and vocational endeavors. Each student-athlete is required to be in good standing academically and making progress toward graduation with a bachelor degree according to NCAA requirements.

The Wolverines compete at the NCAA Division I level and currently are members of the Western Athletic Conference. UVU offers the following NCAA Division I sports: Baseball, Softball, Men's and Women's Basketball, Men's and Women's Cross Country, Men's and Women's Golf, Men's and Women's Indoor and Outdoor Track and Field, Men's and Women's Soccer, and Women's Volleyball.

For more specific information regarding any sport or team, please call our Athletic Department Office at 801-863-8998, or look us up on the internet at: wolverinegreen.com.

## Cheerleaders & "THE WOLVERINE"

The UVU Cheerleaders are a large part of promoting fan involvement and enthusiasm at UVU athletic events. The squad consists of highly talented young men and women who perform stunting and tumbling routines.

The WOLVERINE is the school mascot who is also involved in crowd interaction and may be seen hanging from the rafters or dropping through the middle of the basketball hoop to excite fans.

Tryouts for these positions are held each spring, and specific information about tryouts may be obtained by calling Student Leadership and Activities at 801-863-8150.

## Dance Team

The UVU Dance Team is comprised of 12-16 skilled dancers who perform regularly at UVU Athletic Events. The Team employs a wide range of styles and utilizes Jazz, Funk, and Lyrical Dance numbers, all choreographed by the team members and director. Tryouts are held each spring. For more information call Student Leadership and Activities at 801-863-8150.

## UVU Campus Store

Located: SC 102 (Centre Stage Temporary Location for June 2020 to April 2021 during Sorensen Center Construction)
Telephone: 801-863-8641

Hours:

- Fall and Spring semesters:
  - Monday - Thursday 7:30 a.m. - 6 p.m.
  - Friday 7:30 a.m. - 5 p.m.
  - Saturday 9 a.m. - 1 p.m.
- Summer semester:
  - Monday, Friday 8 a.m. - 5 p.m.
  - Tuesday, Wednesday 8 a.m. - 6 p.m.
- Closed Sundays and Campus Holidays

The UVU Campus Store is open each weekday to serve the students, faculty and staff of UVU. Course Materials are purchased online at bncvirtual.com/uvu.htm or MyUVU/Textbooks. At the UVU Campus Store you find your required Course Materials and everything else you will need for your college career: UVU apparel, backpacks, UVU insignia, school supplies, computers, calculators, cables, headphones, general reading materials, reference books, snacks.

# UVU Clubs

Office: SL 122
Telephone: 801-863-8820
Web: Clubs

UVU Clubs connects students to UVU in a unique way that reflects each student's individual interests and academic desires.

The Clubs Branch, also known as the ICC Executive Board, works with 100+ active clubs by facilitating club success on campus. Many clubs are very active on campus and have received local, state, and national recognitions.

By getting involved in a club, students have the opportunity to increase leadership, citizenship, and service skills that enhance UVU and the community. Students meet new people, develop skill sets, and most of all, have fun. For information on existing clubs and/or procedures for chartering a new club, look on the web at uvu.edu/clubs, or contact the UVU Clubs Office in SL 122.

# Veteran Success Center

Office: WB 100a
Telephone: 801-863-8212
E-mail: veterans@uvu.edu
Web: Veterans Success

Veterans eligible for VA Education Benefits may obtain assistance at the Veteran Success Center located in the Woodbury Business Building. Veterans not receiving VA educational benefits are also encouraged to send their Military Transcripts or JST (Joint Service Transcripts) to the transcript office to begin the evaluation process.

**Guideline for Enrollment and Progress**

According to VA standards of progress, educational benefits will be paid for courses required for graduation in the student's declared educational objective. Eligible persons will be required to maintain the academic standards of the school and to actively and consistently pursue their declared educational objective in order to maintain benefits. To receive Veterans Educational Benefits, students are required to attend class. Benefits will be terminated for non-attendance. This may cause an over-payment to the student and result in debts that the student is ultimately responsible for. Some veterans receiving VA educational benefits must verify their attendance to receive their benefits. Please check with the Veteran Success Center for current procedures.

Veterans and dependents receiving grades of "UW" (unofficial withdrawal) or "W" (withdrawal) will have to reimburse the VA for any difference in pay, retroactive up to the beginning of the semester; exceptions may be made if students can report mitigating circumstances to the Department of Veterans Affairs. Benefits will not be paid for a course that is audited (AU).

**New Military Connected Students**

New students applying for VA educational benefits may be requested to submit to the UVU Veterans' Service Coordinator either original or certified copies of the following documents: (1) VA claim (c) number, if applicable, and (2) Confirmation of VA.Gov application, (3) Certificate of Eligibility. This information is needed as soon as possible to ensure timely and accurate processing of benefits. UVU forms can be found online at uvu.edu/veterans. Official transcripts from all previously attended colleges or universities are required. The VA will not pay for any course the student has previously taken and successfully completed.

**Continuing & Returning Military Connected Students**

All continuing and returning military connected students must submit to UVU Veteran Success Center promptly after registering for the semester a Veterans' Class Schedule Form that can be found online. This form must be submitted each semester to indicate that the student requests to receive educational benefits for that semester. Please be aware that adding and dropping classes may cause a debt with the Department of Veterans Affairs. Students are required to keep the UVU Veteran Success Center informed of any changes made to their class schedule. Failure to inform of changes may result in a debt to the University or the VA.

In accordance with Title 38 US Code 3679(e), Utah Valley University adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post-9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation & Employment (Ch. 31) benefits, while payment to the institution is pending from VA. Utah Valley University will not:

- Prevent the student's enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA Certificate of Eligibility (COE) by the first day of class;

- Provide a written request to be certified; or turn in proper documentation requesting certification;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA).

## Wee Care Center

Front Telephone: 801-863-7266
Web: Wee Care Center
Email: weecarecenter@uvu.edu

Director: Jolene Merica
Location: WE 102
Telephone: 801-863-7267

Manager: Melisa Hunt
Location: WE 103
Telephone: 801-863-4775

The Wee Care Center is designed to meet the childcare needs of parent-students at UVU. Quality care is provided to children ages six weeks to six years. All services are based on a sliding fee scale according to size of family and income. Enrollment is based on a first-come, first-served basis with priority given to Pell-eligible returning parents and parent-students who are single, low income or near degree completion. The Wee Care Center is NECPA accredited.

## Women's Success Center

Web: Women's Success Center

Senior Director: Tara Ivie
Office: LC 302c
Telephone: 801-863-3020

Assistant Director: Lauren Hoover
Office: LC 302b
Telephone: 801-863-5723

Program Coordinator: Holly Coutts
Office: LC 305b
Telephone: 801-863-7583

Program Coordinator: Justine Dorton
Office: LC 303b
Telephone: 801-863-6954

Program Coordinator: Alyssa Goya
Office: LC 304a
Telephone: 801-863-8498

Program Coordinator: Briettny Curtner
Office: LC 304b
Telephone: 801-863-8080

Marketing Manager: TBA

Administrative Assistant: Monique Barr
Office: LC 303
Telephone: 801-863-3010

The mission of the Women's Success Center is to recruit, retain, and graduate female students. We work to help all women graduate by providing support and removing barriers that prevent them from finishing a degree.

## Writing Center

See Writing Center.

# Other Important Student Information

## Student Right to Know

Utah Valley University hosts information regarding the Student Right-to-Know and Campus Security Act of 1991 on the HEA Student Consumer Information website. The Student Right-to-Know Act of 1991 requires all colleges and universities participating in Federal Student Aid Programs to

disclose campus security policies, crime statistics, and information on students receiving athletically-related student aid, graduation rates, and other basic information about the University. To access a copy of the current Campus Security Report please visit www.uvu.edu/police.

## Alcohol, Tobacco & Drugs

Utah Valley University, historically and at present, seeks to encourage and sustain an academic environment that promotes the health, safety, and welfare of all members of its community. In keeping with these objectives, alcoholic beverages, unlawful drugs, or other illegal substances shall not be consumed, used, carried, sold, or unlawfully manufactured on any property or in any building owned, leased, or rented by UVU, or at any activity sponsored by the University. (UVU Policy 157)

Any individual known to be in violation will be subject to University disciplinary action and to substantial legal sanctions pursuant to Local, County, State and Federal laws.

Smoking is prohibited in all University buildings and concourses. (UVU Policy 158)

All students can access a copy of the University Drug Policy online each semester at www.uvu.edu/wellness/aboutus/drug-policy.html. It explains the policy and University sanctions that may follow as a result of inappropriate drug and or alcohol use and the known health risks associated with inappropriate use.

## Confidentiality of Records Policy

Utah Valley University is concerned for the confidentiality of student academic records, and a reasonable balance between the obligation of the institution for the instruction and welfare of the student and its responsibility to society. The University will make every effort to maintain student academic records in confidence by keeping information from individuals who are not authorized to receive it or who might use it for illegitimate purposes. The policy also reflects the efforts of the University to comply with the provisions of the Family Educational Rights and Privacy Act of 1974.

Upon presentation of appropriate identification and under circumstances which preclude alteration or mutilation of records, students will be able to inspect all records relating to themselves which are not considered by the University to be private records of University Personnel. A student is entitled to an explanation of any recorded data and may initiate action leading to a hearing, if necessary, to correct or expunge information he or she considers inaccurate or misleading.

Faculty and administrative officers who have a legitimate need to use student records will be allowed access to such records, as needed without prior permission from the student. A request from an educational institution to which the student has applied for admission, or from an institution or agency, from which the student is seeking financial assistance will be granted without written permission of the student. Similarly, data will be furnished to university accrediting bodies and governmental officials without written permission of the student.

No student information other than directory information will be given to any third party (except those mentioned above) without written consent of the student, and then only those records accessible to the student. The term party is construed to include parents, employers, government agencies, or any other people or organizations. Parents or guardians may have access to grade reports of a student's activity if the parents establish to the satisfaction of the University that they are providing one-half or more of the student's support. Court orders and subpoenas for records will be referred to and acted upon according to the directions of the Registrar. The University will make a reasonable effort to notify the student prior to release of information in response to subpoenas or court orders prior to actual submission of the material.

Directory information will be released to news media and to others upon request.

Directory information is defined as follows:

- Name of student
- Student identification number
- Telephone number of student
- University student email address
- Photographs
- Participation in officially recognized activities and sports
- Weight and height of members of athletic teams
- Hometown city and state of student
- Verification of current enrollment
- Dates of enrollment
- Degrees conferred, dates, major field of concentration and honors received

Students may request, at any time, through the University Registrar's office.

## Civil Rights

**Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. The following office has been designated to handle inquiries regarding non-discrimination: EOAA/Title IX – 801-863-5704 – 800 W University Pkwy, Orem, 84058, Suite BA 203.**

Complete policies and procedures regarding Civil Rights (UVU Policies 152, 153, 154, 157, 158, 160, 161 162, 165) can be found at www.uvu.edu/policies, then click on Policy Manual.

### Policy

The University prohibits all forms of protected class discrimination, harassment, and retaliation that violate Title VII of the Civil Rights Act of 1964 (Title VII), Title IV of the Higher Education Amendments Act of 1972 (Title IV), Title VI of the Higher Education Amendments Act of 1972 (Title VI), or related applicable laws. The University shall respond promptly and effectively to reports of protected class discrimination, harassment, and retaliation and shall take appropriate action to stop and prevent the recurrence of such conduct on the complainant and/or the university community.

### Prohibited Conduct

Violations of policy 165 include acts of protected class discrimination, harassment, and retaliation within the meaning of Title VII, Title IV, Title VI, or related applicable laws. The University shall respond promptly and effectively to reports of protected class discrimination, harassment, and retaliation and shall take appropriate action to stop and prevent the recurrence of such conduct on the complainant and/or the university community. The University shall take steps to prevent retaliation and shall take strong, responsive action to threats or acts of retaliation. Individuals who, in bad faith, deliberately make false or malicious accusations of violation of this policy shall be subject to disciplinary action, up to and including termination of employment and/or expulsion from the University. A finding of no violation by the investigator(s) does not in itself constitute proof of a false or malicious accusation. The University may discipline any person who is found to have violated this policy.

## Freedom of Speech and Peaceful Assembly

### Policy

Because free expression and the free exchange of ideas are central to the goals of a university, Utah Valley University is committed to the principles of free speech and assembly guaranteed by the United States Constitution and the Utah Constitution, and in accordance with generally accepted concepts of academic freedom. The University is committed to protecting and enhancing the free exchange of ideas and to artistic expression, the right to free speech, and academic freedom in the University and on the university campus without prior restraint or censorship, subject to limitations on unlawful/unprotected speech and to clearly stated, reasonable, and nondiscriminatory rules regarding time, place, and manner.

### Preparation Strategies

- Plan your peaceful assemblies through the Dean of Students Office
- Reserve an appropriate location from the list below
- Schedule appropriate amplification, if necessary
- Contact University Police for traffic and crowd control, if necessary
- Post fliers and/or cardboard signs according to the University Signage Policy
- Pay rental charges, if required
- Commit to obey local, state and federal laws and University policies
- Agree not to disrupt the educational process of the University

### Prohibitions

- Disruption or obstruction of university functions, organized meetings, or other assemblies in such a way as to invade the rights of others to assemble and the rights of speakers to free expression
- Violence
- Assemblies inside buildings where minors or vulnerable populations are predominantly present
- Damage to University or private property
- Use of administrative or academic offices
- Jeopardizing public order or safety
- Interference with entrances and exits to buildings or the normal flow of pedestrian or vehicular traffic
- Interference with classes and teaching, and activities related to teaching or research

### Penalties

Persons violating the time, place, and manner restrictions relating to protests and demonstrations may be subject to arrest or other action authorized by law after notice is given of the restrictions being violated and the personas refuse to cease and desist. Student violations of UVU Policy 541 Student Code of Conduct may face disciplinary action.

### Locations Appropriate For Peaceful Assembly

Locations are subject to availability; some locations may not be available at all times due to previously scheduled engagements. Speakers may speak in any outdoor area, as long as such speech does not violate time, place, and manner restrictions in UVU policy 161 section 4.8.6.

Locations include rooms inside the Sorensen Student Center, Grand Ballroom, Theater, Centre Stage or meeting rooms; Athletic fields/Lawn areas; Events Center: Arena, or Presidential Level; Student Life and Wellness Center Plaza; and Pope Science Courtyard

### Scheduling

Although it is not necessary for persons planning protests, demonstrations, or speakers to obtain prior permission from the University, the University encourages such personals to contact the campus Event Services to reserve or schedule a place in advance to ensure availability.

UVU Event Services, SC 103, 801-863-8612
Events Center Scheduling, EC Concourse, 801-863-8767

Sound equipment shall be used only at volume levels that so not disrupt or disturb teaching, research, or other duly authorized meetings or activities at the University, and in accordance with city ordinances.

## Utah Safety Law

In 1965 the Utah State Legislature passed a law requiring every student, teacher, and visitor in any public or private school to wear industrial quality eye protection devices while participating in or observing the following: industrial educational activities involving hot or molten metals; operation of machinery or equipment that may throw particles of foreign matter into the eyes; heating, treating, tempering, or kiln firing of industrial materials; chemistry or physics laboratories when using caustic, explosive, or hot chemicals, liquids, or solids.

# Tuition & Fees

## Bursar's Office/UVU Cashier

- Office: BA 108
- Telephone: 801-863-7200
- Fax: 801-863-8787
- E-mail: bursar@uvu.edu
- Hours: Monday, Thursday, Friday 8 a.m. - 5 p.m.; Tuesday, Wednesday 8 a.m. - 6 p.m.

## Tuition & Fees Policy

Tuition and student fees are established by the Utah State Board of Regents. University Policy regarding payment of tuition and fees states that all tuition and fees assessed at the time of registration are due and payable. This policy applies to all registration periods. Tuition and other charges are subject to change without notice. Please check current policies, procedures, tuition and fee tables, payment deadlines, and other important information at uvu.edu/registration.

Early registration not covered by Financial Aid or paid in full by the published payment deadline may be purged (dropped) for non-payment. After the published deadline, Utah Valley University will not drop courses for non-payment or non-attendance. Students who change their mind are responsible to drop their own classes or file a Leave of Absence. Filing a Leave of Absence does not absolve a student of any financial obligation to the University for tuition or other charges owing or repayment of a financial aid disbursement. Students must drop or withdraw by the published 100% Refund Date or they will be responsible to pay the total tuition and fees owed. For exact refund and drop deadlines, please refer to the Registration Dates and Deadlines at uvu.edu/registration.

Students who default on all or any portion of their tuition and fees will be suspended from further registration and records activity at UVU until their accounts are paid in full.

Past due tuition accounts may be reported to a Nationwide Credit Reporting Agency, and/or turned over to an outside collection agency for collection.

## Tuition Surcharge Policy

Students are encouraged to avoid accumulating credit hours beyond those needed to successfully complete their identified program of study. A student may be charged the excess credit hour surcharge for credit hours in excess of 125% of a student's program of study. The surcharge amount for resident students is double the current year's resident tuition rates for the number of credit hours taken. Non-resident students will continue to pay non-resident tuition. (Board of Regents Policy R515)

For further information regarding this policy, please contact your advisor or the Graduation/Transfer Services Office.

## Dropping/Withdrawing from Courses

When students enroll in a course, they are reserving a seat in the class. If a student decides not to take a class, it is the responsibility of the student to drop the course before the 100% Refund Deadline. Dropping the class before this deadline removes the charges from the student's account and allows other students to register. Charges for classes dropped after the 100% Refund Period deadlines will remain owing and will not be credited back to the student's account balance.

## Student Financial Responsibility

Before students can register for classes they must review and agree to the terms and conditions outlined in the Student Financial Responsibility Agreement, then review and update their address and other demographic information. It is important that students carefully update their demographic information as the University periodically sends bills, refund checks, and other important correspondence through the mail.

The Student Financial Responsibility Agreement (SFRA) includes agreements to pay tuition and fees, requires adherence to payment and withdrawal deadlines, outlines the consequences of delinquencies, and presents required financial aid consents. It also provides students an opportunity to consent to electronic delivery of their 1098-T Tax Form. The following is a brief description of terms included in the SFRA. To view the SFRA document in full, visit uvu.edu/cashier/sfra.html.

- FINANCIAL RESPONSIBILITY: I agree to pay all tuition, fees, and other related costs that result from my registration and/or future drop/add activity and understand that acceptance of these terms constitutes a promise to pay agreement.
- DROPPING/WITHDRAWING FROM COURSES: I understand and agree it is my responsibility to drop my own classes if I decide not to attend and further understand that I must drop my classes and/or file a Leave of Absence before the 100% Refund Deadline or I will be responsible for all tuition and fees.

- CONSEQUENCES OF DELINQUENT ACCOUNT/COLLECTION: I agree to pay all charges by the published deadlines and understand the consequences of delinquencies on my account including late payment charges, registration holds, and possible collection fees.
- COMMUNICATION: I understand all correspondence from Utah Valley University will be sent to the student's myUVU email account (including my billing statements) and therefore I am responsible for reading the e-mails I receive from UVU on a timely basis. I agree to keep my contact information current with UVU and further agree to allow Utah Valley University and its agents to contact me at any address, telephone, or cell phone number that I provide now or in the future.
- FINANCIAL AID DISBURSEMENTS: I understand that if I am expecting Financial Aid, I am responsible to follow up and ensure I have met all requirements to receive it, and acknowledge that I may be charged a late fee if my Financial Aid has not disbursed by the Late Fee Deadline. I further acknowledge that aid is contingent upon my enrollment and attendance in each class.

# Tuition Refund Policy

The tuition refund policy is established by the Utah State Board of Regents and amended by each college or university to fit their programs. Utah Valley University refunds to students who withdraw from school or drop classes as follows:
Semester:

- Through the 100% refund date published on the Student Timetable....100%
- After the 100% refund date published on the student Timetable....0%

Exact dates for semester, block, and weekend classes can be found at uvu.edu/schedule.

Students must drop classes or completely withdraw by the published 100% Refund Deadline in order to have the charges removed from their account. Students who withdraw after that date will not receive a refund; if they have not paid, they will continue to owe the University for these charges and will be subject to collections procedures if left unpaid.

Changes in enrollment may affect Financial Aid eligibility and amounts received. Financial Aid awards may be revoked when dropping courses, thus increasing the amount owed.

A Petition to the Refund Policy Form can be obtained online through myUVU or from the Office of the Registrar.

## State-Mandated Refund Policies

Students who are living in the following states while actively participating in UVU courses will receive refunds as designated by the state departments of education.

### New Mexico

5.100.3.11 PAYMENT AND REFUNDS FOR TUITION:

A. Cooling off period: Any student signing an enrollment agreement or making an initial deposit or payment toward tuition and fees of the institution shall be entitled to a cooling off period of at least three work days from the date of agreement or payment or from the date that the student first visits the institution, whichever is longer. During the cooling off period the agreement can be withdrawn and all payments shall be refunded. Evidence of personal appearance at the institution or deposit of a written statement of withdrawal for delivery by mail or other means shall be deemed as meeting the terms of the cooling off period.

B. Refunds prior to commencing instruction: Following the cooling off period but prior to the beginning of instruction, a student may withdraw from enrollment, effective upon personal appearance at the institution or deposit of a written statement of withdrawal for delivery (as defined above), and the institution shall be entitled to retain no more than $200 in tuition or fees as registration charges.

C. In the case of students enrolling for non-traditional instruction, a student may withdraw from enrollment following the cooling off period, prior to submission by the student of any lesson materials and effective upon deposit of a written statement of withdrawal for delivery (as defined above) and the institution shall be entitled to retain no more than $200 in tuition or fees as registration charges or an alternative amount that the institution can demonstrate to have been expended in preparation for that particular student's enrollment.

D. Refunds following commencement of instruction: An institution registered with the department shall adhere to either the following tuition refund policy or to a policy established by the institution's state of residence or accrediting body.

E. A student may withdraw after beginning instruction or submitting lesson materials, effective upon appearance at the institution or deposit of a written statement of withdrawal for delivery (as defined above), and the institution shall be entitled to retain no more than $200 in tuition or fees as registration charges or an alternative amount that the institution can demonstrate to have been expended in undertaking that particular student's instruction plus a pro rata amount of any additional tuition and fees earned and paid according to the following schedule:

| Date of withdrawal as a percent of the enrollment period for which the student was obligated | Portion of tuition and fees obligated and paid that are eligible to be retained by the institution |
|---|---|
| within 1st 10 percent | 10 percent |
| within 2nd 10 percent | 25 percent |
| within 3rd 10 percent | 40 percent |
| within 4th 10 percent | 55 percent |
| within 5th 10 percent | 70 percent |

| Date of withdrawal as a percent of the enrollment period for which the student was obligated | Portion of tuition and fees obligated and paid that are eligible to be retained by the institution |
|---|---|
| within 6th 10 percent | 85 percent |
| thereafter | 100 percent |

F. "Enrollment period for which the student was obligated" means a quarter, semester, or other term of instruction followed by the institution which the student has begun and for which the student has agreed to pay tuition.

G. Tuition/fee refunds must be made within 30 calendar days of the institution receiving written notice of a student's withdrawal or of the institution terminating enrollment of the student, whichever is earlier. Upon request by a student or the department, the institution shall provide an accounting for such amounts retained under this standard within five work days.

H. The institution's payment and refund policies shall be clearly articulated in the institution's catalog and as part of all enrollment agreements.

# Special Lab & Course Fees

Some classes require fees in addition to standard tuition and fees. The online class schedule indicates such lab, course, and materials fees.

# Late Payment Fee (Late Fee)

Late Payment Fees are assessed each Wednesday night throughout the semester with a begin date according to the Student Timetable. Late fees are assessed on ALL unpaid account balances at 20%, not to exceed $200.00 per semester, including accounts awaiting Financial Aid.

# Late Registration Fee (Late ADD Fee)

Special approvals are required to register late for a class. The length of time for each late registration period is relative to each part of term and is governed by the Student Timetable. Students who add classes during the late registration period must finalize the process by paying for appropriate late registration fees in addition to their tuition/fees according to the published dates on the Semester Student Timetable.

# Payment Options

## At the Cashier Windows

- Cash
- Check
- PIN-based debit

## Online through Tuition Payment Plus

### Electronic Checks

Electronic Check payments are free of charge and can be made online only with the bank routing number and account number. Payments can be made from a personal checking or savings account. Corporate checks, credit card checks, home equity, traveler’s cheques, etc. are not accepted. Electronic check payments are processed through Tuition Payment PLUS, accessed through myUVU. Any check returned by the payor’s bank for any reason, will be considered a “dishonored” check and all penalties for a “dishonored” check will be applicable.

### Credit Cards

Payments with credit cards are accepted online only and will be charged a non-refundable service fee of 2.85% (minimum $3.00). Most major credit cards are accepted including VISA, MasterCard, American Express, and Discover.

## Tuition Payment Plan

The tuition payment plan allows students to pay installments on their tuition and fees over the course of the semester with a minimal fee to enroll. If students enroll before the published Payment Deadline dates, their classes will not be dropped for nonpayment. In addition, enrollment in the payment plan before the Late Fee Deadline will prevent the 20% late fee from being assessed. More information about the payment plan can be found at https://www.uvu.edu/collections/tuition.html.

## Check Cashing Procedures

The University does not accept two-party checks. Checks written to UVU must have the student’s UV ID number, and the payor’s address and phone number on the face of the check.

Checks made for an amount larger than the total tuition and fees due will not be accepted.

## Dishonored Checks

A dishonored check is any check returned by the payor’s bank for any reason, including, but not limited to, insufficient funds, no account, bad account, stop payment, unauthorized account, refer to maker. Checks written that later have a “stop payment” placed upon them will be considered as “dishonored”.

A service charge will be assessed on each dishonored check unless the payor can document in writing from the bank that it was a bank error.

## Third Party/Sponsored Payments

Students are responsible for ensuring that appropriate documentation for a third-party or sponsored payment is submitted to the Accounts Receivable Office prior to the start of classes each semester. If paperwork cannot be submitted to the Accounts Receivable Office by the published Payment Deadline, students should consider enrolling in the Tuition Payment Plan to avoid having their classes purged (dropped) for nonpayment.

Students who are sponsored by a third-party must comply with the terms of the sponsor agreement and verify that all tuition and fees charges are paid by the sponsor. Any balance not paid by the sponsor remains the student responsibility and is subject to all payment deadlines and late fees.

If a student adjusts their registration schedule after their authorization has been received by UVU, it is the student's responsibility to verify that any course or tuition and fee changes will be paid by the sponsor and that these changes are reported to the Accounts Receivable office for proper processing.

If the sponsor does not provide funding by the end of the semester, the student will be responsible for payment of tuition and fees.

# Undergraduate Tuition and Fees

Tuition and student fees are established by the Utah State Board of Regents. Tuition and such other changes as appear in the catalog and other College publications are subject to change without notice. All tuition and fees are payable at the time of registration. Checks for more than the total tuiton and fees due will not be accepted.

## Fall 2021 - Summer 2022 Undergraduate Tuition

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 0.5 | 315.00 | 17.00 | 332.00 | 0.5 | 888.00 | 17.00 | 905.00 |
| 1.0 | 418.00 | 33.00 | 451.00 | 1.0 | 1,207.00 | 33.00 | 1,240.00 |
| 1.5 | 521.00 | 49.00 | 570.00 | 1.5 | 1,526.00 | 49.00 | 1,575.00 |
| 2.0 | 624.00 | 65.00 | 689.00 | 2.0 | 1,845.00 | 65.00 | 1,910.00 |
| 2.5 | 727.00 | 81.00 | 808.00 | 2.5 | 2,164.00 | 81.00 | 2,245.00 |
| 3.0 | 830.00 | 97.00 | 927.00 | 3.0 | 2,483.00 | 97.00 | 2,580.00 |
| 3.5 | 933.00 | 113.00 | 1,046.00 | 3.5 | 2,802.00 | 113.00 | 2,915.00 |
| 4.0 | 1,036.00 | 129.00 | 1,165.00 | 4.0 | 3,121.00 | 129.00 | 3,250.00 |
| 4.5 | 1,139.00 | 145.00 | 1,284.00 | 4.5 | 3,440.00 | 145.00 | 3,585.00 |
| 5.0 | 1,242.00 | 161.00 | 1,403.00 | 5.0 | 3,759.00 | 161.00 | 3,920.00 |
| 5.5 | 1,345.00 | 177.00 | 1,522.00 | 5.5 | 4,078.00 | 177.00 | 4,255.00 |
| 6.0 | 1,448.00 | 193.00 | 1,641.00 | 6.0 | 4,397.00 | 193.00 | 4,590.00 |
| 6.5 | 1,551.00 | 209.00 | 1,760.00 | 6.5 | 4,716.00 | 209.00 | 4,925.00 |
| 7.0 | 1,654.00 | 225.00 | 1,879.00 | 7.0 | 5,035.00 | 225.00 | 5,260.00 |
| 7.5 | 1,757.00 | 241.00 | 1,998.00 | 7.5 | 5,354.00 | 241.00 | 5,595.00 |
| 8.0 | 1,860.00 | 257.00 | 2,117.00 | 8.0 | 5,673.00 | 257.00 | 5,930.00 |
| 8.5 | 1,963.00 | 273.00 | 2,236.00 | 8.5 | 5,992.00 | 273.00 | 6,265.00 |
| 9.0 | 2,066.00 | 289.00 | 2,355.00 | 9.0 | 6,311.00 | 289.00 | 6,600.00 |
| 9.5 | 2,169.00 | 305.00 | 2,474.00 | 9.5 | 6,630.00 | 305.00 | 6,935.00 |
| 10.0 | 2,272.00 | 321.00 | 2,593.00 | 10.0 | 6,949.00 | 321.00 | 7,270.00 |
| 10.5 | 2,375.00 | 321.00 | 2,696.00 | 10.5 | 7,268.00 | 321.00 | 7,589.00 |
| 11.0 | 2,478.00 | 321.00 | 2,799.00 | 11.0 | 7,587.00 | 321.00 | 7,908.00 |
| 11.5 | 2,581.00 | 321.00 | 2,902.00 | 11.5 | 7,906.00 | 321.00 | 8,227.00 |
| | Equal Payment | | | | Equal Payment | | |
| 12.0 | 2,684.00 | 321.00 | 3,005.00 | 12.0 | 8,225.00 | 321.00 | 8,546.00 |
| 12.5 | 2,684.00 | 321.00 | 3,005.00 | 12.5 | 8,225.00 | 321.00 | 8,546.00 |
| 13.0 | 2,684.00 | 321.00 | 3,005.00 | 13.0 | 8,225.00 | 321.00 | 8,546.00 |
| 13.5 | 2,684.00 | 321.00 | 3,005.00 | 13.5 | 8,225.00 | 321.00 | 8,546.00 |
| 14.0 | 2,684.00 | 321.00 | 3,005.00 | 14.0 | 8,225.00 | 321.00 | 8,546.00 |
| 14.5 | 2,684.00 | 321.00 | 3,005.00 | 14.5 | 8,225.00 | 321.00 | 8,546.00 |

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 15.0 | 2,684.00 | 321.00 | 3,005.00 | 15.0 | 8,225.00 | 321.00 | 8,546.00 |
| 15.5 | 2,684.00 | 321.00 | 3,005.00 | 15.5 | 8,225.00 | 321.00 | 8,546.00 |
| 16.0 | 2,684.00 | 321.00 | 3,005.00 | 16.0 | 8,225.00 | 321.00 | 8,546.00 |
| 16.5 | 2,684.00 | 321.00 | 3,005.00 | 16.5 | 8,225.00 | 321.00 | 8,546.00 |
| 17.0 | 2,684.00 | 321.00 | 3,005.00 | 17.0 | 8,225.00 | 321.00 | 8,546.00 |
| 17.5 | 2,684.00 | 321.00 | 3,005.00 | 17.5 | 8,225.00 | 321.00 | 8,546.00 |
| 18.0 | 2,684.00 | 321.00 | 3,005.00 | 18.0 | 8,225.00 | 321.00 | 8,546.00 |
| | Equal Payment End | | | | Equal Payment End | | |
| 18.5 | 2,787.00 | 321.00 | 3,108.00 | 18.5 | 8,544.00 | 321.00 | 8,865.00 |
| 19.0 | 2,890.00 | 321.00 | 3,211.00 | 19.0 | 8,863.00 | 321.00 | 9,184.00 |
| 19.5 | 2,993.00 | 321.00 | 3,314.00 | 19.5 | 9,182.00 | 321.00 | 9,503.00 |
| 20.0 | 3,096.00 | 321.00 | 3,417.00 | 20.0 | 9,501.00 | 321.00 | 9,822.00 |
| 20.5 | 3,199.00 | 321.00 | 3,520.00 | 20.5 | 9,820.00 | 321.00 | 10,141.00 |
| 21.0 | 3,302.00 | 321.00 | 3,623.00 | 21.0 | 10,139.00 | 321.00 | 10,460.00 |
| 21.5 | 3,405.00 | 321.00 | 3,726.00 | 21.5 | 10,458.00 | 321.00 | 10,779.00 |
| 22.0 | 3,508.00 | 321.00 | 3,829.00 | 22.0 | 10,777.00 | 321.00 | 11,098.00 |
| 22.5 | 3,611.00 | 321.00 | 3,932.00 | 22.5 | 11,096.00 | 321.00 | 11,417.00 |
| 23.0 | 3,714.00 | 321.00 | 4,035.00 | 23.0 | 11,415.00 | 321.00 | 11,736.00 |
| 23.5 | 3,817.00 | 321.00 | 4,138.00 | 23.5 | 11,734.00 | 321.00 | 12,055.00 |
| 24.0 | 3,920.00 | 321.00 | 4,241.00 | 24.0 | 12,053.00 | 321.00 | 12,374.00 |
| 24.5 | 4,023.00 | 321.00 | 4,344.00 | 24.5 | 12,372.00 | 321.00 | 12,693.00 |
| 25.0 | 4,126.00 | 321.00 | 4,447.00 | 25.0 | 12,691.00 | 321.00 | 13,012.00 |

For each credit hour over 25, $206 per credit hour for resident and $638 per credit hour for non-resident will be assessed.

| Fee | Amount |
|---|---|
| Admission Application Fee | $35 |
| Late Admission Application Fee (After deadline of August 1 for fall and December 1 for spring) | $40 ($35 +$40 late fee) total $75 |
| Readmit Application Fee | $15 |
| Readmit Late Application Fee (After deadline of August 1 for fall and December 1 for spring) | $40 ($15 +$40 late fee) total $55 |
| International Student Admissions Application Fee | $115 |
| International Student Semester Fee | $40 |
| Late Graduation Application Fee | $25 |
| Special Lab and Course Fees | (see online class schedule) |
| Challenge Credit Fee | $5 per credit |
| Challenge Credit Form | $15 |
| Late Registration Fee | $45 beginning Spring 2018 |
| For each credit hour over 25 for the Academic Year: | (See Tuition Table) |
| Late Tuition Payment Fee | Assessed each Wednesday night on ALL UNPAID ACCOUNT BALANCES, including 2nd block, at 20%, not to exceed $200 |
| Tuition Payment Plan - Enrollment Fee | $25 |
| Tuition Payment Plan - Fee for each late installment payment | $25 |

# Graduate Tuition and Fees

Tuition and student fees are established by the Utah State Board of Regents. Tuition and such other changes as appear in the catalog and other College publications are subject to change without notice. All tuition and fees are payable at the time of registration. Checks for more than the total tuition and fees due will not be accepted.

## Master of Education, Master of Nursing, Master of Science - Mathematics Education, Graduate Certificates

### FALL 2021 - SUMMER 2022 TUITION

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 0.5 | 150.50 | 16.00 | 166.50 | 0.5 | 454.50 | 16.00 | 470.50 |
| 1.0 | 301.00 | 32.00 | 333.00 | 1.0 | 909.00 | 32.00 | 941.00 |
| 1.5 | 451.50 | 48.00 | 499.50 | 1.5 | 1,363.50 | 48.00 | 1,411.50 |
| 2.0 | 602.00 | 64.00 | 666.00 | 2.0 | 1,818.00 | 64.00 | 1,882.00 |
| 2.5 | 752.50 | 80.00 | 832.50 | 2.5 | 2,272.50 | 80.00 | 2,352.50 |
| 3.0 | 903.00 | 96.00 | 999.00 | 3.0 | 2,727.00 | 96.00 | 2,823.00 |
| 3.5 | 1,053.50 | 112.00 | 1,165.50 | 3.5 | 3,181.50 | 112.00 | 3,293.50 |
| 4.0 | 1,204.00 | 128.00 | 1,332.00 | 4.0 | 3,636.00 | 128.00 | 3,764.00 |
| 4.5 | 1,354.50 | 144.00 | 1,498.50 | 4.5 | 4,090.50 | 144.00 | 4,234.50 |
| 5.0 | 1,505.00 | 160.00 | 1,665.00 | 5.0 | 4,545.00 | 160.00 | 4,705.00 |
| 5.5 | 1,655.50 | 176.00 | 1,831.50 | 5.5 | 4,999.50 | 176.00 | 5,175.50 |
| 6.0 | 1,806.00 | 192.00 | 1,998.00 | 6.0 | 5,454.00 | 192.00 | 5,646.00 |
| 6.5 | 1,956.50 | 208.00 | 2,164.50 | 6.5 | 5,908.50 | 208.00 | 6,116.50 |
| 7.0 | 2,107.00 | 224.00 | 2,331.00 | 7.0 | 6,363.00 | 224.00 | 6,587.00 |
| 7.5 | 2,257.50 | 240.00 | 2,497.50 | 7.5 | 6,817.50 | 240.00 | 7,057.50 |
| 8.0 | 2,408.00 | 256.00 | 2,664.00 | 8.0 | 7,272.00 | 256.00 | 7,528.00 |
| 8.5 | 2,558.50 | 272.00 | 2,830.50 | 8.5 | 7,726.50 | 272.00 | 7,998.50 |
| 9.0 | 2,709.00 | 288.00 | 2,997.00 | 9.0 | 8,181.00 | 288.00 | 8,469.00 |
| 9.5 | 2,859.50 | 304.00 | 3,163.50 | 9.5 | 8,635.50 | 304.00 | 8,939.50 |
| 10.0 | 3,010.00 | 320.00 | 3,330.00 | 10.0 | 9,090.00 | 320.00 | 9,410.00 |
| 10.5 | 3,160.50 | 320.00 | 3,480.50 | 10.5 | 9,544.50 | 320.00 | 9,864.50 |
| 11.0 | 3,311.00 | 320.00 | 3,631.00 | 11.0 | 9,999.00 | 320.00 | 10,319.00 |
| 11.5 | 3,461.50 | 320.00 | 3,781.50 | 11.5 | 10,453.50 | 320.00 | 10,773.50 |
| 12.0 | 3,612.00 | 320.00 | 3,932.00 | 12.0 | 10,908.00 | 320.00 | 11,228.00 |
| 12.5 | 3,762.50 | 320.00 | 4,082.50 | 12.5 | 11,362.50 | 320.00 | 11,682.50 |
| 13.0 | 3,913.00 | 320.00 | 4,233.00 | 13.0 | 11,817.00 | 320.00 | 12,137.00 |
| 13.5 | 4,063.50 | 320.00 | 4,383.50 | 13.5 | 12,271.50 | 320.00 | 12,591.50 |
| 14.0 | 4,214.00 | 320.00 | 4,534.00 | 14.0 | 12,726.00 | 320.00 | 13,046.00 |
| 14.5 | 4,364.50 | 320.00 | 4,684.50 | 14.5 | 13,180.50 | 320.00 | 13,500.50 |
| 15.0 | 4,515.00 | 320.00 | 4,835.00 | 15.0 | 13,635.00 | 320.00 | 13,955.00 |
| 15.5 | 4,665.50 | 320.00 | 4,985.50 | 15.5 | 14,089.50 | 320.00 | 14,409.50 |
| 16.0 | 4,816.00 | 320.00 | 5,136.00 | 16.0 | 14,544.00 | 320.00 | 14,864.00 |
| 16.5 | 4,966.50 | 320.00 | 5,286.50 | 16.5 | 14,998.50 | 320.00 | 15,318.50 |
| 17.0 | 5,117.00 | 320.00 | 5,437.00 | 17.0 | 15,453.00 | 320.00 | 15,773.00 |
| 17.5 | 5,267.50 | 320.00 | 5,587.50 | 17.5 | 15,907.50 | 320.00 | 16,227.50 |
| 18.0 | 5,418.00 | 320.00 | 5,738.00 | 18.0 | 16,362.00 | 320.00 | 16,682.00 |
| 18.5 | 5,568.50 | 320.00 | 5,888.50 | 18.5 | 16,816.50 | 320.00 | 17,136.50 |

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 19.0 | 5,719.00 | 320.00 | 6,039.00 | 19.0 | 17,271.00 | 320.00 | 17,591.00 |
| 19.5 | 5,869.50 | 320.00 | 6,189.50 | 19.5 | 17,725.50 | 320.00 | 18,045.50 |
| 20.0 | 6,020.00 | 320.00 | 6,340.00 | 20.0 | 18,180.00 | 320.00 | 18,500.00 |
| 20.5 | 6,170.50 | 320.00 | 6,490.50 | 20.5 | 18,634.50 | 320.00 | 18,954.50 |
| 21.0 | 6,321.00 | 320.00 | 6,641.00 | 21.0 | 19,089.00 | 320.00 | 19,409.00 |
| 21.5 | 6,471.50 | 320.00 | 6,791.50 | 21.5 | 19,543.50 | 320.00 | 19,863.50 |
| 22.0 | 6,622.00 | 320.00 | 6,942.00 | 22.0 | 19,998.00 | 320.00 | 20,318.00 |
| 22.5 | 6,772.50 | 320.00 | 7,092.50 | 22.5 | 20,452.50 | 320.00 | 20,772.50 |
| 23.0 | 6,923.00 | 320.00 | 7,243.00 | 23.0 | 20,907.00 | 320.00 | 21,227.00 |
| 23.5 | 7,073.50 | 320.00 | 7,393.50 | 23.5 | 21,361.50 | 320.00 | 21,681.50 |
| 24.0 | 7,224.00 | 320.00 | 7,544.00 | 24.0 | 21,816.00 | 320.00 | 22,136.00 |
| 24.5 | 7,374.50 | 320.00 | 7,694.50 | 24.5 | 22,270.50 | 320.00 | 22,590.50 |
| 25.0 | 7,525.00 | 320.00 | 7,845.00 | 25.0 | 22,725.00 | 320.00 | 23,045.00 |

For each credit hour over 25, $301 per credit hour for resident and $909 per credit hour for non-resident will be assessed.

## Master of Cybersecurity, Master of Engineering and Technology Management, Master of Public Services

### FALL 2021 - SUMMER 2022 TUITION

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 1.0 | 430.00 | 32.00 | 462.00 | 1.0 | 1,038.00 | 32.00 | 1,070.00 |
| 2.0 | 860.00 | 64.00 | 924.00 | 2.0 | 2,076.00 | 64.00 | 2,140.00 |
| 3.0 | 1,290.00 | 96.00 | 1,386.00 | 3.0 | 3,114.00 | 96.00 | 3,210.00 |
| 4.0 | 1,720.00 | 128.00 | 1,848.00 | 4.0 | 4,152.00 | 128.00 | 4,280.00 |
| 5.0 | 2,150.00 | 160.00 | 2,310.00 | 5.0 | 5,190.00 | 160.00 | 5,350.00 |
| 6.0 | 2,580.00 | 192.00 | 2,772.00 | 6.0 | 6,228.00 | 192.00 | 6,420.00 |
| 7.0 | 3,010.00 | 224.00 | 3,234.00 | 7.0 | 7,266.00 | 224.00 | 7,490.00 |
| 8.0 | 3,440.00 | 256.00 | 3,696.00 | 8.0 | 8,304.00 | 256.00 | 8,560.00 |
| 9.0 | 3,870.00 | 288.00 | 4,158.00 | 9.0 | 9,342.00 | 288.00 | 9,630.00 |
| 10.0 | 4,300.00 | 320.00 | 4,620.00 | 10.0 | 10,380.00 | 320.00 | 10,700.00 |
| 11.0 | 4,730.00 | 320.00 | 5,050.00 | 11.0 | 11,418.00 | 320.00 | 11,738.00 |
| 12.0 | 5,160.00 | 320.00 | 5,480.00 | 12.0 | 12,456.00 | 320.00 | 12,776.00 |
| 13.0 | 5,590.00 | 320.00 | 5,910.00 | 13.0 | 13,494.00 | 320.00 | 13,814.00 |
| 14.0 | 6,020.00 | 320.00 | 6,340.00 | 14.0 | 14,532.00 | 320.00 | 14,852.00 |
| 15.0 | 6,450.00 | 320.00 | 6,770.00 | 15.0 | 15,570.00 | 320.00 | 15,890.00 |
| 16.0 | 6,880.00 | 320.00 | 7,200.00 | 16.0 | 16,608.00 | 320.00 | 16,928.00 |
| 17.0 | 7,310.00 | 320.00 | 7,630.00 | 17.0 | 17,646.00 | 320.00 | 17,966.00 |
| 18.0 | 7,740.00 | 320.00 | 8,060.00 | 18.0 | 18,684.00 | 320.00 | 19,004.00 |
| 19.0 | 8,170.00 | 320.00 | 8,490.00 | 19.0 | 19,722.00 | 320.00 | 20,042.00 |
| 20.0 | 8,600.00 | 320.00 | 8,920.00 | 20.0 | 20,760.00 | 320.00 | 21,080.00 |

## Master of Accountancy & Master of Financial Planning and Analytics

### FALL 2021 - SUMMER 2022 TUITION

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 1.0 | 531.00 | 32.00 | 563.00 | 1.0 | 1,281.00 | 32.00 | 1,313.00 |
| 2.0 | 1,062.00 | 64.00 | 1,126.00 | 2.0 | 2,562.00 | 64.00 | 2,626.00 |
| 3.0 | 1,593.00 | 96.00 | 1,689.00 | 3.0 | 3,843.00 | 96.00 | 3,939.00 |
| 4.0 | 2,124.00 | 128.00 | 2,252.00 | 4.0 | 5,124.00 | 128.00 | 5,252.00 |
| 5.0 | 2,655.00 | 160.00 | 2,815.00 | 5.0 | 6,405.00 | 160.00 | 6,565.00 |
| 6.0 | 3,186.00 | 192.00 | 3,378.00 | 6.0 | 7,686.00 | 192.00 | 7,878.00 |
| 7.0 | 3,717.00 | 224.00 | 3,941.00 | 7.0 | 8,967.00 | 224.00 | 9,191.00 |
| 8.0 | 4,248.00 | 256.00 | 4,504.00 | 8.0 | 10,248.00 | 256.00 | 10,504.00 |
| 9.0 | 4,779.00 | 288.00 | 5,067.00 | 9.0 | 11,529.00 | 288.00 | 11,817.00 |
| 10.0 | 5,310.00 | 320.00 | 5,630.00 | 10.0 | 12,810.00 | 320.00 | 13,130.00 |
| 11.0 | 5,841.00 | 320.00 | 6,161.00 | 11.0 | 14,091.00 | 320.00 | 14,411.00 |
| 12.0 | 6,372.00 | 320.00 | 6,692.00 | 12.0 | 15,372.00 | 320.00 | 15,692.00 |
| 13.0 | 6,903.00 | 320.00 | 7,223.00 | 13.0 | 16,653.00 | 320.00 | 16,973.00 |
| 14.0 | 7,434.00 | 320.00 | 7,754.00 | 14.0 | 17,934.00 | 320.00 | 18,254.00 |
| 15.0 | 7,965.00 | 320.00 | 8,285.00 | 15.0 | 19,215.00 | 320.00 | 19,535.00 |
| 16.0 | 8,496.00 | 320.00 | 8,816.00 | 16.0 | 20,496.00 | 320.00 | 20,816.00 |
| 17.0 | 9,027.00 | 320.00 | 9,347.00 | 17.0 | 21,777.00 | 320.00 | 22,097.00 |
| 18.0 | 9,558.00 | 320.00 | 9,878.00 | 18.0 | 23,058.00 | 320.00 | 23,378.00 |
| 19.0 | 10,089.00 | 320.00 | 10,409.00 | 19.0 | 24,339.00 | 320.00 | 24,659.00 |
| 20.0 | 10,620.00 | 320.00 | 10,940.00 | 20.0 | 25,620.00 | 320.00 | 25,940.00 |

## Master of Business Administration

### FALL 2021 - SUMMER 2022 TUITION

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 1.0 | 644.00 | 32.00 | 676.00 | 1.0 | 1,394.00 | 32.00 | 1,426.00 |
| 2.0 | 1,288.00 | 64.00 | 1,352.00 | 2.0 | 2,788.00 | 64.00 | 2,852.00 |
| 3.0 | 1,932.00 | 96.00 | 2,028.00 | 3.0 | 4,182.00 | 96.00 | 4,278.00 |
| 4.0 | 2,576.00 | 128.00 | 2,704.00 | 4.0 | 5,576.00 | 128.00 | 5,704.00 |
| 5.0 | 3,220.00 | 160.00 | 3,380.00 | 5.0 | 6,970.00 | 160.00 | 7,130.00 |
| 6.0 | 3,864.00 | 192.00 | 4,056.00 | 6.0 | 8,364.00 | 192.00 | 8,556.00 |
| 7.0 | 4,508.00 | 224.00 | 4,732.00 | 7.0 | 9,758.00 | 224.00 | 9,982.00 |
| 8.0 | 5,152.00 | 256.00 | 5,408.00 | 8.0 | 11,152.00 | 256.00 | 11,408.00 |
| 9.0 | 5,796.00 | 288.00 | 6,084.00 | 9.0 | 12,546.00 | 288.00 | 12,834.00 |
| 10.0 | 6,440.00 | 320.00 | 6,760.00 | 10.0 | 13,940.00 | 320.00 | 14,260.00 |
| 11.0 | 7,084.00 | 320.00 | 7,404.00 | 11.0 | 15,334.00 | 320.00 | 15,654.00 |
| 12.0 | 7,728.00 | 320.00 | 8,048.00 | 12.0 | 16,728.00 | 320.00 | 17,048.00 |
| 13.0 | 8,372.00 | 320.00 | 8,692.00 | 13.0 | 18,122.00 | 320.00 | 18,442.00 |
| 14.0 | 9,016.00 | 320.00 | 9,336.00 | 14.0 | 19,516.00 | 320.00 | 19,836.00 |
| 15.0 | 9,660.00 | 320.00 | 9,980.00 | 15.0 | 20,910.00 | 320.00 | 21,230.00 |
| 16.0 | 10,304.00 | 320.00 | 10,624.00 | 16.0 | 22,304.00 | 320.00 | 22,624.00 |
| 17.0 | 10,948.00 | 320.00 | 11,268.00 | 17.0 | 23,698.00 | 320.00 | 24,018.00 |

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 18.0 | 11,592.00 | 320.00 | 11,912.00 | 18.0 | 25,092.00 | 320.00 | 25,412.00 |
| 19.0 | 12,236.00 | 320.00 | 12,556.00 | 19.0 | 26,486.00 | 320.00 | 26,806.00 |
| 20.0 | 12,880.00 | 320.00 | 13,200.00 | 20.0 | 27,880.00 | 320.00 | 28,200.00 |

## Master of Computer Science

### FALL 2021 - SUMMER 2022 TUITION

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 1.0 | 403.00 | 32.00 | 435.00 | 1.0 | 1,011.00 | 32.00 | 1,043.00 |
| 2.0 | 806.00 | 64.00 | 870.00 | 2.0 | 2,022.00 | 64.00 | 2,086.00 |
| 3.0 | 1,209.00 | 96.00 | 1,305.00 | 3.0 | 3,033.00 | 96.00 | 3,129.00 |
| 4.0 | 1,612.00 | 128.00 | 1,740.00 | 4.0 | 4,044.00 | 128.00 | 4,172.00 |
| 5.0 | 2,015.00 | 160.00 | 2,175.00 | 5.0 | 5,055.00 | 160.00 | 5,215.00 |
| 6.0 | 2,418.00 | 192.00 | 2,610.00 | 6.0 | 6,066.00 | 192.00 | 6,258.00 |
| 7.0 | 2,821.00 | 224.00 | 3,045.00 | 7.0 | 7,077.00 | 224.00 | 7,301.00 |
| 8.0 | 3,224.00 | 256.00 | 3,480.00 | 8.0 | 8,088.00 | 256.00 | 8,344.00 |
| 9.0 | 3,627.00 | 288.00 | 3,915.00 | 9.0 | 9,099.00 | 288.00 | 9,387.00 |
| 10.0 | 4,030.00 | 320.00 | 4,350.00 | 10.0 | 10,110.00 | 320.00 | 10,430.00 |
| 11.0 | 4,433.00 | 320.00 | 4,753.00 | 11.0 | 11,121.00 | 320.00 | 11,441.00 |
| 12.0 | 4,836.00 | 320.00 | 5,156.00 | 12.0 | 12,132.00 | 320.00 | 12,452.00 |
| 13.0 | 5,239.00 | 320.00 | 5,559.00 | 13.0 | 13,143.00 | 320.00 | 13,463.00 |
| 14.0 | 5,642.00 | 320.00 | 5,962.00 | 14.0 | 14,154.00 | 320.00 | 14,474.00 |
| 15.0 | 6,045.00 | 320.00 | 6,365.00 | 15.0 | 15,165.00 | 320.00 | 15,485.00 |
| 16.0 | 6,448.00 | 320.00 | 6,768.00 | 16.0 | 16,176.00 | 320.00 | 16,496.00 |
| 17.0 | 6,851.00 | 320.00 | 7,171.00 | 17.0 | 17,187.00 | 320.00 | 17,507.00 |
| 18.0 | 7,254.00 | 320.00 | 7,574.00 | 18.0 | 18,198.00 | 320.00 | 18,518.00 |
| 19.0 | 7,657.00 | 320.00 | 7,977.00 | 19.0 | 19,209.00 | 320.00 | 19,529.00 |
| 20.0 | 8,060.00 | 320.00 | 8,380.00 | 20.0 | 20,220.00 | 320.00 | 20,540.00 |

## Master of Social Work, Master of Arts in Marriage & Family Therapy, Master of Education in School Counseling Emphasis, Master of Clinical Mental Health Counseling Emphasis

### FALL 2021 - SUMMER 2022 TUITION

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 1.0 | 376.00 | 32.00 | 408.00 | 1.0 | 984.00 | 32.00 | 1,016.00 |
| 2.0 | 752.00 | 64.00 | 816.00 | 2.0 | 1,968.00 | 64.00 | 2,032.00 |
| 3.0 | 1,128.00 | 96.00 | 1,224.00 | 3.0 | 2,952.00 | 96.00 | 3,048.00 |
| 4.0 | 1,504.00 | 128.00 | 1,632.00 | 4.0 | 3,936.00 | 128.00 | 4,064.00 |
| 5.0 | 1,880.00 | 160.00 | 2,040.00 | 5.0 | 4,920.00 | 160.00 | 5,080.00 |
| 6.0 | 2,256.00 | 192.00 | 2,448.00 | 6.0 | 5,904.00 | 192.00 | 6,096.00 |
| 7.0 | 2,632.00 | 224.00 | 2,856.00 | 7.0 | 6,888.00 | 224.00 | 7,112.00 |
| 8.0 | 3,008.00 | 256.00 | 3,264.00 | 8.0 | 7,872.00 | 256.00 | 8,128.00 |
| 9.0 | 3,384.00 | 288.00 | 3,672.00 | 9.0 | 8,856.00 | 288.00 | 9,144.00 |

| Resident Hours | | | | Non-Resident Hours | | | |
|---|---|---|---|---|---|---|---|
| **Hours** | **Tuition** | **Fees** | **Total** | **Hours** | **Tuition** | **Fees** | **Total** |
| 10.0 | 3,760.00 | 320.00 | 4,080.00 | 10.0 | 9,840.00 | 320.00 | 10,160.00 |
| 11.0 | 4,136.00 | 320.00 | 4,456.00 | 11.0 | 10,824.00 | 320.00 | 11,144.00 |
| 12.0 | 4,512.00 | 320.00 | 4,832.00 | 12.0 | 11,808.00 | 320.00 | 12,128.00 |
| 13.0 | 4,888.00 | 320.00 | 5,208.00 | 13.0 | 12,792.00 | 320.00 | 13,112.00 |
| 14.0 | 5,264.00 | 320.00 | 5,584.00 | 14.0 | 13,776.00 | 320.00 | 14,096.00 |
| 15.0 | 5,640.00 | 320.00 | 5,960.00 | 15.0 | 14,760.00 | 320.00 | 15,080.00 |
| 16.0 | 6,016.00 | 320.00 | 6,336.00 | 16.0 | 15,744.00 | 320.00 | 16,064.00 |
| 17.0 | 6,392.00 | 320.00 | 6,712.00 | 17.0 | 16,728.00 | 320.00 | 17,048.00 |
| 18.0 | 6,768.00 | 320.00 | 7,088.00 | 18.0 | 17,712.00 | 320.00 | 18,032.00 |
| 19.0 | 7,144.00 | 320.00 | 7,464.00 | 19.0 | 18,696.00 | 320.00 | 19,016.00 |
| 20.0 | 7,520.00 | 320.00 | 7,840.00 | 20.0 | 19,680.00 | 320.00 | 20,000.00 |

## College of Engineering and Technology

Architecture and Engineering Design ..... 86
Aviation Science ..... 113
Computer Science ..... 157
Computer Science Graduate Programs ..... 171
Construction Technologies ..... 173
Culinary Arts Institute ..... 192
Cybersecurity Graduate Programs ..... 193
Digital Media ..... 203
Engineering ..... 245
Engineering Technology ..... 255
Information Systems and Technology ..... 318
Technology Management ..... 443
Technology Management Graduate Programs ..... 447
Transportation Technologies ..... 457

## College of Engineering and Technology

Architecture and Engineering Design ..... 86
Aviation Science ..... 113
Computer Science ..... 157
Computer Science Graduate Programs ..... 171
Construction Technologies ..... 173
Culinary Arts Institute ..... 192
Cybersecurity Graduate Programs ..... 193
Digital Media ..... 203
Engineering ..... 245
Engineering Technology ..... 255
Information Systems and Technology ..... 318
Technology Management ..... 443
Technology Management Graduate Programs ..... 447
Transportation Technologies ..... 457

## College of Health and Public Service

Allied Health ..... 80
Criminal Justice/Law Enforcement ..... 181
Emergency Services ..... 238
Nursing ..... 383
Nursing Graduate Programs ..... 386
Public Health ..... 409
Public Service Graduate Programs ..... 418

## College of Humanities and Social Sciences

Behavioral Science....119
Clinical Mental Health Counseling Graduate Programs....151
Communication....152
English and Literature....260
History and Political Science....296
Integrated Studies....340
Languages and Cultures....344
Master of Arts in Marriage and Family Therapy Graduate Programs....363
Philosophy and Humanities....393
Social Work Graduate Programs....424

## College of Science

Biology....134
Chemistry....146
Earth Science....214
Exercise Science and Outdoor Recreation....279
Mathematics....364
Mathematics Graduate Programs....372
Physics....405

## School of Education

Education Graduate Programs....223
Elementary Education....234
Secondary and Special Education....419

## School of the Arts

Art and Design....98
Dance....195
Music....374
Theatrical Arts for Stage and Screen....448

## University College

Developmental Mathematics....202
English Language Learning....259
Literacies and Composition....356
Student Leadership and Success Studies....437

## Woodbury School of Business

Accounting....74
Accounting Graduate Programs....78
Air Force and Army ROTC....79
Business Graduate Programs....143
Finance and Economics....287
Financial Planning and Analytics Graduate Programs....295
Marketing....357
Organizational Leadership....387
Strategic Management and Operations....426

# Departments and Degrees


**A**

Air Force and Army ROTC....79

Aviation Science....113

- Aerospace Technology Management, B.S....
- Aviation Management, B.S....
- Aviation Science, A.A.S....
- Aviation Science, A.S....
- Aviation Science, Certificate of Proficiency....
- Professional Pilot, B.S....

Allied Health....80

- Dental Hygiene, A.A.S....
- Dental Hygiene, B.S....
- Healthcare Services, A.A.S....
- Respiratory Therapy, A.A.S....
- Respiratory Therapy, B.S....

Accounting....74

- Accounting, A.S....
- Accounting, B.S....
- Accounting, Certificate of Completion....
- Accounting, Minor....

Accounting Graduate Programs....78

- Master of Accountancy, M.Acc....

Architecture and Engineering Design....86

- Architectural Design Technology, Certificate of Proficiency....
- Architecture, B.Arch....
- Civil Design and Surveying Technology, Certificate of Proficiency....
- Engineering Design Technology, A.A.S....
- Engineering Design Technology, A.S....
- Mechanical Design Technology, Certificate of Proficiency....
- Structural Design Technology, Certificate of Proficiency....
- Surveying Technology, A.A.S....
- Surveying Technology, Certificate of Proficiency....
- Surveying and Mapping, A.S....
- Surveying and Mapping, B.S....

Art and Design....98

- Art Education, B.S....
- Art History, B.A....
- Art History, Minor....
- Art and Design - Design/Illustration Emphasis, A.A.S....
- Art and Design - Graphic Design Emphasis, A.A.S....
- Art and Design - Graphic Design Emphasis, B.F.A....
- Art and Design - Illustration Emphasis, B.F.A....
- Art and Design - Painting and Drawing Emphasis, B.F.A....
- Art and Design - Photography Emphasis, A.A.S....
- Art and Design - Photography Emphasis, B.F.A....
- Art and Design - Sculpture and Ceramics Emphasis, B.F.A....
- Art and Design, A.A....
- Art and Design, A.S....
- Art and Design, B.A....
- Art and Design, B.S....
- Art and Design, Certificate of Completion....
- Art and Design, Certificate of Proficiency....

**B**

Business Graduate Programs....143

- Master of Business Administration - Finance Emphasis, M.B.A..
- Master of Business Administration - Management Emphasis, M.B.A....
- Master of Business Administration - Marketing Emphasis, M.B.A....
- Master of Business Administration - Technology Management Emphasis, M.B.A....

Behavioral Science....119

- Advanced Substance Use Disorder Counseling, Certificate of Proficiency....
- Anthropology, B.A....
- Anthropology, B.S....
- Anthropology, Minor....
- Behavioral Science, A.A....
- Behavioral Science, A.S....
- Family Science, B.A....
- Family Science, B.S....
- Family Science, Minor....
- Interdisciplinary Gerontology, Certificate of Proficiency....
- Psychology, B.A....
- Psychology, B.S....
- Psychology, Minor....
- Social Work, B.S.W....
- Sociology, B.A....
- Sociology, B.S....
- Sociology, Minor....
- Substance Use Disorder Counseling, Certificate of Proficiency...

Biology....134

- Bioinformatics, B.S....
- Biology Education, B.S....
- Biology, A.A....
- Biology, A.S....
- Biology, B.S....
- Biology, Minor....
- Biotechnology, B.S....
- Botany, B.S....
- Microbiology, B.S....

**C**


Computer Science Graduate Programs..... 171
Computer Science, M.C.S.....
Culinary Arts Institute..... 192
Culinary Arts, A.A.S.....
Communication..... 152
Applied Communication, B.A.....
Applied Communication, B.S.....
Applied Communication, Minor.....
Humanities and Social Sciences, A.A.....
Humanities and Social Sciences, A.S.....
Public Relations and Strategic Communication, B.A.....
Public Relations and Strategic Communication, B.S.....
Public Relations and Strategic Communication, Minor.....
Chemistry..... 146
Chemistry - Biochemistry Emphasis, B.S.....
Chemistry - Professional Chemistry Emphasis, B.S.....
Chemistry Education, B.S.....
Chemistry, Minor.....
Construction Technologies..... 173
Building Inspection Technology, A.A.S.....
Building Inspection Technology, Certificate of Completion.....
Cabinetry and Architectural Woodwork, A.A.S.....
Cabinetry and Architectural Woodwork, A.S.....
Cabinetry and Architectural Woodwork, Certificate of Completion.....
Cabinetry and Architectural Woodwork, Certificate of Proficiency.....
Cabinetry and Architectural Woodwork, Diploma.....
Construction Management, A.A.S.....
Construction Management, B.S.....
Construction Management, Certificate of Completion.....
Construction Management, Certificate of Proficiency.....
Facilities Management, A.A.S.....
Woodworking Education, Certificate of Proficiency.....
Cybersecurity Graduate Programs..... 193
Cybersecurity, Graduate Certificate.....
Cybersecurity, M.S.....
Clinical Mental Health Counseling Graduate Programs..... 151
Clinical Mental Health Counseling, M.S.....
Criminal Justice/Law Enforcement..... 181
Criminal Justice, A.A.....
Criminal Justice, A.S.....
Criminal Justice, B.S.....
Criminal Justice, Certificate of Proficiency.....
Criminal Justice, Minor.....
Forensic Science - Forensic Investigation Emphasis, B.S.....
Forensic Science - Forensic Laboratory Emphasis, B.S.....
Forensic Science, Minor.....
Intelligence Studies, A.S.....
Law Enforcement, Certificate of Proficiency.....
National Security Studies, B.A.....
National Security Studies, B.S.....
National Security Studies, Certificate of Proficiency.....
National Security Studies, Minor.....
Computer Science..... 157
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Master of Education - Educational Technology Emphasis, M.Ed.
Master of Education - Elementary Mathematics Emphasis, M.Ed.....
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Master of Education - English as a Second Language Emphasis, M.Ed.....
Master of Education - Gifted and Talented Education Emphasis, M.Ed.....
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# Accounting

## Accounting

The Accounting department is in the Woodbury School of Business. To find the most up-to-date information from the Accounting department, visit their website.

Accounting department

**DEPARTMENT CHAIR**

**SMITH, Kevin** *Professor*

**FACULTY**

**BAILEY, James** *Professor*
**BALL, Kamilyn** *Professional in Residence*
**BARTHOLOMEW, Aaron** *Associate Professor*
**CIESLEWICZ, Joshua** *Associate Professor*
**HELQUIST, Joel** *Associate Professor*
**HOWARD, Carolyn** *Associate Professor*
**JASPERSON, Jill O.** *Associate Professor*
**JEPPSON, Nathan** *Assistant Professor*
**MYERS, Noah** *Assistant Professor*
**OLSEN, Kari Joseph** *Associate Professor*
**ORTEGA, Xiaoli** *Associate Professor*
**PAUL, Ordyna** *Professional In Residence*
**SCHMIDT, Bunny** *Lecturer*
**SMITH, Kevin** *Professor*
**SMITH, Sheldon R.** *Professor*
**STUBBS, Kyle** *Assistant Professor*
**VAN WAGONER, Marty** *Professional in Residence*
**WAITE, David** *Lecturer*
**WILLIAMS, Jeffrey** *Assistant Professor*
**WITESMAN, J. David P.** *Assistant Professor*

# Course Descriptions

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# Degrees & Programs

## Accounting, A.S.

### *Requirements*

The Associate in Science degree provides a broad business foundation and prepares students for upper-division studies in accounting. Students receive a broad range of theoretical and applied knowledge in the areas of accounting, economics, business law, and quantitative applications.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) | |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| or | MATH 1090 | College Algebra for Business (recommended for Business majors) | 3 |
| or | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution[1] | | 3 |
| | Fine Arts Distribution | | 3 |
| | ECON 2010 | Principles of Economics I (Fulfills the Social/Behavioral Science Distribution) | 3 |
| Discipline Core Requirements: | | | 25 Credits |
| Complete one of the following introductory accounting sequences: | | | 6 |
| | ACC 2110 | Principles of Accounting I (3) | |
| and | ACC 2120 | Principles of Accounting II (Grade of B- or higher required) (3) | |
| or | ACC 2010 | Financial Accounting | |
| and | ACC 2020 | Managerial Accounting (Grade of B- or higher required) | |
| | ACC 2125 | Introduction to the Accounting Profession | 1 |
| | ACC 2500 | Data Analytics in Accounting | 3 |
| | ACC 2600 | Business Law and Ethics | 3 |
| or | LEGL 3000 | Business Law (3) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | Complete 3 credits from the following: | | 3 |
| | MGMT 2240 | Business Calculus (3) | |
| | ACC 2250 | Accounting for Entrepreneurs (3) | |
| | MKTG 2390 | Professional Business Presentations (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall GPA of 2.0 or above with 2.5 GPA or above in Business courses. No grade below "C-" in Business courses.
3. Residency hours: Minimum of 20 credit hours through course attendance at UVU with at least 12 credits of Woodbury School of Business courses.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

| Footnote |
|---|
| [1]HUM 1010 recommended |

## Accounting, Certificate of Completion

### *Requirements*

A certificate of completion introduces students to the knowledge and skills need to perform in a basic business environment. It includes a knowledge of basic business math, accounting, and accounting software. Skills include communication and presentation skills. This is primarily an applied certificate with a brief conceptual background in business.

**Total Program Credits: 30**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 24 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (3) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher. | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | ACC 2120 | Principles of Accounting II | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| or | ACC 2500 | Data Analytics in Accounting (3) | |
| | ECON 2010 | Principles of Economics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| Elective Requirements: | | | 6 Credits |
| Complete at least 6 credits from the courses below: | | | 6 |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research (3) | |
| | ECON 2020 | Principles of Economics II (3) | |
| | MGMT 2240 | Business Calculus (3) | |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I (3) | |

**Graduation Requirements:**

1. Minimum of 30 credits required for a Certificate.
2. Must earn grade of B- or higher in ACC 2110 and ACC 2120.
3. Overall GPA of 2.0 required for graduation with no grade lower than a "C-" in Woodbury School of Business classes.
4. Residency hours -- minimum of 16 credit hours through course attendance at UVU.

## Accounting, Minor

### *Requirements*

A Minor in Accounting will prepare students in any major to speak the language of business. Students will receive extensive coverage of both financial and managerial accounting, with the opportunity to pursue other accounting areas of study including: financial accounting, audit, information systems, or tax.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| Complete one of the following introductory accounting sequences | | | 6 |
| | ACC 2110 | Principles of Accounting I (3) | |
| and | ACC 2120 | Principles of Accounting II (3) | |
| or | ACC 2010 | Financial Accounting (3) | |
| and | ACC 2020 | Managerial Accounting (3) | |
| Complete the following courses: | | | 6 |
| | ACC 3010 | Intermediate Accounting I (3) | |
| or | ACC 3030 | Intermediate Accounting for Non-Accounting Majors (3)[1, 2] | |
| | ACC 3300 | Cost Management (3) | |
| Elective Requirements: | | | 6 Credits |
| Choose 6 credits from the following: | | | 6 |
| | ACC 3020 | Intermediate Accounting II (3)[2] | |
| | ACC 312G | International Internal Auditing (3) | |
| | ACC 3400 | Individual Income Tax (3) | |
| | ACC 3510 | Accounting Information Systems(3)[2] | |
| | ACC 4030 | Governmental and Not For Profit Accounting (3) | |
| | ACC 4310 | Advanced Management Accounting (3) | |
| | ACC 4400 | Taxation of Business Entities (3) | |

**Graduation Requirements:**

1. Overall grade point average of 2.5 GPA in all Woodbury School of Business courses and no grade lower than a C- in business courses.
2. Completion of GE and specified departmental requirements.

NOTES: Students are responsible for completing all prerequisite courses.

| Footnote |
|---|
| [1] Only take ACC 3010 if you intend to take ACC 3020 as one of your electives. |
| [2] Course may require completion of prerequisite courses not included in the minor. |

## Accounting, B.S.

### *Requirements*

This degree offers a balanced theoretical and applied approach to study a broad range of business and accounting disciplines. This includes business topics of marketing, finance, law, operations, and strategy. Following a study of the primary accounting disciplines of financial, managerial, audit, information systems, and tax, students can engage in a more specialized study of internal audit, management accounting, tax, or public accounting/graduate school. Students also develop important business skills in communication, critical thinking, team building, and computer applications.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements | | | |
| To be considered matriculated in the Accounting degree, a student must complete the following courses with at least a C-grade: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| and | ACC 2120 | Principles of Accounting II | 3 |
| or | ACC 2010 | Financial Accounting (3) | |
| and | ACC 2020 | Managerial Accounting (3) | |
| | ACC 2500 | Data Analytics in Accounting (3) | 3 |
| or | IM 2600 | Spreadsheet Applications (3) | |
| | ECON 2010 | Principles of Economics I | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| or | MATH 1090 | College Algebra for Business (3) | 3 |
| or | An Advanced Placement (AP) Calculus AB or BC Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | |
| or | PES 1097 | Fitness for Life (2) | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | ECON 2010 | Principles of Economics I (Fulfills the Social/Behavioral Science Distribution) | 3 |
| Discipline Core Requirements: | | | 71 Credits |
| Business Foundation Courses: (required for matriculation) | | | |
| Complete one of the following sequences (Satisfies Business Core accounting requirement):[2] | | | 6 |
| | ACC 2110 | Principles of Accounting I (3) | |
| and | ACC 2120 | Principles of Accounting II (3) | |
| or | ACC 2010 | Financial Accounting (3) | |
| and | ACC 2020 | Managerial Accounting (3) | |
| | ACC 2500 | Data Analytics in Accounting[2] | 3 |
| or | IM 2600 | Spreadsheet Applications (3) | |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MKTG 220G | Written Business Communication WE[2] | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance[1] | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management[1] | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation | 3 |
| | MGMT 495R | Executive Lecture Series | 1 |
| or | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| | MKTG 3600 | Principles of Marketing | 3 |

| | | | |
|---|---|---|---|
| Accounting Core Courses: | | | |
| | ACC 2125 | Introduction to the Accounting Profession | 1 |
| | ACC 2600 | Business Law and Ethics | 3 |
| or | LEGL 3000 | Business Law (3) | |
| | ACC 3010 | Intermediate Accounting I | 3 |
| | ACC 3020 | Intermediate Accounting II | 3 |
| | ACC 312G | International Internal Auditing | 3 |
| | ACC 3300 | Cost Management | 3 |
| | ACC 3400 | Individual Income Tax | 3 |
| | ACC 3510 | Accounting Information Systems | 3 |
| Accounting Elective Requirements | | | |
| Complete two of the following advanced accounting courses: | | | 6 |
| | ACC 4030 | Governmental and Not-For-Profit Accounting (3) | |
| | ACC 4110 | Auditing (3) | |
| | ACC 4310 | Advanced Management Accounting (3) | |
| | ACC 5020 | Advanced Financial Accounting (3) | |
| Complete one of the following specialized accounting courses: | | | 3 |
| | ACC 4050 | Financial Statement Analysis (3) | |
| | ACC 4400 | Taxation of Business Entities (3) | |
| | ACC 470R | Current Topics in Accounting (3) | |
| | ACC 481R | Internship (3) (Subject to approval by department chair) (Repeat for up to 3 credits) | |
| | ACC 5140 | Fraud Examination (3) | |
| Elective Requirements: | | | 14 Credits |
| | Complete 14 credits of any courses 1000-level or higher | | 14 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits; a minimum of 40 credits must be upper division.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| 1- Course cannot be taken until student is matriculated |
| 2-Must be completed with a grade of B- or higher. |

# Accounting Graduate Programs

## Master of Accountancy Graduate Program

The Master of Accountancy Graduate Program is in the Woodbury School of Business. To find the most up-to-date information on Master of Accountancy Graduate Program, visit their website.

Master of Accountancy Graduate Program

## Course Descriptions

Accounting..... 468
Business Management..... 704

## Degrees & Programs

### Master of Accountancy, M.Acc

#### *Requirements*

The Master of Accountancy (MAcc) degree prepares students for professional positions in accounting with the potential for advancement throughout their career. Building upon an undergraduate education in accounting and business it qualifies students for entry-level positions in public accounting, industry, government, and not-for-profit organizations. The MAcc qualifies students to sit for the Uniform CPA Examinations in the State of Utah which is a necessary step in becoming a Certified Public Accountant (CPA). It also provides a base from which students may pursue related certifications such as Certified Internal Auditor (CIA), Certified Management Accountant (CMA), and Certified Fraud Examiner (CFE). Combined with appropriate experience the MAcc can lead to a wide variety of significant leadership positions in accounting and business including Chief Financial Officer (CFO) and Chief Executive Officer (CEO).

**Total Program Credits: 30**

| | | | |
|---|---|---|---|
| **Matriculation Requirements:** | | | |
| 1. Admission to Woodbury School of Business Master of Accountancy program. | | | |
| Discipline Core Requirements: | | | 21 Credits |
| | ACC 6350 | Management Control Systems | 3 |
| | ACC 6030 | Financial Accounting and Reporting | 3 |
| | ACC 6510 | Financial Auditing | 3 |
| | ACC 6560 | Accounting Theory and Research | 3 |
| | ACC 6060 | Professionalism and Leadership | 3 |
| | ACC 6130 | Case Studies in Auditing | 3 |
| | ACC 6420 | Principles of Corporate Tax | 3 |
| Elective Requirements: | | | 9 Credits |
| Select 9 semester credits from the following courses: | | | 9 |
| | ACC 6020 | Advanced Financial Accounting Applications (3) | |
| | ACC 6140 | Fraud Examination and Forensic Accounting (3) | |
| | ACC 6150 | Information Systems Auditing (3) | |
| | ACC 6410 | Tax Research and Procedure (3) | |
| | ACC 6440 | Partnership Tax (3) | |
| | ACC 6460 | Estate and Gift Tax (3) | |
| | ACC 6430 | Advanced Corporate Tax (3) | |
| | ACC 6600 | Business Regulation (3) | |
| | ACC 6610 | Financial Statement Research and Analysis (3) | |
| | ACC 679R | Special Topics in Accounting (3) | |
| | Other master's level course as approved by the program | | |

**Graduation Requirements:**

1. Completion of a minimum of 30 semester credits.
2. Overall grade point average of 3.0 or above in Master of Accountancy courses.
3. A grade of C or higher required for all courses used to satisfy graduation requirement.
4. If a similar course was taken at the undergraduate level, the graduate course cannot be used to meet the graduation requirement.
5. Transfer credit - a minimum of 20 credits must be completed at Utah Valley University.

# Air Force and Army ROTC

## Air Force ROTC

The Air Force ROTC program is offerred through a collaboration between UVU and BYU. To find the most up-to-date information from the Air Force ROTC program, visit their website.

ROTC

## Course Descriptions

Aerospace Studies.....472
Military Science.....710

# Allied Health

## Allied Health

The Allied Health department is in the College of Health and Public Service. To find the most up-to-date information from the Allied Health department, visit their website.

Allied Health department

**DEPARTMENT CHAIR**

**KNIGHT, Dianne** *Associate Professor*

**FACULTY**

**ESKELSON, Max** *Assistant Professor*
**KNIGHT, Dianne** *Associate Professor*
**PRESTON, Karen** *Associate Professor*
**ROSE, Kelly** *Assistant Professor*
**SWAN, Nicole** *Assistant Professor*
**WILSON, Sandra** *Associate Professor*
**YOUNG, Kathleen M.** *Assistant Professor*

# Course Descriptions

Dental Hygiene..... 564
Respiratory Therapy..... 765

# Degrees & Programs

## Dental Hygiene, A.A.S.

### *Requirements*

This is a competitive admission process and has the following pre-requisites that must be taken, and completed, before you are able to apply and begin the first semester of the program. The pre-requisite courses are: MATH 1050, ENGL 1010, CHEM 1110, ZOOL 2320, ZOOL 2325, ZOOL 2420, ZOOL 2425. Please note that some of the above pre-requisites for application to our AAS program have pre-requisites of their own, as well. Please contact the department offering our pre-requisite courses for more information.

**Total Program Credits: 84**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete ENGL 1010 or ENGH 1005, BIOL 1610, CHEM 1110, ZOOL 2320/ZOOL 2325 and ZOOL 2420/ZOOL 2425 with a minimum of a "C" grade or higher<br>2. Complete the HSRT - Health Science Reasoning Test.<br>3. Complete 20 hours of clinical/dental office observation.<br>4. Submit two letters of reference by either a current supervisor/ employer or academic instructor.<br>5. Submit a 2 page essay on topic provided by department.<br>6. Submit the Dental Hygiene Application Fee by February 1.<br>7. Complete interview process and be formally accepted into program. | | | |
| General Education Requirements: | | | 31 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Distribution Courses | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences | 4 |
| | COMM 1020 | Public Speaking | 2 |
| | COMM 1025 | Public Speaking Lab | 1 |
| | PSY 1010 | General Psychology | 3 |
| | SOC 1010 | Introduction to Sociology | 3 |
| | MICR 2060 | Microbiology for Health Professions | 3 |
| | MICR 2065 | Microbiology for Health Professions Laboratory | 1 |
| | ZOOL 2320 | Human Anatomy | 3 |
| | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| Discipline Core Requirements: | | | 53 Credits |
| Complete the following: | | | |
| | DENT 1010 | Dental Hygiene I | 3 |
| | DENT 1015 | Dental Hygiene I Preclinical lab | 2 |
| | DENT 1020 | Oral Anatomy and Physiology | 4 |
| | DENT 1030 | Dental Materials | 2 |
| | DENT 1040 | Dental Hygiene II | 3 |
| | DENT 1045 | Dental Hygiene II Clinical | 3 |
| | DENT 1050 | Clinical Dental Radiography | 1 |
| | DENT 1055 | Clinical Dental Radiography Lab | 1 |
| | DENT 1060 | General and Oral Pathology | 2 |
| | DENT 1070 | Medical Emergencies in the Dental Office | 2 |
| | DENT 2020 | Dental Pharmacology | 3 |
| | DENT 206G | Oral Public Health | 3 |
| | DENT 3010 | Dental Anesthesiology | 3 |
| | DENT 3015 | Dental Hygiene III Clinical | 4 |
| | DENT 3030 | Periodontology | 3 |
| | DENT 3040 | Dental Hygiene IV | 2 |
| | DENT 3045 | Dental Hygiene IV Clinical | 4 |
| | DENT 3050 | Dental Hygiene Seminar | 1 |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | ZOOL 2420 | Human Physiology | 3 |
| | ZOOL 2425 | Human Physiology Laboratory | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 84 semester credits.
2. Overall grade point average of 2.5 or above. All courses must have "C-" or higher.

3. Residency hours: minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Healthcare Services, A.A.S.

### *Requirements*

The Associate in Applied Science in Healthcare Services is designed for individuals working in a health-related area who have obtained, or are working toward a technical certification, license, etc. Many of these students will be looking for a pathway to allow them better upward mobility in their professions or education to help them become a certified health professional. Students initially finish a program at Mountainland Technical College to develop a portfolio that presents licenses and work-related certifications as well as provides a rationale for receiving technical, experiential credit. Students matriculating into UVU's AAS program will add to their portfolio core courses that provide fundamental knowledge of health professions, human anatomy and physiology, as well as elective courses; students enhance their technical knowledge and skills in one or more health-related areas (e.g. surgical technician, medical assistant, and medical billing and coding).

**Total Program Credits: 64**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Completion of an approved MTECH articulated certificate | | | |
| General Education Requirements: | | | 17 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| Complete one of the following: | | | 3 |
| | MAT 1010 | Intermediate Algebra (4) | |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Distribution Courses | | | |
| | Any Humanities or Fine Arts Distribution | | 3 |
| | Any Social Science Distribution | | 3 |
| | BIOL 1010 | General Biology | 3 |
| or | BIOL 1610 | College Biology I (4) | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Discipline Core Requirements: | | | 35 Credits |
| | HLTH 2200 | Introduction to Health Professions | 2 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| | 30 credit hours of R473 articulation agreement | | 30 |
| Elective Requirements: | | | 12 Credits |
| | HLTH 2400 | Concepts of Stress Management (3) | |
| | HLTH 2600 | Drugs Behavior and Society (3) | |
| | BIOL 1610 | College Biology I (4) | |
| | BIOL 1615 | College Biology I Laboratory (1) | |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences (4) | |
| | DENT 1000 | Introduction to Dental Professions (1) | |
| | ESEC 1013 | Emergency Medical Response (3) | |
| | ESEC 1140 | Emergency Medical Technician Basic (9) | |
| | IM 1010 | Basic Computer Applications (3) | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | NUTR 1020 | Foundations of Human Nutrition (3) | |
| | ACC 2010 | Financial Accounting (3) | |
| | ACC 2020 | Managerial Accounting (3) | |
| | RESP 1540 | Survey of Respiratory Therapy (1) | |
| | MKTG 220G | Written Business Communication WE (3) | |
| | PSY 1010 | General Psychology (3) | |
| | PSY 1100 | Human Development Life Span (3) | |
| | SOC 1010 | Introduction to Sociology (3) | |
| | ZOOL 2320 | Human Anatomy (3) | |
| | ZOOL 2325 | Human Anatomy Laboratory (1) | |
| | ZOOL 2420 | Human Physiology (3) | |
| | ZOOL 2425 | Human Physiology Laboratory (1) | |

**Graduation Requirements:**

1. Complete a minimum of 64 semester credits.
2. Overall grade point average of 2.0 (C) or above. All Health Service core electives must be completed with a C- or higher.
3. Residency hours - minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. Completion of an approved and articulated MTECH certificate

## Respiratory Therapy, A.A.S.

### *Requirements*

An Associate of Applied Science in Respiratory Therapy consists of comprehensive classroom and clinical curricula that prepares students for matriculation into the BS Respiratory Therapy program and credentialing exam offered by the National Board of Respiratory Care (NBRC). The NBRC is the credentialing arm of the American Association of Respiratory Care. Successful completion of the curriculum and the credentialing exam certifies students as a Registered Respiratory Therapist (RRT) and enables them to apply for licensure in their state of residence. Employment opportunities with health care providers range from home health and hospice to neonatal, pediatric, and adult intensive care units in UVU's service area and across the country.

**Total Program Credits: 72**

| Matriculation Requirements: |
|---|
| 1. Complete the following coursework:<br>• College English<br>• Quantitative Literacy<br>• Personal Health and Wellness<br>• Microbiology with lab (4 credits)<br>• College Biology with lab (5 credits)<br>• Chemistry (4 credits) |

- Human Anatomy with lab (4 credits)
- Human Physiology with lab (4 credits)
- Physics
- Survey of Respiratory Therapy: Note: Must pass all general education and pre-requisite courses with a minimum of a “C” grade or higher

2. Complete the Test of Academic Skills (TEAS)

3. Submit Application Fee and Application by the third Friday in September

4. Personal Interview: All candidates will be screened and those deemed to meet or exceed basic application requirements will be invited for an interview. This interview does not guarantee acceptance into the program as students will compete with all other applicants for matriculation into a cohort. Applicants must bring a photo ID to the interview.

5. Other Determining Factors

- Prior healthcare experience (preferred, but not required)
- Shadowing opportunity (recommended)
- Discipline for academic performance
- Successful completion of a background check
- Drug Screen

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 27 Credits |
| Complete one of the following: | | | 3 |
| | ENGL 1010 | Introduction to Academic Writing (3) | |
| | ENGL 101H | Introduction to Writing (3.0) | |
| | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete One of the following | | | 2 |
| | HLTH 1100 | Personal Health and Wellness (2.0) (Highly recommended) | |
| | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | PSY 1010 | General Psychology | 3 |
| or | PSY 1100 | Human Development Life Span (3.0) | |
| | BIOL 1610 | College Biology I (4.0) | 4 |
| and | BIOL 1615 | College Biology I Laboratory | 1 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences | 4 |
| or | CHEM 1210 | Principles of Chemistry I (4.0) | |
| | MICR 2060 | Microbiology for Health Professions | 3 |
| and | MICR 2065 | Microbiology for Health Professions Laboratory | 1 |
| Discipline Core Requirements: | | | 45 Credits |
| Complete one of the following: | | | 4 |
| | ZOOL 2320 | Human Anatomy (3.0) | |
| and | ZOOL 2325 | Human Anatomy Laboratory (1.0) | |
| | ZOOL 232H | Human Anatomy (3.0) | |
| and | ZOOL 232L | Human Anatomy Laboratory (1.0) | |
| Complete the following: | | | |
| | ZOOL 2420 | Human Physiology | 3 |
| and | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | PHYS 1010 | Elementary Physics | 3 |
| | RESP 1540 | Survey of Respiratory Therapy | 1 |
| Must be accepted into Program to take these Courses | | | |
| | RESP 2145 | Fundamentals of Respiratory Care Lab | 3 |
| | RESP 2165 | Mechanical Ventilation Lab | 2 |
| | RESP 2210 | Cardiopulmonary and Renal Anatomy and Physiology I | 3 |
| | RESP 2230 | Cardiopulmonary Pathophysiology I | 2 |
| | RESP 2250 | Basic Patient Assessment | 2 |
| | RESP 2270 | Application of Cardiopulmonary Diagnostics | 3 |
| | RESP 2300 | Fundamentals of Respiratory Care | 3 |
| | RESP 2320 | Mechanical Ventilation I | 3 |
| | RESP 2330 | Entry Level Respiratory Therapy Review | 1 |
| | RESP 2420 | Critical Thinking in Respiratory Care | 2 |
| | RESP 2520 | Principles of Pharmacology | 2 |
| | RESP 2705 | Clinical Practice I | 3 |
| | RESP 2715 | Specialty Clinical Experiences | 1 |
| | RESP 2725 | Clinical Practice II | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 72 semester credits
2. Must earn a C or higher in ALL Respiratory Therapy discipline courses, general education courses, and pre-requisite courses.
3. Residency hours: minimum of 20 credit hours through course attendance at UVU.
4. Completion of specified departmental requirements.

## Dental Hygiene, B.S.

### *Requirements*

This is a Bachelor Completion program, meaning you must first have a two year degree in dental hygiene to apply and be accepted. Please refer to our website at www.uvu.edu/dental and/or call us at 801-863-7536 or 7592 for specific information about the application process. The BS degree builds on the AAS degree in dental hygiene. The BS degree consists of 120 credits and builds on the credits already earned in the AAS program. This degree can be for those who want to: increase their knowledge in their field, move onto an advanced degree, become a hygiene faculty and teach, work for private companies, research work for the government, become a mid-level provider or want to improve their critical thinking and problem solving skills. This degree is aimed at the working professional, as the Dental Hygiene

courses are offered on-line. There is not a clinical component. There are also no special fees involved. The first four (4) semesters and AAS pre-requisites are listed. You must have completed your AAS degree before you can matriculate into the BS program. Because applicants will present with a variety of previous courses already taken, the following plan is only meant to be a guide. It is based on a student completing the UVU AAS Dental Hygiene Degree. Once you have applied, and are in the BS program, you must speak with the Department of Dental Hygiene advisor to help you customize a plan that works for you.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Complete ENGL 1010 or ENGH 1005, BIOL 1610, CHEM 1110, ZOOL 2320/ZOOL 2325 and ZOOL 2420/ZOOL 2425 with a minimum of a "C" grade or higher<br>2. Complete the HSRT - Health Science Reasoning Test.<br>3. Complete 20 hours of clinical/dental office observation.<br>4. Submit two letters of reference by either a current supervisor/ employer or academic instructor.<br>5. Submit a 2 page essay on topic provided by department.<br>6. Submit the Dental Hygiene Application Fee and Application by February 1.<br>7. Complete interview process and be formally accepted into program. | | | |
| General Education Requirements: | | | 37 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values (3) | |
| or | PHIL 205G | Ethics and Values (strongly suggested) | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences (fulfills Physical Science) | 4 |
| | ZOOL 2320 | Human Anatomy (fulfills additional Biology or Physical Science) | 3 |
| | Fine Arts | | 3 |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab | 1 |
| | SOC 1010 | Introduction to Sociology (fulfills Social/Behavioral Science) | 3 |
| Discipline Core Requirements: | | | 74 Credits |
| Complete the following: | | | |
| | MICR 2060 | Microbiology for Health Professions | 3 |
| | MICR 2065 | Microbiology for Health Professions Laboratory | 1 |
| | PSY 1010 | General Psychology | 3 |
| | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| | ZOOL 2420 | Human Physiology | 3 |
| and | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | DENT 1010 | Dental Hygiene I | 3 |
| | DENT 1015 | Dental Hygiene I Preclinical lab | 2 |
| | DENT 1020 | Oral Anatomy and Physiology | 4 |
| | DENT 1030 | Dental Materials | 2 |
| | DENT 1040 | Dental Hygiene II | 3 |
| | DENT 1045 | Dental Hygiene II Clinical | 3 |
| | DENT 1050 | Clinical Dental Radiography | 1 |
| | DENT 1055 | Clinical Dental Radiography Lab | 1 |
| | DENT 1060 | General and Oral Pathology | 2 |
| | DENT 1070 | Medical Emergencies in the Dental Office | 2 |
| | DENT 2020 | Dental Pharmacology | 3 |
| | DENT 206G | Oral Public Health | 3 |
| | DENT 3010 | Dental Anesthesiology | 3 |
| | DENT 3015 | Dental Hygiene III Clinical | 4 |
| | DENT 3030 | Periodontology | 3 |
| | DENT 3040 | Dental Hygiene IV | 2 |
| | DENT 3045 | Dental Hygiene IV Clinical | 4 |
| | DENT 3050 | Dental Hygiene Seminar | 1 |
| | DENT 3060 | Advanced Dental Hygiene Public Health | 3 |
| | DENT 3200 | Teaching the Dental Hygiene Patient WE | 3 |
| | DENT 4200 | Teaching the Dental Hygiene Student | 3 |
| | DENT 4300 | Dental Hygiene Capstone | 1 |
| | DENT 489R | Undergraduate Research in Dental Hygiene WE | 3 |
| or | HLTH 4600 | Research Methods for Community Health WE (3) | |
| Elective Requirements | | | 9 Credits |
| Take 9 credits from the following electives: | | | 9 |

| | | | |
|---|---|---|---|
| | DENT 3100 | Office and Private Practice for the Dental Hygienist (3) | |
| | DENT 406G | Global Community Health Project (3) | |
| | DENT 481R | Internship in Dental Hygiene (1) | |
| | DENT 490R | Special Topics in Dental Hygiene (3) | |
| | EDSC 3000 | Educational Psychology (3) | |
| | ENTR 3170 | Entrepreneurship and Opportunity Validation (3) | |
| | HLTH 3200 | Principles of Community Health (3) | |
| | HLTH 3260 | Theory-Based Approaches to Modifying Health Behavior (3) | |
| | HLTH 3700 | Grant Writing WE (3) | |
| | HLTH 3800 | Epidemiology (3) | |
| | HLTH 4200 | Health Education Teaching Methods WE (3) | |
| | HLTH 4300 | Community Health Ethics (3) | |
| | HLTH 440G | Health and Diversity (3) | |
| | HLTH 4500 | Healthcare Administration (3) | |
| | MGMT 3000 | Organizational Behavior WE (3) | |
| | MKTG 3600 | Principles of Marketing (3) | |
| | SOC 3430 | Sociology of Education (3) | |
| | Other advisor approved upper division elective | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits semester credits
2. Overall grade point average of 2.5 or above. All courses must have "C-" or higher.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with 10 hours earned during the last 45 hours
4. Completion of GE and specified departmental requirements
5. A minimum of 40 upper division credit hours
6. Successful completion of at least one Global/Intercultural course.

# Respiratory Therapy, B.S.

## *Requirements*

A Bachelor of Science in Respiratory Therapy consists of comprehensive classroom and clinical curricula that prepare students for the credentialing exam offered by the National Board of Respiratory Care (NBRC). The NBRC is the credentialing arm of the American Association of Respiratory Care. Successful completion of the curriculum and the credentialing exam certifies students as a Registered Respiratory Therapist (RRT) and enables them to apply for licensure in their state of residence. Employment opportunities with health care providers range from home health and hospice to neonatal, pediatric, and adult intensive care units in UVU's service area and across the country.

**Total Program Credits: 124**

| Matriculation Requirements: |
|---|
| Unless students already have an RRT Certification and associate's degree, the following matriculation requirements may apply.<br><br>1. Complete the following coursework:<br><br>• College English (6 credits)<br>• Quantitative Literacy<br>• Personal Health and Wellness<br>• Microbiology with lab (4 credits)<br>• College Biology with lab (5 credits)<br>• Chemistry (4 credits)<br>• Human Anatomy with lab (4 credits)<br>• Human Physiology with lab (4 credits)<br>• Physics<br>• Survey of Respiratory Therapy Note: Must pass all general education and pre-requisite courses with a minimum of a "C" grade or higher<br><br>2. Complete the Test of Academic Skills (TEAS)<br><br>3. Submit the Respiratory Therapy Application Fee and Application by the third Friday in September<br><br>4. Personal Interview: All candidates will be screened and those deemed to meet or exceed basic application requirements will be invited for an interview. This interview does not guarantee acceptance into the program as students will compete with all other applicants for matriculation into a cohort. Applicants must bring a photo ID to the interview.<br><br>5. Other Determining Factors<br><br>• Prior healthcare experience (preferred, but not required)<br>• Shadowing opportunity (recommended)<br>• Discipline for academic performance<br>• Successful completion of background check<br>• Drug Screen |

| General Education Requirements: | | | 39 Credits |
|---|---|---|---|
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | ENGL 1010 | Introduction to Academic Writing (3) | |
| or | ENGL 101H | Introduction to Writing (3) | |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 170H | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 270H | US History to 1877 (3) | |
| and | HIST 271H | US History to 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 205G | Ethics and Values | 3 |
| | MICR 2060 | Microbiology for Health Professions | 3 |

| | | | |
|---|---|---|---|
| and | MICR 2065 | Microbiology for Health Professions Laboratory | 1 |
| Complete one of the following: | | | 2 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | PSY 1010 | General Psychology | 3 |
| or | PSY 1100 | Human Development Life Span (3) | |
| | BIOL 1610 | College Biology I | 4 |
| and | BIOL 1615 | College Biology I Laboratory | 1 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences | 4 |
| or | CHEM 1210 | Principles of Chemistry I (4) | |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 85 Credits |
| Complete the following: | | | |
| | ZOOL 2320 | Human Anatomy | 3 |
| | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| | ZOOL 2420 | Human Physiology | 3 |
| | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | PHYS 1010 | Elementary Physics | 3 |
| | RESP 1540 | Survey of Respiratory Therapy | 1 |
| Must be accepted into Respiratory Therapy Program to take the following courses. | | | |
| | RESP 2145 | Fundamentals of Respiratory Care Lab | 3 |
| | RESP 2165 | Mechanical Ventilation Lab | 2 |
| | RESP 2210 | Cardiopulmonary and Renal Anatomy and Physiology I | 3 |
| | RESP 2230 | Cardiopulmonary Pathophysiology I | 2 |
| | RESP 2250 | Basic Patient Assessment | 2 |
| | RESP 2270 | Application of Cardiopulmonary Diagnostics | 3 |
| | RESP 2300 | Fundamentals of Respiratory Care | 3 |
| | RESP 2320 | Mechanical Ventilation I | 3 |
| | RESP 2330 | Entry Level Respiratory Therapy Review | 1 |
| | RESP 2420 | Critical Thinking in Respiratory Care | 2 |
| | RESP 2520 | Principles of Pharmacology | 2 |
| | RESP 2705 | Clinical APractice I | 3 |
| | RESP 2715 | Specialty Clinical Experiences | 1 |
| | RESP 2725 | Clinical Practice II | 3 |
| All lower Division RESP courses must be complete before enrolling in RESP upper division courses. | | | |
| | RESP 3210 | Cardiopulmonary and Renal Anatomy and Physiology II | 2 |
| | RESP 3220 | Cardiopulmonary Pathophysiology II | 2 |
| | RESP 3260 | Neonatal/Pediatric Critical Care | 3 |
| | RESP 3270 | Adult Critical Care | 2 |
| | RESP 3280 | Extended Care Roles for Respiratory Therapists | 2 |
| | RESP 3320 | Mechanical Ventilation II | 4 |
| | RESP 3430 | Principles of Healthcare Education and Disease Management | 3 |
| | RESP 3765 | Clinical Practice III Neonatal/Pediatric Respiratory Therapy Clinical | 2 |
| | RESP 3785 | Extended Roles in Respiratory Therapy Clinical | 2 |
| | NURS 4120 | Rapid Response Concepts Across the Lifespan | 3 |
| or | RESP 4940 | Special Topcs in Respiratory Therapy (2) | |
| | RESP 4610 | Advanced Patient Assessment WE | 3 |
| | RESP 4640 | Respiratory Therapy Capstone | 2 |
| | RESP 4775 | Clinical Practice IV Adult Critical Care | 4 |
| | RESP 4800 | Respiratory Therapy Seminar | 3 |
| | RESP 4890 | Principles of Respiratory Care Research and Management | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 124 semester credits, including at least 40 hours of upper-division credits.
2. Must earn a C or higher in ALL Respiratory Therapy discipline courses, general education courses, and pre-requisite courses.
3. Completion of GE and specified departmental requirements.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU.
5. Successful completion of at least one Global/Intercultural course.

# Architecture and Engineering Design

## Architecture and Engineering Design

The Architecture & Engineering Design department is in the College of Engineering & Technology. To find the most up-to-date information from the Architecture & Engineering Design department, visit their website.

Architecture & Engineering Design department

**DEPARTMENT CHAIR**

**PRICE, Robert D.** *Associate Professor*

**FACULTY**

**ALLRED, Jonathan** *Assistant Professor*
**BARKER, David B.** *Assistant Professor*
**HEAL, Stanley** *Lecturer*
**JOHNSON, Jeffrey** *Lecturer*
**MCMULLIN, Paul** *Assistant Professor*
**MILES, Christopher** *Lecturer*
**PERRY, Danial L.** *Professor*
**PRICE, Robert D.** *Associate Professor*
**REMY, Jennifer** *Lecturer - Placeholder*
**RO, Brandon** *Assistant Professor*
**SELVARAJAN, Sowmya** *Associate Professor*
**SMITH, Sidney D.** *Associate Professor*
**SNIDER, Marika** *Assistant Professor*
**TAYLOR, Darin** *Professor*

## Course Descriptions


Architecture....480
Eng Graphics Design Tech....605
Geographic Information Systems....655
Land Surveying....778


## Degrees & Programs

### Engineering Design Technology, A.A.S.

#### *Requirements*

The Associate in Applied Science Degree is a "job ready" degree and applies the technical and functional elements of several Drafting and Design fields. Students will take courses in the fundamentals of drafting and design, industry standard two-dimensional and three-dimensional software, Architectural Design, Civil Design and Surveying, Electrical Design, Mechanical Design, and Structural Steel Detailing and Design. Students will take other supporting classes and advanced courses in a minimum of two specialty areas of their choosing.

**Total Program Credits: 65**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 19 Credits |
| ENGLISH | | | 3 |
| | ENGL 1010 | Introduction to Academic Writing (3) | |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| or | MKTG 220G | Written Business Communication WE (3) | |
| MATHEMATICS | | | |
| | EGDT 1600 | Technical Math--Algebra | 3 |
| or | MATH 1050 | College Algebra (4) | |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| | EGDT 1610 | Technical Math--Geometry/Trig | 3 |
| or | MATH 1060 | Trigonometry (3) | |
| HUMANITITES/FINE ARTS/FOREIGN LANGUAGE | | | 3 |
| | PHIL 2050 | Ethics and Values (3) | |
| or | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | |
| SOCIAL AND BEHAVIORAL SCIENCE | | | 3 |
| | Any approved Social Science | | |
| BIOLOGY OR PHYSICAL SCIENCE | | | |
| | PHYS 1010 | Elementary Physics | 3 |
| PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT | | | 1 |
| | Any approved Physical Education, Health, Safety or Environment Course | | |
| Discipline Core Requirements: | | | 37 Credits |
| | EGDT 1010 | Electrical Drafting and Design | 3 |
| | EGDT 1020 | 3D Architectural Modeling | 3 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1070 | 3 Dimensional Modeling--Inventor | 3 |
| or | EGDT 1071 | 3 Dimensional Modeling--Solidworks (3) | |
| | EGDT 1100 | Architectural Drafting and Desig | 3 |
| | EGDT 1200 | Mechanical Drafting | 3 |
| | EGDT 1300 | Structural Drafting | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | EGDT 2020 | Descriptive Geometry | 3 |
| | EGDT 2040 | Piping Drafting | 2 |
| | EGDT 2600 | Applied Structures I - Statics | 3 |
| | EGDT 2610 | Applied Structures II - Strength of Materials | 3 |
| | EGDT 285R | AEC Design Lecture Series | 0.5 |
| | EGDT 2860 | Cooperative Correlated Instruction/ SkillsUSA | 0.5 |
| | EGDT 2870 | Portfolio and Career Preparation | 1 |
| Elective Requirements: | | | 9 Credits |
| Choose a minimum of three courses from the following list for a minimum of 9 credits: | | | 9 |
| | EGDT 2010 | Advanced Electrical--CAD (2) | |
| | EGDT 2100 | Architecture Materials and Methods (3) | |
| | EGDT 2200 | Advanced Mechanical (3) | |
| | EGDT 2300 | Advanced Structural--CAD (3) | |
| | EGDT 2400 | Surveying Applications and Field Techniques II (3) | |
| | EGDT 2500 | 3 Dimensional Modeling--Civil 3D (3) | |

| | | | |
|---|---|---|---|
| | EGDT 281R | Internship (1) | |

**Graduation Requirements:**

1. Completion of a minimum of 65 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements, including a portfolio and exit interview.

## Engineering Design Technology, A.S.

### *Requirements*

The Associate in Science Degree is a transferable degree and applies the technical and functional elements of several Drafting and Design fields without taking the advanced course work required in the Associate in Applied Science Degree. Students will take fundamental courses in drafting and design, industry standard two-dimensional and three-dimensional software, Architectural Design, Civil Design and Surveying, Electrical Design, Mechanical Design, and Structural Steel Detailing and Design.

**Total Program Credits: 61**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (MATH 1050 is a prerequisite for many classes in the program core.) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Complete the following: | | | |
| | PHYS 1010 | Elementary Physics | 3 |
| or | PHYS 2010 | College Physics I | 3 |
| | Complete the following distribution courses: | | |
| | Biology (Recommend BIOL 1010) | | 3 |
| | Physical Science (Recommend GEO 1010) | | 3 |
| | Humanities (Recommend ENGL 2100) | | 3 |
| | Fine Arts Distribution (Recommend EGDT 1720) | | 3 |
| | Social/Behavioral Science (Recommend COMM 1050) | | 3 |
| Discipline Core Requirements: | | | 26 Credits |
| Complete a minimum of 26 credits from the following tracks: | | | 26 |
| Architectural Drafting and Design Track. (Students select this track if interested in a career in architectural drafting and design. Students also take these classes as part of the Bachelor of Architecture degree.) | | | |
| | EGDT 1020 | 3D Architectural Modeling (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | |
| | EGDT 1100 | Architectural Drafting and Design (3) | |
| | EGDT 2100 | Architecture Materials and Methods (3) | |
| | EGDT 2600 | Applied Structures I - Statics (3) (MATH 1050 is a prerequisite for this course) | |
| | ARC 1010 | Classical Architecture Workshop (3) | |
| | ARC 2110 | Architecture Studio I (3) | |
| | ARC 2210 | Architecture Studio II (3) | |
| | ARC 2220 | Construction Documents and Specifications (3) | |
| Civil Drafting and Design Track. (Students select this track if interested in a career in civil drafting and design. Students may also apply these courses to several focus areas within the Surveying and Mapping B.S. degree.) | | | |
| | EGDT 1020 | 3D Architectural Modeling (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3) | |
| | EGDT 1060 | MicroStation Infrastructure Design (3) | |
| | EGDT 1300 | Structural Drafting (3) | |
| | EGDT 1400 | Surveying Applications and Field Techniques I (3) | |
| | EGDT 1600 | Technical Math Algebra (3) | |
| and | EGDT 1610 | Technical Math Geometry Trig (3) (MATH 1050 is a prerequisite for MATH 1060 Trigonometry) | |
| or | MATH 1060 | Trigonometry (3) | |
| | EGDT 2040 | Piping Drafting (2) | |
| | EGDT 2500 | 3 Dimensional Modeling--Civil 3D (3) | |
| Mechanical/Electrical Drafting and Design Track. (Students select this track if interested in a career in mechanical drafting and design.) | | | |
| | EGDT 1010 | Electrical Electronic Drafting (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3) | |
| | EGDT 1050 | Introduction to 3D Printing (2) | |

| | | | |
|---|---|---|---|
| | EGDT 1070 | 3 Dimensional Modeling--Inventor (3) | |
| or | EGDT 1071 | 3 Dimensional Modeling--Solidworks (3) | |
| | EGDT 1200 | Mechanical Drafting (3) | |
| | EGDT 2020 | Descriptive Geometry (3) | |
| | EGDT 2200 | Advanced Mechanical (3) | |
| | EGDT 2600 | Applied Structures I - Statics (3) (MATH 1050, or EGDT 1600 and EGDT 1610 are prerequisite for this course) | |
| | EGDT 2610 | Applied Structures II - Strength of Materials (3) (MATH 1050, or EGDT 1600 and EGDT 1610 are prerequisites for this course) | |
| Structural Drafting and Design Track. (Students select this track if interested in a career in structural drafting and design.) | | | |
| | EGDT 1020 | 3D Architectural Modeling (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3) | |
| | EGDT 1100 | Architectural Drafting and Design (3) | |
| | EGDT 1300 | Structural Drafting (3) | |
| | EGDT 1600 | Technical Math Algebra (3) | |
| or | MATH 1060 | Trigonometry (3) | |
| | EGDT 2300 | Advanced Structural CAD (3) (MATH 1050, MATH 1060 or EGDT 1600 and EGDT 1610 are prerequisites for this course) | |
| | EGDT 2310 | Structural Steel Modeling (3) | |
| | EGDT 2600 | Applied Structures I - Statics (3) (MATH 1050, or EGDT 1600 and EGDT 1610 are prerequisites for this course) | |
| | EGDT 2610 | Applied Structures II - Strength of Materials (3) (MATH 1050, or EGDT 1600 and EGDT 1610 are prerequisites for this course) | |
| General Drafting and Design Track. (Students select this track if interested in a career in general techniques and principles.) Complete the following: | | | |
| | EGDT 1020 | 3D Architectural Modeling (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3) | |
| | EGDT 1070 | 3 Dimensional Modeling--Inventor (3) | |
| or | EGDT 1071 | 3 Dimensional Modeling--Solidworks (3) | |
| | EGDT 1300 | Structural Drafting (3) | |
| | EGDT 1400 | Surveying Applications and Field Techniques I (3) | |
| Choose 12 Credits of Electives from the following: (Some courses may have additional prereqs.) | | | |
| | ARC 1010 | Classical Architecture Workshop (3) | |
| | ARC 2110 | Architecture Studio I (3) | |
| | ARC 2210 | Architecture Studio II (3) | |
| | EGDT 1010 | Electrical Electronic Drafting (3) | |
| | EGDT 1050 | Introduction to 3D Printing (2) | |
| | EGDT 1060 | MicroStation Infrastructure Design (3) | |
| | EGDT 1100 | Architectural Drafting and Design (3) | |
| | EGDT 1200 | Mechanical Drafting (3) | |
| | EGDT 1300 | Structural Drafting (3) | |
| | EGDT 1600 | Technical Math Algebra (3) | |
| | EGDT 1610 | Technical Math Geometry Trig (3) | |
| | EGDT 1720 | Architectural Rendering (3) | |
| | EGDT 2020 | Descriptive Geometry (3) | |
| | EGDT 2040 | Piping Drafting (2) | |
| | EGDT 2100 | Architecture Materials and Methods (3) | |
| | EGDT 2200 | Advanced Mechanical (3) | |
| | EGDT 2300 | Advanced Structural--CAD (3) | |
| | EGDT 2310 | Structural Steel Modeling (3) | |
| | EGDT 2400 | Surveying Applications and Field Techniques II (3) | |
| | EGDT 2500 | 3 Dimensional Modeling--Civil 3D (3.0) | |
| | EGDT 2610 | Applied Structures II - Strength of Materials (3) | |
| | EGDT 281R | Internship (1) | |
| | EGDT 285R | AEC Design Lecture Series (0.5) | |
| | EGDT 2860 | Cooperative Correlated Instruction SkillsUSA (0.5) | |

**Graduation Requirements:**

1. Completion of a minimum of 61 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Surveying Technology, A.A.S.

### *Requirements*

The AAS in Surveying Technology meets the educational component for licensure as a Professional Land Surveyor (PLS) in the State of Utah according to the State of Utah Office of Administrative Rules 156-22-302(c)(1). This degree prepares students for immediate employment beyond entry level work in surveying or civil engineering firms. Students will be prepared to perform many of the various field and office tasks related to surveying including site and topographic surveys, boundary investigation and research, map-making, various survey adjustment calculations, writing of legal property descriptions, and other survey technician duties and responsibilities.

**Total Program Credits: 64**

| General Education Requirements: | | | 18 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Complete one of the following: | | | 3 |

| | | | |
|---|---|---|---|
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| Distribution Courses: | | | |
| | Any approved Biology or Physical Science Course | | 3 |
| | Any approved Social/Behavioral/ Political Science course | | 3 |
| | Any approved Physical Education, Health, Safety or Environmental Course | | 3 |
| Discipline Core Requirements: | | | 40 Credits |
| Surveying and Technology Foundation | | | |
| | MATH 1060 | Trigonometry | 3 |
| or | EGDT 1600 | Technical Math--Algebra (3) | |
| and | EGDT 1610 | Technical Math--Geometry/Trig (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | EGDT 2400 | Surveying Applications and Field Techniques II | 3 |
| | GIS 2640 | Fundamentals of Geographic Information Systems | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | SURV 1020 | Introduction to Surveying and Mapping WE | 1 |
| | SURV 1030 | Fundamentals of Geodesy and Control Surveys | 3 |
| | SURV 1220 | Remote Sensing and Photogrammetry | 3 |
| | SURV 1340 | Fundamentals of Boundary Law | 3 |
| | SURV 2010 | Land History of America | 3 |
| | SURV 2100 | Mapping From Field to Finish | 3 |
| | SURV 2310 | Surveying US Public Lands | 3 |
| | SURV 2320 | Property Descriptions and Public Land Records | 3 |
| Elective Requirements: | | | 6 Credits |
| Complete 6 credits from the following: | | | 6 |
| | EGDT 1060 | MicroStation Infrastructure Design (3) | |
| | SURV 2030 | Geodesy (3) | |
| | EGDT 2500 | 3 Dimensional Modeling--Civil 3D (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 64 semester credits required for a AAS degree
2. Overall grade point average 2.5 or above with a minimum of 3.0 GPA in all Surveying Technology courses. No grade lower than a "B" in all Surveying Technology Foundation courses.
3. Residency hours: Minimum of 20 credit hours of Surveying and Mapping courses through course attendance at UVU.

## Surveying and Mapping, A.S.

### *Requirements*

Geomatics is the study of geospatial measurement and representation including such disciplines as land surveying, photogrammetry, remote sensing (satellite imaging and laser scanning), geographic information systems (GIS), cartography, global positioning systems (GPS), and some parts of geography and civil engineering.

Geomatics is a discipline which integrates acquisition, modeling, analysis, and management of geo-spatial reference data. Based on the scientific framework of geodesy, it uses terrestrial, marine, airborne, satellite-based sensors, and measurement systems and technologies to acquire spatial and other data. The Land Surveying component of Geomatics includes investigation, analysis, and application of boundary/ property laws and legal principles pertaining to specific public and private properties and is a regulated profession wherein a license to practice land surveying is issued by each state in an effort to protect the public and private interests in property boundaries.

Students in the Geomatics program may earn an Associate in Science in Geomatics which will help them be immediately employable as entry level surveyor GIS technician. Students may also earn a Bachelor of Science in Geomatics which will prepare them to successfully pass the national Fundamentals of Surveying (FS) exam which is a

significant step towards surveying licensure. The bachelor degree program has been developed around four core disciplines which build on an in-depth foundation of knowledge needed for the professional practice of surveying and GIS. Geomatics program goals are to secure ABET/ASAC accreditation by Fall Semester 2017 and to continue to encourage student interest in obtaining graduate degrees in the field of Geomatics from other nationally ranked institutions. The program is operating under an annual cohort system starting in the fall semester of each year, so matriculation is required to ensure that each perspective student completes all required course prerequisites prior to entrance into a cohort.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral | | 3 |
| Discipline Core Requirements: | | | 19 Credits |
| | My Educator Exam * | | |
| | SURV 1020 | Introduction to Surveying and Mapping WE | 1 |
| | MATH 1060 | Trigonometry | 3 |
| or | EGDT 1600 | Technical Math--Algebra (3.0) | |
| and | EGDT 1610 | Technical Math--Geometry/Trig (3.0) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | EGDT 2400 | Surveying Applications and Field Techniques II | 3 |
| | GIS 2640 | Fundamentals of Geographic Information Systems | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| Elective Requirements: | | | 6 Credits |
| Choose 6 credits from the following or any other courses approved by department | | | 6 |
| | SURV 1030 | Fundamentals of Geodesy and Control Surveys (3.0) | |
| | SURV 1220 | Remote Sensing and Photogrammetry (3.0) | |
| | SURV 1340 | Fundamentals of Boundary Law (3.0) | |
| | SURV 2010 | Land History of America (3.0) | |
| | SURV 2030 | Geodesy (3.0) | |
| | SURV 2310 | Surveying US Public Lands (3.0) | |
| | SURV 2320 | Property Descriptions and Public Land Records (3.0) | |
| | EGDT 2500 | 3 Dimensional Modeling--Civil 3D (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 60 or more semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

| Footnote |
|---|
| * Students will be required to complete the My Educator exam with a score of 80 percent or higher or complete the IM 2010 course with a score of 80 percent or higher. |

## Architectural Design Technology, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Architectural Design Technology applies the technical and functional elements of residential and commercial architectural design. Students will take courses in the fundamentals of drafting and design, two-dimensional and three-dimensional software/ Building Information Modeling (BIM) packages, architectural rendering, residential design and construction, and commercial design and construction.

**Total Program Credits: 17**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 17 Credits |
| | EGDT 1000 | Introduction to Engineering Drawing and Technical Design | 2 |
| | EGDT 1020 | 3D Architectural Modeling | 3 |

| | | | |
|---|---|---|---|
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1100 | Architectural Drafting and Design | 3 |
| | EGDT 1720 | Architectural Rendering | 3 |
| | EGDT 2100 | Architecture Materials and Methods | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 17 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours-- minimum of 5 credit hours through course attendance at UVU.

## Civil Design and Surveying Technology, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Civil Design and Surveying Technology will be dedicated to teaching the technical and functional elements of civil design and surveying, and will educate students in the process of taking civil related projects from data obtained from ground observations and measurements made by surveying to conceptual design to completed construction documents and finally to surveying and staking the proposed design on the ground so it can be constructed. Students will be required to take civil and surveying courses currently offered in the Engineering Design Technology (EDT) department including the courses from the Drafting Technology program and the Surveying and Mapping program. From these courses students will learn the basics of surveying, civil drafting and design, and be trained in industry standard two-dimensional and three-dimensional software packages. Students will also take courses in surveying applications, land development, advanced field and office surveying, and civil design. A student with a Certificate of Proficiency in Civil Design and Surveying Technology will be prepared for an entry level job as a civil drafter/ designer or survey technician. They can increase their education, training, and employability by completing the Associate of Applied Science in Engineering Design Technology, Certificate of Proficiency in Mapping Technology, Certificate of Proficiency in Surveying Technology, Associate of Applied Science in Surveying Technology (pending), Associate of Science in Surveying and Mapping and/or a Bachelor of Science in Surveying and Mapping.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| Choose one of the following courses: | | | 3 |
| | EGDT 1600 | Technical Math Algebra (3.0) | |
| and | EGDT 1610 | Technical Math Geometry Trig (3.0) | |
| or | MATH 1060 | Trigonometry (3.0) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | EGDT 2400 | Surveying Applications and Field Techniques II | 3 |
| Elective Requirements: | | | 6 Credits |
| Choose 6 credit hours: | | | 6 |
| Any course beginning with the following prefix may be taken as an elective: EGDT, SURV, GIS, ENGR, or CIVE | | | |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours-- minimum of 4 credit hours through course attendance at UVU.

## Mechanical Design Technology, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Mechanical Design Technology applies the technical and functional elements of mechanical design. Students will take courses in the fundamentals of drafting and design, basic mechanical drafting and design, two-dimensional and three-dimensional software packages, electrical design, and advanced mechanical design.

**Total Program Credits: 17**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 17 Credits |
| | EGDT 1000 | Introduction to Engineering Drawing and Technical Design | 2 |
| | EGDT 1010 | Electrical Drafting and Design | 3 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1070 | 3 Dimensional Modeling--Inventor | 3 |
| or | EGDT 1071 | 3 Dimensional Modeling--Solidworks (3.0) | |
| | EGDT 1200 | Mechanical Drafting | 3 |
| | EGDT 2200 | Advanced Mechanical | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 17 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours-- minimum of 5 credit hours through course attendance at UVU.

## Structural Design Technology, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Structural Design Technology applies the technical and functional elements of structural steel detailing. Students will take courses in the fundamentals of drafting and design, basic structural steel detailing, two-dimensional and three-dimensional software/Building Information Modeling (BIM) packages, and advanced structural design and detailing.

**Total Program Credits: 17**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 17 Credits |
| | EGDT 1000 | Introduction to Engineering Drawing and Technical Design | 2 |
| | EGDT 1020 | 3D Architectural Modeling | 3 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1300 | Structural Drafting | 3 |
| | EGDT 2300 | Advanced Structural--CAD | 3 |
| | EGDT 2310 | Structural Steel Modeling | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 17 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours-- minimum of 5 credit hours through course attendance at UVU.

## Surveying Technology, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Surveying Technology is intended to provide part of the educational competency required for licensure as a Professional Land Surveyor (PLS) in the State of Utah. If an individual holds a bachelor of science degree in a related surveying field such as civil engineering or construction management, according to the State of Utah Office of Administrative Rules 156-22-302(c)(3), they may complete an additional 30 semester hours of surveying specific course work to complete the educational component for licensure. This certificate meets this regulatory educational requirement if the related degree includes algebra, calculus, geometry, statistics, or trigonometry. It prepares students for immediate employment beyond entry level work in surveying or civil engineering firms as a crew chief or a position with similar responsibilities. Students will be prepared to perform many of the various field and office tasks related to surveying including site and topographic surveys, boundary investigation and research, map-making, various survey adjustment calculations, writing of legal property descriptions, and other survey technician duties and responsibilities.

**Total Program Credits: 28**

| | | | |
|---|---|---|---|
| Discipline Core Requirements | | | 22 Credits |
| | Surveying Technology Foundation | | |
| | SURV 1020 | Introduction to Surveying and Mapping WE | 1 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | EGDT 2400 | Surveying Applications and Field Techniques II | 3 |
| | SURV 1220 | Remote Sensing and Photogrammetry | 3 |
| | SURV 2310 | Surveying US Public Lands | 3 |
| | SURV 2320 | Property Descriptions and Public Land Records | 3 |
| | SURV 3340 | Boundary Law | 3 |
| Elective Requirements | | | 6 Credits |
| | SURV 1030 | Fundamentals of Geodesy and Control Surveys (3) | |
| | SURV 2030 | Geodesy (3) | |
| | EGDT 2500 | 3 Dimensional Modeling--Civil 3D (3) | |
| | GIS 3600 | Introduction to Geographic Information Systems (4) | |
| | GIS 3620 | Advanced Geographic Information Systems (3) | |
| | EGDT 3500 | Advanced Civil Drafting and Design (3) | |
| | SURV 3220 | Control Surveys (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 28 semester credits required for a Certificate of Completion in Surveying Technology
2. Overall grade point average 2.5 or above with a minimum of 3.0 GPA in all Surveying Technology courses. No grade lower than a "B" in all Surveying Technology Foundation courses.
3. Residency hours: Minimum of 8 credit hours of Surveying and Mapping courses through course attendance at UVU.

## Architecture, B.Arch

### *Requirements*

The Bachelor of Architecture (B-Arch) is a five-year professional degree designed to meet the National Architectural Accreditation Board (NAAB) requirements. The degree features a rigorous design-oriented curriculum with a solid foundation in technology, practice-based coursework, plan and document generation, building codes, specifications, digital parametric modeling, building information modeling, architectural visualization, digital fabrication, building envelope systems, structural systems, and building sustainability. Students will become experts in current design and building technologies, making them ideal employees in architecture offices and related design & construction industries including civil, mechanical, and electrical. The program is structured as a two-plus-three stackable credential, awarding an Associate of Science in Engineering Design Technology after the first two years and a comprehensive professional B-Arch degree for the final three years. This allows students who do not wish to pursue licensure a two-year path into the profession. In their final three years, students engage in coursework which readies them to become licensed, practicing architects, projects managers, principals, owners, and community leaders in the profession. Students acquire leadership skills through courses in professional practice, ethics, and architectural registration exam preparation. Students learn to design buildings in a historical and cultural context through rigorous coursework in areas such as history, theory, culture, study abroad, and community service projects. Concurrently, students engage in arts and science courses to expand critical thinking. Transfer students with associate degrees from other institutions are invited to apply for admission into year three and are accepted based on transcript and portfolio review. Upon graduation, and completing their internships, students will qualify to take the Architectural Registration Exam (ARE) to become licensed architects in the State of Utah. A total of at least 151 hours of coursework is required for the Bachelor of Architecture.

**Total Program Credits: 151**

| | | | |
|---|---|---|---|
| Matriculation Requirements | | | |
| 1. Before being formally admitted into the Bachelor of Architecture (B-Arch) degree program, students must matriculate into the Architecture Cohort (the final 3 years of the program) by either completing the AS Engineering Design Technology (Architecture Design and Drafting Track) with a minimum grade of C or better in all courses, OR by completing matriculation requirements 2:<br>2. Complete the following courses with a C grade or better. | | | |
| | PHYS 1010 | Elementary Physics | 3 |
| or | PHYS 2010 | College Physics I (3) | |
| | EGDT 1020 | 3D Architectural Modeling | 3 |
| | EGDT 1100 | Architectural Drafting and Design | 3 |
| | EGDT 2100 | Architecture Materials and Methods | 3 |
| | EGDT 2600 | Applied Structures I - Statics | 3 |
| | ARC 1010 | Classical Architecture Workshop | 3 |
| | ARC 2110 | Architecture Studio I | 3 |
| | ARC 2210 | Architecture Studio II | 3 |

| | | | |
|---|---|---|---|
| | ARC 2220 | Construction Documents and Specifications | 3 |
| | All Architecture students must complete a Matriculation Application and Portfolio by the appointed deadline during the Spring semester prior to the Fall Bachelor Degree cohort to which the student desires to gain entry. Subsequently an official acceptance letter must be obtained from the Architecture Program Coordinator prior to taking any further Architecture courses. Part-time students may be admitted into the Architecture cohort and may be allowed to proceed through the program at their own pace. All transfer credits must be approved in writing by UVU and the B-ARCH Program Coordinator. | | |
| General Education Requirements | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete the following: | | | 4 |
| | MATH 1050 | College Algebra QL (4) (MATH 1050 is a prerequisite for many classes in the program core.) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage SS (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| | PHYS 1010 | Elementary Physics | 3 |
| or | PHYS 2010 | College Physics I (3) | |
| Biology (Recommended BIOL 1010) | | | 3 |
| Humanities (Recommended ENGL 2100) | | | 3 |
| Physical Science (Recommended GEO 1010) | | | 3 |
| Fine Arts (Recommended EGDT 1720) | | | 3 |
| Social/Behavorial Science (Recommended COMM 1050) | | | 3 |
| Discipline Core Requirements | | | 100 Credits |
| | EGDT 1020 | 3D Architectural Modeling | 3 |
| | EGDT 1100 | Architectural Drafting and Design | 3 |
| | EGDT 2100 | Architecture Materials and Methods | 3 |
| | EGDT 2600 | Applied Structures I - Statics (MATH 1050 is a prerequiite for this course) | 3 |
| | EGDT 2610 | Applied Structures II - Strength of Materials | 3 |
| | ARC 1010 | Classical Architecture Workshop | 3 |
| | ARC 2110 | Architecture Studio I | 3 |
| | ARC 2210 | Architecture Studio II | 3 |
| | ARC 2220 | Construction Documents and Specifications | 3 |
| | ARC 3110 | Architecture Studio III | 6 |
| | ARC 3120 | Architectural Graphic Communication | 3 |
| | ARC 3130 | Codes and Construction Law | 3 |
| | ARC 3210 | Architecture Studio IV | 6 |
| | ARC 3220 | Passive Environmental Systems | 3 |
| | ARC 3230 | Global History of Architecture to 1700 | 3 |
| | ARC 4110 | Architecture Studio V | 6 |
| | ARC 4120 | Active Environmental Systems | 3 |
| | ARC 4130 | Global History of Architecture Since 1700 | 3 |
| | ARC 4210 | Architecture Studio VI | 6 |
| | ARC 4220 | Building Envelope and Science | 3 |
| | ARC 4230 | Capstone Project Research | 3 |
| | ARC 4510 | Architecture Studio VII | 6 |
| | ARC 4520 | Architectural Theory | 3 |
| | ARC 4530 | Culture and Behavior in Architecture | 3 |
| | ARC 4540 | Architecture Professional Practice | 3 |
| | ARC 4610 | Architecture Studio VIII | 7 |
| | CMGT 405G | Global Sustainability and the Built Environment | 3 |
| Elective Requirements | | | 15 |
| | Choose 15 credits from the following: (Some courses may have additional prereqs.) | | 15 |
| | ARC 459R | Special Topics in Architecture (1) (Strongly Recommended) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3) | |
| | EGDT 1050 | Introduction to 3D Printing (2) | |
| | EGDT 1070 | 3 Dimensional Modeling Inventor (3.0) | |
| | EGDT 1071 | 3 Dimensional Modeling--Solidworks (3.0) | |
| | EGDT 1200 | Mechanical Drafting (3.0) | |
| | EGDT 1300 | Structural Drafting (3.0) | |
| | EGDT 1400 | Surveying Applications and Field Techniques I (3.0) | |
| | EGDT 1720 | Architectural Rendering (3.0) | |
| | EGDT 2300 | Advanced Structural CAD (3) | |
| | EGDT 2310 | Structural Steel Modeling (3) | |
| | EGDT 2400 | Surveying Applications and Field Techniques II (3) | |
| | ART 1810 | Introduction to Interior Design (3) | |
| | ART 1820 | Interior Space Design (3) | |
| | ART 1830 | Residential Interior Design (3) | |
| | ART 2815 | Historical Architecture and Interior Design (3) | |
| | ART 2825 | Modern Architecture Interiors and Furnishings (3) | |
| | ARTH 2710 | History of Art to the Renaissance (3) | |

| | | | |
|---|---|---|---|
| | ARTH 2720 | History of Art from the Renaissance (3) | |
| | ARTH 3010 | History of Design and Visual Arts (3) | |
| | ARTH 3015 | Ancient Art of Egypt and the Near East (3) | |
| | ARTH 3020 | Classical Art and Architecture History (3) | |
| | ARTH 3030 | Medieval Art and Architecture History (3) | |
| | ARTH 3040 | Renaissance Art History (3) | |
| | ARTH 3050 | Baroque Art and Architecture History (3) | |
| | ARTH 3060 | Nineteenth-Century Art History (3) | |
| | ARTH 3080 | History of Architecture (3.0) | |
| | ARTH 3100 | History of American Art and Architecture (3.0) | |
| | CAW 1100 | Artistic Wood Design (3) | |
| | CMGT 1010 | Introduction to Construction Management (3) | |
| | CMGT 1020 | Construction Materials and Methods I (3) | |
| | CMGT 1190 | Concrete and Framing Lab (3) | |
| | CMGT 1220 | Finishing Lab (3) | |
| | CMGT 2010 | Construction Materials and Methods II (3) | |
| | CMGT 2080 | Principles of Construction Scheduling (3) | |
| | CMGT 3030 | Principles of Construction Estimating (3) | |
| | CMGT 3140 | Construction Real Estate (3) | |
| | CMGT 3160 | Building Information Modeling (3) | |
| | CMGT 4010 | Construction Contracts (3) | |
| | DGM 1220 | Digital Design Essentials (3) | |
| | DGM 1620 | Survey of Animation (3) | |
| | DGM 1660 | Introduction to 3D Modeling and Surfacing (3) | |
| | DGM 2210 | 3D Modeling and Animation Essentials (4) | |
| | DGM 2250 | Principles of Digital Design (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 151 semester credits required for the B-Arch degree; at leas 40 credit hours must be upper-division courses.
2. Overall grade point average of 2.5 or above, with a minimum grade of C- in all Architecture courses and elective requirements.
3. Residency hours: Minimum of 45 credit hours of Architecture courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

## Surveying and Mapping, B.S.

### *Requirements*

Surveying and Mapping is the study of geospatial measurement and representation including such disciplines as land surveying, photogrammetry, remote sensing (satellite imaging and laser scanning), geographic information systems (GIS), cartography, global positioning systems (GPS), and some parts of geography and civil engineering. Surveying and Mapping is a discipline which integrates acquisition, modeling, analysis, and management of geo-spatial reference data. Based on the scientific framework of geodesy, it uses terrestrial, marine, airborne, satellite-based sensors, and measurement systems and technologies to acquire spatial and other data. The Land Surveying component of Surveying and Mapping includes investigation, analysis, and application of boundary/property laws and legal principles pertaining to specific public and private properties and is a regulated profession wherein a license to practice land surveying is issued by each state in an effort to protect the public and private interests in property boundaries.
Students in the Surveying and Mapping program may earn an Associate in Science in Surveying and Mapping which will help them be immediately employable as an entry level surveyor GIS technician. Students may also earn a Bachelor of Science in Surveying and Mapping which will prepare them to successfully pass the national Fundamentals of Surveying (FS) exam which is a significant step towards surveying licensure. The bachelor degree program has been developed around four core disciplines which build on an in-depth foundation of knowledge needed for the professional practice of surveying and GIS. Surveying and Mapping program goals are to secure ABET/ASAC accreditation by Fall Semester 2017 and to continue to encourage student interest in obtaining graduate degrees in the field of Surveying and Mapping from other nationally ranked institutions. The program is operating under an annual cohort system starting in the fall semester of each year, so matriculation is required to ensure that each perspective student completes all required course prerequisites prior to entrance into a cohort.

**Total Program Credits: 121**

| Matriculation Requirements: | |
|---|---|
| 1. Before being formally admitted into the BS Surveying and Mapping, students must matriculate into the Surveying and Mapping Cohort (the final 2 years of the program) by either completing an AS in Surveying and Mapping with a minimum grade of C or better, (except for MATH 1060 and/or its equivalents which must be a B or better) OR by completing matriculation requirements 2 and 3:<br><br>2. Complete My Educator with an exam score of 80% or higher OR complete IM 2010 Business Computer Proficiency (3.0 credit hours) with B- or higher.<br><br>3. Complete the following courses with a C grade or better:<br><br>• SURV 1020 Introduction to Surveying and Mapping WE (1)<br>• EGDT 1040 Fundamentals of Technical Engineering Drawing (3)<br>• EGDT 1400 Surveying Applications and Field Techniques I (3)<br>• MATH 1060 Trigonometry (3)<br>• or EGDT 1600 Technical Math--Algebra (3)<br>• and EGDT 1610 Technical Math--Geometry/Trig (3)<br>• MKTG 220G Written Business Communication WE (3)<br><br>4. All Surveying and Mapping students must complete a Matriculation Application by the appointed deadline during the Spring semester prior to the Fall bachelor degree cohort to which the student desires to gain entry. Subsequently official approval must be obtained from the Program Coordinator prior to taking any further Surveying and Mapping courses. Part-time students may be admitted into the | |

| | | | |
|---|---|---|---|
| Surveying and Mapping cohort and may be allowed to proceed through the program at their own pace.. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research (3) | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 74 Credits |
| Surveying and Mapping Core | | | |
| | MATH 1060 | Trigonometry | 3 |
| or | EGDT 1600 | Technical Math--Algebra (3) | |
| and | EGDT 1610 | Technical Math--Geometry/Trig (3) | |
| | SURV 1020 | Introduction to Surveying and Mapping WE | 1 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | EGDT 2400 | Surveying Applications and Field Techniques II | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | SURV 1220 | Remote Sensing and Photogrammetry | 3 |
| | SURV 2320 | Property Descriptions and Public Land Records | 3 |
| | GIS 3600 | Introduction to Geographic Information Systems | 4 |
| | GIS 3620 | Advanced Geographic Information Systems | 3 |
| | SURV 3400 | Surveying Applications and Field Techniques III | 3 |
| | SURV 451R | Surveying and Mapping Lecture Series (.5) | 2 |
| | SURV 455G | Global Professional Ethics and Liabilities | 3 |

| | | | |
|---|---|---|---|
| | SURV 4930 | Senior Surveying and Mapping Capstone WE | 4 |
| Professional Focus Areas | | | |
| The following are suggested courses based on specific areas of professional/technical interest. You may choose all courses from one focus area or a combination of courses from any focus area depending on personal goals. Total of 33 credit hours. | | | 33 |
| Professional Surveying License Focus Area | | | |
| | SURV 2010 | Land and Survey History (3) | |
| | SURV 2030 | Geodesy (3) | |
| | SURV 2310 | Surveying US Public Lands (3) | |
| | LEGL 3000 | Business Law (3) | |
| | SURV 3010 | Measurement Analysis and Adjustments (4) | |
| | SURV 3030 | Land Development Planning, Platting, and Mapping (3) | |
| | SURV 3210 | Advanced Photogrammetry (3) | |
| | SURV 3220 | Control Surveys (3) | |
| | SURV 3230 | Construction and Route Surveys (3) | |
| | SURV 3340 | Boundary Law (3) | |
| | SURV 4340 | Surveying Legal Principles (3) | |
| | SURV 4400 | Surveying Applications and Field Techniques IV (3) | |
| | SURV 4500 | Professional Services Practicum (3) | |
| Professional GIS/Mapping Focus Area | | | |
| | SURV 1030 | Fundamentals of Geodesy and Control Surveys (3) | |
| | SURV 1340 | Fundamentals of Boundary Law (3) | |
| | SURV 2010 | Land History of America (3) | |
| | SURV 2030 | Geodesy (3) | |
| | SURV 2100 | Mapping From Field to Finish (3) | |
| | GIS 2640 | Fundamentals of Geographic Information Systems (2) | |
| | GIS 3630 | Geographic Information Systems Application Development (3) | |
| | LEGL 3000 | Business Law (3) | |
| | SURV 3220 | Control Surveys (3) | |
| | SURV 3340 | Boundary Law (3) | |
| Civil Design Technology Focus Area | | | |
| | EGDT 1300 | Structural Drafting (3) | |
| | EGDT 1060 | MicroStation Infrastructure Design (3) | |
| | EGDT 2040 | Piping Drafting (2) | |
| | EGDT 2500 | 3 Dimensional Modeling--Civil 3D (3) | |
| | CMGT 3010 | Construction Materials Testing (3) | |
| | SURV 3230 | Construction and Route Surveys (3) | |
| | EGDT 3450 | Civil Design Systems (3) | |
| | EGDT 3500 | Advanced Civil Drafting and Design (3) | |
| | SURV 4400 | Surveying Applications and Field Techniques IV (3) | |
| Elective Requirements: | | | 12 Credits |
| Approved Surveying and Mapping elective courses can be taken with the following prefixes: SURV, GIS, EGDT, ARC, ENGR, CIVE, PHYS, GEOG, CMGT, CS, ENST, MATH, and LEGL. Total of 12 credit hours | | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 121 semester credits required for a BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.5 or above with a minimum of 3.0 GPA in all Surveying and Mapping courses including Surveying and Mapping Core and Professional Focus Areas

3. Residency hours: Minimum of 30 credit hours of Surveying and Mapping courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

# Art and Design

## Art and Design

The Art and Design department is in the School of the Arts. To find the most up-to-date information from the Art and Design department, visit their website.

Art and Design department

**DEPARTMENT CHAIR**

**DAVIS, Courtney** *Associate Professor*

**FACULTY**

**BULE, Steve** *Professor*
**CLARK, Travis Lee** *Lecturer*
**DAVIS, Courtney** *Associate Professor*
**ELEM, Reid** *Assistant Professor*
**EVJEN, Benjamin** *Assistant Professor*
**FRY, Gareth** *Assistant Professor*
**FULLMER, Howard W.** *Associate Professor*
**HARDIN, Chad Wayne** *Assistant Professor*
**JENSEN, Brian L.** *Professor*
**LANEGAN, Jason** *Assistant Professor*
**LOVELL, Travis** *Associate Professor*
**REES, John** *Associate Professor*
**REEVES, Audrey** *Assistant Professor*
**SHARPE, D. Marshall** *Lecturer - Placeholder*
**STEELE-MAKASCI, Nancy** *Associate Professor*
**STEWART, Perry Alan** *Professor*
**STORER, Joshua** *Assistant Professor*
**TALBERT, Mark** *Professor*
**THORNOCK, Christopher** *Assistant Professor*
**TRUSCOTT, Brandon T.** *Associate Professor*
**TUTWILER, Amber** *Assistant Professor*
**VINCENT, Marcus A.** *Associate Professor*
**WILKEY, Patrick** *Associate Professor*
**YOUNG, Christopher** *Assistant Professor*

## Course Descriptions

Art....482
Art History....491

## Degrees & Programs

### Art and Design - Design/Illustration Emphasis, A.A.S.

#### *Requirements*

The Applied Associate in Science is a two-year work-ready degree that helps prepare students for entry level jobs within the Illustration industry. This degree and credits earned can be used to further their studies in a Bachelor of Fine Arts or other programs.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Portfolio review required for students seeking the AAS - Art and Design - Graphic Design Emphasis(The Portfolio Review occurs after the first year of coursework.Students who do not pass the review mayapply the first year of coursework to the AA or AS in Art & Design.) | | | |
| General Education Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Complete one of the following: (Note: A higher level MATH course may substitute for thisrequirement) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | Social or Behavioral Science | | 3 |
| | Biology or Physical Science | | 3 |
| | P.E. or Health | | 1 |
| | ARTH 2710 | History of Art to the Renaissance (3) | |
| or | ARTH 2720 | History of Art from the Renaissance | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| | ART 1110 | Drawing I | 3 |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 1400 | Graphic Computer Applications | 3 |
| | ART 1750 | Intro to Digital Imaging | 3 |
| Emphasis Requirements: | | | 26 Credits |
| | ART 1210 | Spatial Drawing | 3 |
| | ART 2220 | Imagination and Visual Literacy | 3 |
| | ART 2230 | Illustrative Media and Techniques I | 3 |
| | ART 2240 | Illustrative Media and Techniques II | 3 |
| | ART 2250 | Gestural Drawing | 3 |
| | ART 2260 | Digital Painting for Illustration I | 3 |
| | ART 2270 | Figure Drawing I | 3 |
| | ART 2280 | 3D Computer Modeling | 3 |
| | ART 200R | Art and Design Lecture Series (1) | 2 |
| Emphasis Elective Requirements: | | | 6 Credits |
| Complete 6 credits of ART/ARTH lower-division electives. Students are strongly encouraged to take either ARTH 2710 or ARTH 2720 (whichever course was not previously taken). | | | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. Portfolio Submission.

### Art and Design - Graphic Design Emphasis, A.A.S.

#### *Requirements*

The Applied Associate in Science is a two-year work-ready degree that helps prepare students for entry level jobs within the Illustration industry.

This degree and credits earned can be used to further their studies in a Bachelor of Fine Arts or other programs.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Portfolio review required for students seeking the AAS Art and Design - Graphic Design Emphasis (The Portfolio Review occurs after the first year of coursework. Students who do not pass the review may apply the first year of coursework to the AA or AS in Art & Design.) | | | |
| General Education Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Complete one of the following: (Note: A higher level MATH course may substitute for thisrequirement) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | Social or Behavioral Science | | 3 |
| | Biology or Physical Science | | 3 |
| | P.E. or Health | | 1 |
| | ARTH 2710 | History of Art to the Renaissance (3) | |
| or | ARTH 2720 | History of Art from the Renaissance | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| | ART 1110 | Drawing I | 3 |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 1400 | Graphic Computer Applications | 3 |
| | ART 1750 | Intro to Digital Imaging | 3 |
| Emphasis Requirements: | | | 23 Credits |
| | ART 1410 | Typography I | 3 |
| | ART 1420 | Graphic Design I | 3 |
| | AAS Portfolio Review | | |
| | DGM 2120 | Web Essentials | 3 |
| | ART 2280 | 3D Computer Modeling | 3 |
| | ART 2400 | Production Design | 3 |
| | ART 2430 | Branding I | 3 |
| | ART 2440 | Motion Graphics I | 3 |
| | ART 200R | Art and Design Lecture Series (1) | 2 |
| Emphasis Elective Requirements: | | | 9 Credits |
| | Complete 9 credits from any ART/ARTH courses not previously used. | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. Portfolio Submission.

## Art and Design - Photography Emphasis, A.A.S.

### *Requirements*

The Applied Associate in Science is a two-year work-ready degree that helps prepare students for entry level jobs within the Illustration industry. This degree and credits earned can be used to further their studies in a Bachelor of Fine Arts or other programs.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Portfolio review required for students seeking the AAS Art and Design - Graphic Design Emphasis (The Portfolio Review occurs after the first year of coursework. Students who do not pass the review may apply the first year of coursework to the AA or AS in Art & Design.) | | | |
| General Education Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Complete one of the following: (Note: A higher level MATH course may substitute for thisrequirement) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | Social or Behavioral Science | | 3 |
| | Biology or Physical Science | | 3 |
| | P.E. or Health | | 1 |
| | ARTH 2710 | History of Art to the Renaissance (3) | |
| or | ARTH 2720 | History of Art from the Renaissance | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| | ART 1110 | Drawing I | 3 |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 1400 | Graphic Computer Applications | 3 |
| | ART 1750 | Intro to Digital Imaging | 3 |
| Emphasis Requirements: | | | 20 Credits |
| | ART 1790 | Dark Room Techniques | 3 |
| | ART 2700 | Photography II | 3 |
| | ART 2710 | Documentary Photography | 3 |
| | ART 2720 | Color Photography | 3 |
| | ART 2730 | Photographic Lighting I | 3 |
| | ART 200R | Art and Design Lecture Series (1) | 2 |
| | ARTH 3200 | The History of Photography | 3 |
| Emphasis Elective Requirements: | | | 12 Credits |
| Complete 12 credits of any ART/ARTH courses not previously used.<br>Students are STRONGLY ADVISED to fulfill part of this requirement with the following courses: | | | 12 |
| | ART 3740 | Fine Art Photography WE (3) | |
| | ART 3750 | Advanced Digital Imaging (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. Portfolio Submission.

## Art and Design, A.A.

### *Requirements*

Students who elect to earn a bachelor of arts or associate of arts degree are required to complete a foreign language requirement, while those who earn a bachelor of science or associate of science degree have the option to take more electives. All of these degrees allow students to explore a few areas within the department and gain a more well-rounded education in the visual arts.

**Total Program Credits: 61**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: (Note: A higher level MATH course may substitute for this requirement) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: when selecting electives be mindful of prerequisite requirements for advanced courses) | | | 9 |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| | ART 2630 | Painting I (3) | |
| Elective Requirements: | | | 8 Credits |
| Complete 8 credits of the same Foreign Language | | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 61 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. Portfolio Submission.
6. For the AA degree, completion of 8 credit hours of course work from one language

## Art and Design, A.S.

### *Requirements*

Students who elect to earn a bachelor of arts or associate of arts degree are required to complete a foreign language requirement, while those who earn a bachelor of science or associate of science degree have the option to take more electives. All of these degrees allow students to explore a few areas within the department and gain a more well-rounded education in the visual arts.

**Total Program Credits: 61**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: (Note: A higher level MATH course may substitute for this requirement) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |

| | | | |
|---|---|---|---|
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | ARTH2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: when selecting electives be mindful of prerequisite requirements for advanced courses): | | | 9 |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| | ART 2630 | Painting I (3) | |
| Elective Requirements: | | | 8 Credits |
| Complete a minimum of 8 credits from any ART/ARTH Course not already required. Courses relative to the type of Bachelors Degree you plan to pursue are recommended. (See department advisor for appropriate courses.) | | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 61 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. Portfolio Submission.

## Art and Design, Certificate of Completion

### *Requirements*

The certificate provides basic instruction in both two-dimensional and three-dimensional using traditional and digital tools.

**Total Program Credits: 30**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 18 Credits |
| | ART 1120 | 2D Design | 3 |
| | ART 1400 | Graphic Computer Applications | 3 |
| | ART 1110 | Drawing I | 3 |
| | ART 1050 | Photography I | 3 |
| | ARTH 2710 | History of Art to the Renaissance (3.0) | |
| or | ARTH 2720 | History of Art from the Renaissance | 3 |
| | ART 1130 | 3D Design | 3 |
| Elective Requirements: | | | 12 Credits |
| | Any ART course not already taken (See Department Advisor). | | 12 |

**Graduation Requirements:**

1. Portfolio Submission.
2. Completion of a minimum of 30 credits.
3. Overall GPA of 2.0 or higher.
4. Residency hours -- Minimum of 10 credits required through course attendance at UVU.

## Art and Design, Certificate of Proficiency

### *Requirements*

This certificate is available for all UVU students with a particular focus designed to provide high school students an opportunity to obtain a certificate of proficiency in a Career and Technical Education (CTE) field while still enrolled in high school and stack into certificate, associate, and bachelor degrees at UVU. This certificate is meant to help students become college ready; it does not prepare them to be job ready.

**Total Program Credits: 16**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | MAT 1030 | Quantitative Reasoning | 3 |
| or | MATH 1050 | College Algebra (4) | |
| | BIOL 1010 | General Biology | 3 |
| | BIOL 1015 | General Biology Laboratory | 1 |
| | ART 1120 | 2D Design | 3 |
| | ART 1400 | Graphic Computer Applications | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 16 semester credits.
2. Overall grade point average of 2.5 or above.
3. All courses must be completed with grade 'C' or higher.

## Art History, Minor

### *Requirements*

Because art history is cross-disciplinary by nature, a minor in art history would compliment almost any degree, whether within or outside of the arts. The minor requires 18 credits of art history courses, including the survey classes Art to and from the Renaissance, as well as four upper division electives, ranging from ancient to contemporary art history. The minor creates a more diverse skill set for students of the visual arts, as well as a more culturally rich educational experience for students outside of the arts.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 6 Credits |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Elective Requirements: | | | 12 Credits |

| | | | |
|---|---|---|---|
| Choose 12 credits from the following: | | | 12 |
| | ARTH 2800 | Introduction to Art History Research and Methodology WE (3) | |
| | ARTH 300R | Special Topics in Art History (3) | |
| | ARTH 3010 | History of Design and Visual Arts (3) | |
| | ARTH 3015 | Ancient Art of Egypt and the Near East (3) | |
| | ARTH 3020 | Classical Art and Architecture History (3) | |
| | ARTH 3030 | Medieval Art and Architecture History (3) | |
| | ARTH 3040 | Renaissance Art History (3) | |
| | ARTH 3050 | Baroque Art and Architecture History (3) | |
| | ARTH 3055 | Northern Baroque Art History (3) | |
| | ARTH 3060 | Nineteenth-Century Art History (3) | |
| | ARTH 3070 | Modern Art and Architecture History WE (3) | |
| | ARTH 3080 | History of Architecture (3) | |
| | ARTH 309G | Introduction to Non Western Ancient Art (3) | |
| | ARTH 3100 | History of American Art and Architecture (3) | |
| | ARTH 3110 | The History of Illustration WE (3) | |
| | ARTH 3120 | History of Contemporary Art (3) | |
| | ARTH 3200 | The History of Photography (3) | |
| | ARTH 3300 | Introduction to Museum Studies (3) | |
| | ARTH 3310 | Art Theory and Criticism (3) | |
| | ARTH 3400 | Arts Management (3) | |
| | ARTH 400R | Art History Seminar WE (3) | |
| | or any other advisor approved upper division courses. | | |

## Art Education, B.S.

### *Requirements*

The Bachelor of Science in Art Education prepares students to qualify for teaching licensure for 7--12th grade. Curriculum is designed to give students a background in general education, as well as secondary education. Students can also focus on a single studio area within visual arts such as painting/drawing, sculpture/ceramics, illustration or printmaking.

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| Students will apply for formal admission to the Secondary Education and the Art and Design Department Art Education program in the semester prior to the beginning of their junior year. Admission criteria include:<br>1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in discipline core courses.<br>3. Completion of all General Education requirements and the majority of discipline core courses.<br>4. Pass LiveScan Criminal Background Check. |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | ART 1350 | Ceramics I (fulfills Fine Arts) | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 85 Credits |
| Discipline Core Requirements Must be completed with a grade of C or higher. | | | |
| | ART 1110 | Drawing I | 3 |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 1400 | Graphic Computer Applications | 3 |
| | ART 1650 | Watercolor | 3 |
| | ART 1750 | Intro to Digital Imaging | 3 |
| | ART 2630 | Painting I | 3 |
| | ART 2680 | Printmaking I | 3 |

| | | | |
|---|---|---|---|
| | ART 3500 | Secondary Art Education Methods I WE | 3 |
| | ART 3510 | Secondary Art Education Methods II WE | 3 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| | ART 200R | Art and Design Lecture Series (must be repeated) | 2 |
| | ART 2110 | Drawing II | 3 |
| | Choose one upper-division ARTH class from the list below: | | 3 |
| | ARTH 3070 | Modern Art and Architecture History WE (3) | |
| | ARTH 3120 | History of Contemporary Art (3) | |
| | One elective 2000 or higher within studio emphasis area. Choose from: Drawing, Painting, Printmaking,Illustration, Ceramics, or Sculpture. It is strongly recommended that students choose the same emphasisarea for the one studio elective 2000 or higher AND the two upper division studio courses. | | 3 |
| | Two upper-division studio courses within one emphasis area. Choose from: Drawing, Painting,Printmaking, Illustration, Ceramics, or Sculpture. | | 6 |
| Prerequisite Secondary Education Requirements: | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| Secondary Education Licensure Requirements: | | | |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 4200 | Classroom Management I (Dance Education majors take DANC 4430 in place of EDSC 4200.) | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, with a minimum of 40 credits of upper division credit.
2. Overall GPA of 3.0 (B) or above with no grade lower than a C in discipline core courses and no grade lower than a B- in Licensure and Methods courses.
3. Completion of GE and specified departmental requirements.
4. Portfolio Submission
5. Successful completion of at least one Global/Intercultural course

# Art History, B.A.

## *Requirements*

The Bachelors of Art in Art History degree at UVU offers a strong foundation in the study of art history and the liberal arts, with an emphasis on both intellectual and practical skills. The department offers an array of art history courses on topics ranging from ancient culture to contemporary art, as well as specialized courses on such relevant topics as museum studies and arts management.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution[1] | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 51 Credits |
| Art Studio Core: Complete one of the following-- | | | 3 |
| | ART 1020 | Basic Drawing for Non-Majors (3) | |
| | ART 1050 | Photography I (3) | |
| | ART 1120 | 2D Design (3) | |
| | ART 1130 | 3D Design (3) | |

| | | | |
|---|---|---|---|
| | ART 1340 | Sculpture I (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1650 | Watercolor (3) | |
| Art History foundation core: complete the following-- | | | 9 |
| | ARTH 2710 | History of Art to the Renaissance (3) | |
| | ARTH 2720 | History of Art from the Renaissance (3) | |
| | ARTH 2800 | Introduction to Art History Research and Methodology WE (3) | |
| Art History Upper Division: complete eleven courses from the following-- | | | 33 |
| | ARTH 300R | Special Topics in Art History (3) | |
| | ARTH 3010 | History of Design and Visual Arts (3) | |
| | ARTH 3015 | Ancient Art of Egypt and the Near East (3) | |
| | ARTH 3020 | Classical Art and Architecture History (3) | |
| | ARTH 3030 | Medieval Art and Architecture History (3) | |
| | ARTH 3040 | Renaissance Art History (3) | |
| | ARTH 3050 | Baroque Art and Architecture History (3) | |
| | ARTH 3055 | Northern Baroque Art History (3) | |
| | ARTH 3060 | Nineteenth-Century Art History (3) | |
| | ARTH 3070 | Modern Art and Architecture History WE (3) | |
| | ARTH 3080 | History of Architecture (3) | |
| | ARTH 309G | Introduction to Non Western Ancient Art (3) | |
| | ARTH 3100 | History of American Art and Architecture (3) | |
| | ARTH 3120 | History of Contemporary Art (3) | |
| | ARTH 3200 | The History of Photography (3) | |
| | ARTH 3300 | Introduction to Museum Studies (3) | |
| | ARTH 3310 | Art Theory and Criticism (3) | |
| | ARTH 3400 | Arts Management (3) | |
| | ARTH 350G | Latin American Art and Architectural History GI (3) | |
| Seminars: | | | |
| | ARTH 400R | Art History Seminar WE (3) (Complete a minimum of two) | 6 |
| Elective Requirements: | | | 33 Credits |
| 1 | One Foreign Language (1010, 1020, 2010 levels. German or French are recommended) | | 12 |
| 2 | Complete any courses from Humanities, History, Philosophy, English, Art, or Art History (at least four courses must be 3000 level). The major adviser will have a list of approved courses. | | 21 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above and a grade point average of 3.0 (B) or above in all ARTH courses.
3. Residency hours- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.
6. Portfolio Submission.

| Footnote: |
|---|
| 1-Fulfilled with Foreign Language 202G/2020 |

## Art and Design - Graphic Design Emphasis, B.F.A.

### *Requirements*

Situated in the heart of the “Silicon Slopes,” UVU’s graphic design program is uniquely situated to offer students cutting-edge learning, internship, and job-placement opportunities. As students use the latest software to practice communicating creatively using typography and imagery, they learn to approach problem solving from marketing and artistic standpoints that resonate with target audiences. Courses emphasize creative, concept-intensive communication, and effective design implementation in both print and interactive design.

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| 1. AA, AS, or AAS Degree or equivalent in Art and Design or advisor approval (Graphic Design Emphasis B.F.A. candidates must complete the AAS Degree or equivalent in Graphic Design; Illustration Emphasis. B.F.A. candidates must complete the AAS Degree or equivalent in Illustration)<br>2. Portfolio Review |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |

| | | | |
|---|---|---|---|
| | Humanities Distribution | | 3 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 26 Credits |
| Courses taken to fulfill individual program emphases will not also counttoward the Discipline Core Requirements (credit will not count twice) | | | |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 200R | Art and Design Lecture Series (Must be taken 2 times) | 2 |
| | ART 499R | BFA Project WE (must be taken in two consecutive semesters) | 6 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: ART 1110 is required for Illustration and Painting/Drawing BFA degrees, ART 1400 is required for Graphic Design BFA degrees, ART 1750 is required for Photography BFA degrees): | | | 9 |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| | ART 2630 | Painting I (3) | |
| Emphasis Requirements: | | | 50 Credits |
| | ART 1410 | Typography I | 3 |
| | ART 1420 | Graphic Design I | 3 |
| AAS Portfolio Review | | | |
| Lower Division Core | | | |
| | DGM 2120 | Web Essentials | 3 |
| | ART 2280 | 3D Computer Modeling | 3 |
| | ART 2400 | Production Design | 3 |
| | ART 2430 | Branding I | 3 |
| | ART 2440 | Motion Graphics I | 3 |
| BFA Portfolio Review | | | |
| Upper Division Core | | | |
| | ART 3420 | Typography II | 3 |
| | ART 3440 | Motion Graphics II | 3 |
| | ART 3450 | Branding II | 3 |
| | ART 3480 | UI/UX Design II | 3 |
| Art History Requirements | | | |
| | ARTH 3010 | History of Design and Visual Arts | 3 |
| | ARTH 3070 | Modern Art and Architecture History WE | 3 |
| Capstone Requirements | | | |
| | ART 443R | Design Studio | 3 |
| | ART 481R | Art and Design Internship (1) | 2 |
| Complete 2 of the following: | | | 6 |
| | ART 4440 | Motion Graphics Studio (3) | |
| | ART 4480 | UI/UX Studio (3) | |
| | ART 443R | Design Studio (3) | |
| Emphasis Elective Requirements: | | | 9 Credits |
| Complete any ART/ARTH courses not already used (Five credits must be upper division) | | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Portfolio submission required during senior year.
6. Successful completion of at least one Global/Intercultural course.

## Art and Design - Illustration Emphasis, B.F.A.

### *Requirements*

The program is ideal for students wanting to pursue careers in traditional illustration, digital illustration, or animation. In addition to working with faculty who are professionals in their fields, students have access to the best software in the industry. Courses in figure drawing, children's book illustration, anatomy and figure structure, flash animation, 3-D computer rendering, and advanced illustration are just a few of the classes available to students. The courses offer a well-rounded and practical learning experience. Students in the illustration program benefit from interaction with instructors who are nationally known professional illustrators.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. AA, AS, or AAS Degree or equivalent in Art and Design or advisor approval (Graphic Design Emphasis B.F.A. candidates must complete the AAS Degree or equivalent in Graphic Design; Illustration Emphasis. B.F.A. candidates must complete the AAS Degree or equivalent in Illustration)<br>2. Portfolio Review | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |

| | | | |
|---|---|---|---|
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 26 Credits |
| Courses taken to fulfill individual program emphases will not also counttoward the Discipline Core Requirements (credit will not count twice) | | | |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 200R | Art and Design Lecture Series (Must be taken 2 times) | 2 |
| | ART 499R | BFA Project WE (must be taken in two consecutive semesters) | 6 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: ART 1110 is required for Illustration and Painting/Drawing BFA degrees, ART 1400 is required for Graphic Design BFA degrees, ART 1750 is required for Photography BFA degrees): | | | 9 |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| | ART 2630 | Painting I (3) | |
| Emphasis Requirements: | | | 48 Credits |
| | ART 1210 | Spatial Drawing[1] | 3 |
| or | ART 1750 | Intro to Digital Imaging (3) | |
| | ART 2220 | Imagination and Visual Literacy | 3 |
| | ART 2230 | Illustrative Media and Techniques I | 3 |
| | ART 2240 | Illustrative Media and Techniques II | 3 |
| | ART 2260 | Digital Painting for Illustration I | 3 |
| | ART 2270 | Figure Drawing I | 3 |
| | ART 2280 | 3D Computer Modeling | 3 |
| | ART 3210 | Narrative Illustration | 3 |
| | ART 3220 | Conceptual Illustration | 3 |
| | ART 327R | Rendering the Human Head | 3 |
| | ART 328R | Painting the Human Head | 3 |
| | ART 361R | Figure Drawing II | 3 |
| | ART 364R | Figure Painting | 3 |
| | ART 421R | Advanced Illustration | 3 |
| | ART 470R | Figure Drawing III | 3 |
| | ARTH 3110 | The History of Illustration WE | 3 |
| Emphasis Elective Requirements: | | | 11 Credits |
| Take an additional 9 credits from the classes below. | | | 9 |
| | ART 321R | Environment Design and Painting (3) | |
| | ART 322R | Advanced Rendering of Forms and Surfaces (3) | |
| | ART 324R | Children's Book Illustration (3) | |
| | ART 325R | 2D Animation for Illustration (3) | |
| | ART 3260 | Digital Painting for Illustration II (3) | |
| | ART 3270 | Digital Illustration (3) | |
| | ART 3280 | 3D Computer Rendering (3) | |
| | ART 426R | Concept Design (3) | |
| | ART 428R | Sequential Illustration (3) | |
| | ART 429R | 3D Illustration (3) | |
| Complete any ART/ARTH courses not already used (2 credit must be upper division). | | | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Portfolio submission required during senior year.
6. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| 1- If ART 1210 is used in the discipline core requirements, take ART 1750 |

## Art and Design - Painting and Drawing Emphasis, B.F.A.

### *Requirements*

Within the painting/drawing program, students emphasize one of four areas: drawing, watermedia, painting, or printmaking. In their senior year, B.F.A. students receive one-on-one instruction from the professor of their choice. Students explore their personal artistic identity while learning the rigor and attention to detail needed to put together a solo exhibition as their culminating experience.

**Total Program Credits: 120**

| Matriculation Requirements: | |
|---|---|
| 1. AA, AS, or AAS Degree or equivalent in Art and Design or advisor approval (Graphic Design Emphasis B.F.A. candidates must complete the AAS Degree or equivalent in Graphic Design; Illustration Emphasis. B.F.A. candidates must complete the AAS Degree or equivalent in Illustration)<br>2. Portfolio Review | |
| General Education Requirements: | 35 Credits |

| | | | |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: (Note: A higher level MATH course may substitute for this requirement) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 26 Credits |
| Courses taken to fulfill individual program emphases will not also counttoward the Discipline Core Requirements (credit will not count twice) | | | |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 200R | Art and Design Lecture Series (Must be taken 2 times) | 2 |
| | ART 499R | BFA Project WE (must be taken in two consecutive semesters) | 6 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: ART 1110 is required for Illustration and Painting/Drawing BFA degrees, ART 1400 is required for Graphic Design BFA degrees, ART 1750 is required for Photography BFA degrees): | | | 9 |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| | ART 2630 | Painting I (3) | |
| Emphasis Requirements: | | | 36 Credits |
| Students emphasizing a 2D area complete the following:[1] | | | |
| | ART 1110 | Drawing I | 3 |
| | ART 1650 | Watercolor | 3 |
| | ART 2110 | Drawing II | 3 |
| | ART 2620 | Color Theory | 3 |
| | ART 2630 | Painting I | 3 |
| | ART 2640 | Painting II | 3 |
| | ART 2680 | Printmaking I | 3 |
| | ART 367R | Printmaking II | 3 |
| | ARTH 3070 | Modern Art and Architecture History WE | 3 |
| | ARTH 3120 | History of Contemporary Art | 3 |
| Complete two classes from the following: | | | 6 |
| | ART 1340 | Sculpture I (3) | |
| or | ART 1350 | Ceramics I (3) | |
| | ARTH 3020 | Classical Art and Architecture History (3) | |
| | ARTH 3030 | Medieval Art and Architecture History (3) | |
| | ARTH 3040 | Renaissance Art History (3) | |
| | ARTH 3050 | Baroque Art and Architecture History (3) | |
| | ARTH 3060 | Nineteenth-Century Art History (3) | |
| | ARTH 3100 | History of American Art and Architecture (3) | |
| Emphasis Elective Requirements: | | | 23 Credits |
| | ART 4840 | Professional Presentation for the Visual Arts WE | 1 |
| Complete minimum of 9 credit hours in one specialization: | | | 9 |
| Drawing | | | |
| | ART 311R | Drawing III (may be taken twice) (3) | |
| | ART 366R | Life Drawing (3) (may be taken twice) | |
| | ART 411R | Drawing IV (may be taken twice) (3) | |
| | ART 466R | Advanced Life Drawing (3) (may be taken twice) | |
| Painting | | | |
| | ART 363R | Painting III (may be taken twice) (3) | |
| | ART 369R | Contemporary Figure Painting (3) (may be taken thrice) | |
| | ART 463R | Painting IV (3) (may be taken twice) | |
| Printmaking | | | |
| | ART 368R | Printmaking III (may be taken twice) (3) | |
| | ART 468R | Printmaking IV (may be taken twice) (3) | |

| | | | |
|---|---|---|---|
| Complete 12.0 elective credits from upper-division specialization courses listed below. It is recommended to focus on depth in the selected specialization. | | | 12 |
| Drawing | | | |
| | ART 311R | Drawing III (may be taken twice) (3) | |
| | ART 366R | Life Drawing (3) (may be taken twice) | |
| | ART 411R | Drawing IV (may be taken twice) (3) | |
| | ART 466R | Advanced Life Drawing (3) (may be taken twice) | |
| Painting | | | |
| | ART 363R | Painting III (may be taken twice) (3) | |
| | ART 369R | Contemporary Figure Painting (3) (may be taken thrice) | |
| | ART 463R | Painting IV (3) (may be taken twice) | |
| Printmaking | | | |
| | ART 368R | Printmaking III (may be taken twice) (3) | |
| | ART 468R | Printmaking IV (may be taken twice) (3) | |
| Complete one of the following additional Professional content courses: | | | 1 |
| | ART 4820 | rofessional Presentation for the Visual Arts I WE (1) | |
| | ART 4830 | Professional Practices for the Visual Arts II WE(1) | |
| | ART 4850 | Professional Writing for the Visual Arts WE (1) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Portfolio submission required during senior year.
6. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1] ART 1110, 1350, and 2630 taken to fulfill this requirement will not also count toward the BFA Discipline Core (credit will notcount twice). |

## Art and Design - Photography Emphasis, B.F.A.

### *Requirements*

UVU's photography program teaches the language of photography. Students will take courses to diversify their skill set in the creation and appreciation of different approaches to photography. They will work with film, historic photographic processes, and cutting edge digital technology. Students learn about and work in commercial and fine art environments. They will be taught working methods in the darkroom, studio lighting techniques, motion, and digital manipulation. The photo program emphasizes a hands-on and engaged approach. We actively look for opportunities to get our students on location and into real world scenarios through internships, study abroad programs, service oriented programs, and classes taught off campus.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. AA, AS, or AAS Degree or equivalent in Art and Design or advisor approval (Graphic Design Emphasis B.F.A. candidates must complete the AAS Degree or equivalent in Graphic Design; Illustration Emphasis. B.F.A. candidates must complete the AAS Degree or equivalent in Illustration)<br>2. Portfolio Review | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: (Note: A higher level MATH course may substitute for this requirement) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 26 Credits |
| Courses taken to fulfill individual program emphases will not also counttoward the Discipline Core Requirements (credit will not count twice) | | | |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 200R | ART and Design Lecture Series (Must be taken 2 times) | 2 |
| | ART 499R | BFA Project WE (must be taken in two consecutive semesters) | 6 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: ART 1110 is required for Illustration and Painting/Drawing | | | 9 |

| | | | |
|---|---|---|---|
| BFA degrees, ART 1400 is required for Graphic Design BFA degrees, ART 1750 is required for Photography BFA degrees): | | | |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| | ART 2630 | Painting I (3) | |
| Emphasis Requirements: | | | 15 Credits |
| Complete the following: | | | |
| | ART 1790 | Dark Room Techniques | 3 |
| | ART 2700 | Photography II | 3 |
| | ART 2710 | Documentary Photography | 3 |
| | ART 2720 | Color Photography | 3 |
| | ART 2730 | Photographic Lighting I | 3 |
| Emphasis Elective Requirements: | | | 44 Credits |
| | ARTH 3200 | The History of Photography | 3 |
| | ART 371R | Historical Photographic Processes | 3 |
| | ART 3730 | Photographic Lighting II | 3 |
| | ART 3740 | Fine Art Photography WE | 3 |
| | ART 3750 | Advanced Digital Imaging | 3 |
| | ART 471R | Photographic Illustration | 3 |
| | ART 474R | Advanced Photo Studies | 3 |
| | ART 4750 | Exploratory Photographic Processes | 3 |
| | ART 481R | Art and Design Internship (1) | 2 |
| | Complete any ART/ARTH courses not already used (6 credits must be upper division). | | 15 |
| Take ONE of the following classes: | | | 3 |
| | ARTH 3400 | Arts Management (3) | |
| | ARTH 3310 | Art Theory and Criticism (3) | |
| | ARTH 3120 | History of Contemporary Art (3) | |
| | ARTH 3040 | Renaissance Art History (3) | |
| | ARTH 3050 | Baroque Art and Architecture History (3) | |
| | ARTH 3060 | Nineteenth-Century Art History (3) | |
| | ARTH 3070 | Modern Art and Architecture History WE (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Portfolio submission required during senior year.
6. Successful completion of at least one Global/Intercultural course.

# Art and Design - Sculpture and Ceramics Emphasis, B.F.A.

## *Requirements*

UVU's BFA in ceramics and sculpture helps students build a strong foundation of design fundamentals, technical skills, and the use of materials. Whether throwing clay on a potter's wheel or listening to a class lecture, students discover endless sources of creative ideas while taking courses in low-fire ceramics, mold making, casting, ceramic technologies, and more.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. AA, AS, or AAS Degree or equivalent in Art and Design or advisor approval (Graphic Design Emphasis B.F.A. candidates must complete the AAS Degree or equivalent in Graphic Design; Illustration Emphasis. B.F.A. candidates must complete the AAS Degree or equivalent in Illustration)<br>2. Portfolio Review | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: (Note: A higher level MATH course may substitute for this requirement) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 26 Credits |
| Courses taken to fulfill individual program emphases will not also count toward the Discipline Core Requirements (credit will not count twice) | | | |

| | | | |
|---|---|---|---|
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |
| | ART 200R | Art and Design Lecture Series (Must be taken 2 times) | 2 |
| | ART 499R | BFA Project WE (must be taken in two consecutive semesters) | 6 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: ART 1110 is required for Illustration and Painting/Drawing BFA degrees, ART 1400 is required for Graphic Design BFA degrees, ART 1750 is required for Photography BFA degrees): | | | 9 |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| | ART 2630 | Painting I (3) | |
| Emphasis Requirements: | | | 45 Credits |
| Students emphasizing 3-D art complete the following (either ART 334R or ART 335R must be repeated): | | | |
| | ART 1340 | Sculpture I | 3 |
| | ART 1350 | Ceramics I | 3 |
| | ART 1650 | Watercolor | 3 |
| | ART 2340 | Sculpture II | 3 |
| | ART 2350 | Ceramics II | 3 |
| | ART 2630 | Painting I | 3 |
| | ART 2680 | Printmaking I | 3 |
| | ART 3800 | Low-Fire Ceramics | 3 |
| | ART 3810 | Ceramic Technologies | 3 |
| | ART 4360 | Mold Making and Casting | 3 |
| | ART 4370 | Hand Building Ceramics | 3 |
| | ART 3005 | Ceramic History Trends and Practices WE | 3 |
| Complete 9.0 credits of the following, with no more than 6.0 credits in one course. | | | 9 |
| | ART 334R | Sculpture III (3) | |
| | ART 335R | Ceramics III (3) | |
| Emphasis Elective Requirements: | | | 14 Credits |
| | Two upper-division Art History classes (6 credits) | | 6 |
| | Complete any ART/ARTH courses not already used (4 credits must be upper division). | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art and Design courses.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Portfolio submission required during senior year.
6. Successful completion of at least one Global/Intercultural course.

## Art and Design, B.A.

### *Requirements*

Students who elect to earn a bachelor of arts or associate of arts degree are required to complete a foreign language requirement, while those who earn a bachelor of science or associate of science degree have the option to take more electives. All of these degrees allow students to explore a few areas within the department and gain a more well-rounded education in the visual arts.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (fulfilled with Foreign Language 202G/2020) | | 4 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 47 Credits |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3D Design | 3 |

| | | | |
|---|---|---|---|
| | ART 200R | Art and Design Lecture Series | 2 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: when selecting electives be mindful ofprerequisite requirements for advanced courses): | | | 9 |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1650 | Watercolor (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| Complete 3 of the 4 following classes: | | | 3 |
| | ART 4820 | Professional Practices for the Visual Arts I WE (1) | |
| | ART 4830 | Professional Practices for the Visual Arts II WE (1) | |
| | ART 4840 | Professional Presentation for the Visual Arts WE (1) | |
| | ART 4850 | Professional Writing for the Visual Arts WE (1) | |
| Complete 24 credits from any ART/ARTH courses not already taken (students must have 40 upper division credit hours to graduate, see Graduation Requirement 1). | | | 24 |
| Elective Requirements: | | | 37 Credits |
| | One Foreign Language | | 12 |
| | Complete any courses 1000 level or higher (students must have 40 upper division credit hours to graduate, see Graduation Requirement 1). | | 25 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in all Art & Design courses.
3. Residency hours- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Portfolio Submission.
6. Successful completion of at least one Global/Intercultural course.
7. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.

## Art and Design, B.S.

### *Requirements*

Students who elect to earn a bachelor of arts or associate of arts degree are required to complete a foreign language requirement, while those who earn a bachelor of science or associate of science degree have the option to take more electives. All of these degrees allow students to explore a few areas within the department and gain a more well-rounded education in the visual arts.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | ARTH 2710 | History of Art to the Renaissance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 47 Credits |
| | ART 1120 | 2D Design | 3 |
| | ART 1130 | 3 D Design | 3 |
| | ART 200R | Art and Design Lecture Series | 2 |
| | ARTH 2720 | History of Art from the Renaissance | 3 |
| Complete 9 credits from the following list (please note: when selecting electives be mindful of prerequisite requirements for advanced courses): | | | 9 |
| | ART 1110 | Drawing I (3) | |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 1350 | Ceramics I (3) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | ART 1420 | Graphic Design I (3) | |
| | ART 1650 | Watercolor (3) | |
| | ART 1750 | Intro to Digital Imaging (3) | |
| Complete 3 of the 4 following classes: | | | 3 |

| | | | |
|---|---|---|---|
| | ART 4820 | Professional Practices for the Visual Arts I WE (1) | |
| | ART 4830 | Professional Practices for the Visual Arts II WE (1) | |
| | ART 4840 | Professional Presentation for the Visual Arts WE (1) | |
| | ART 4850 | Professional Writing for the Visual Arts WE (1) | |
| Complete 24 credits from any ART/ARTH courses not already taken (see Graduation Requirement 1). | | | 24 |
| Elective Requirements: | | | 38 Credits |
| | Complete any courses 1000 level or higher (students must have 40 upper division credit hours to graduate, see Graduation Requirement 1). | | 38 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, with a minimum of 40 of upper division credits.
2. Overall grade point average of 2.0 (C) above with no grade lower than a C-in all Art & Design courses.
3. Residency hours- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Portfolio Submission.
6. Successful completion of at least one Global/Intercultural course.

# Aviation Science

## Aviation Science

The Aviation Science department is in the College of Health and Public Service. To find the most up-to-date information from the Aviation Science department, visit their website.

Aviation Science department

**DEPARTMENT CHAIR**

**JOHNSON, Randall** *Associate Professor*

**FACULTY**

**CHAMBERLAIN, Cory** *Associate Professor*
**HOLLISTER, Michael L.** *Assistant Professor*
**JOHNSON, Randall** *Associate Professor*
**LEICK, Ryan** *Associate Professor*
**LEY, Stephen** *Associate Professor*
**SILCOX, Fiona** *Assistant Professor*
**SUTLIFF, Daniel** *Professional in Residence*
**TROUTT, Jack** *Assistant Professor*
**WILLIAMS, Brice** *Associate Professor*

# Course Descriptions

Aviation Science..... 503

# Degrees & Programs

## Aviation Science, A.A.S.

### *Requirements*

The A.A.S. degree prepares the student by concentrating on aviation courses. It is commonly referred to as the job-ready degree, preparing the student for entry level positions in the industry.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 18 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | MAT 1010 | Intermediate Algebra | 4 |
| | PHIL 2050 | Ethics and Values | 3 |
| or | Any other Humanities | | |
| | POLS 1000 | American Heritage | 3 |
| or | HIST 1700 | American Civilization (3) | |
| or | Any other Social Science | | |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| Discipline Core Requirements: | | | 45 Credits |
| | AVSC 1010 | Survey of Aviation Science | 3 |
| | AVSC 1100 | Ground I - Private | 3 |
| | AVSC 1110 | Flight I - Private | 3 |
| | AVSC 1120 | Basic Aircraft Systems | 1 |
| | AVSC 1230 | Flight II - Instrument I | 2 |
| | AVSC 1240 | Ground II - Instrument | 3 |
| | AVSC 1250 | Flight II - Instrument II | 3 |
| | AVSC 1260 | 21st Century Avionics and Instrumentation | 1 |
| | AVSC 2110 | Aviation Weather | 3 |
| | AVSC 2130 | Aviation Safety | 3 |
| | AVSC 2150 | Air Transportation Management | 3 |
| | AVSC 2300 | Ground IV - Commercial | 3 |
| | AVSC 2310 | Flight IV - Commercial | 3 |
| | AVSC 2450 | Flight III - Multi Engine | 1 |
| | AVSC 2440 | Ground III - Multi Engine | 1 |
| Complete one of the following sets of courses: | | | 9 |
| | Certified Flight Instructor: | | |
| | AVSC 2400 | Ground Certified Flight Instructor (4) | |
| | AVSC 2410 | Flight Certified Flight Instructor (1) | |
| | AVSC 2420 | Ground CFI Instrument (1) | |
| | AVSC 2430 | Flight CFI Instrument (1) | |
| | AVSC 2500 | Ground Multi-Engine Instructor (1) | |
| | AVSC 2510 | Flight Multi-Engine Instructor (1) | |
| | First Officer: | | |
| | AVSC 3300 | Jet Transport Systems (3) | |
| | AVSC 3600 | Multi-piloted Operations (3) | |
| | AVSC 4800 | Professional Pilot Capstone (3) | |
| | Aviation Management: | | |
| | AVSC 3020 | Aviation Insurance and Risk Management (3) | |
| | AVSC 3060 | Airline Management (3) | |
| | AVSC 3090 | Airline and Dispatch Operations (3) | |
| | AVSC 3120 | Airport Management (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 63 or more semester credits.
2. Overall grade point average of 2.0 (C) or above. C- or above required for all aviation major classes.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements
5. Completion of Commercial Pilot Certificate.
6. Students may count no more than 4 credit hours of total cooperative work experience (AVSC 281/285R) toward the degree requirements without department approval.

## Aviation Science, A.S.

### *Requirements*

The A.S. degree is designed to prepare the student with all the ratings necessary to be qualified for entry-level jobs in the aviation field. Obtaining an associate degree helps the graduate prepare for a diversity of job-related responsibilities and prepares students to enter directly into the B.S. degree.

**Total Program Credits: 62**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0)[1] | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science[2] | | 3 |
| | Additional Biology or Physical Science[3] | | 3 |
| | Humanities Distribution[4] | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science[5] | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | AVSC 1010 | Survey of Aviation Science | 3 |
| or | AVSC 1050 | Introduction to Aviation Management (3.0) | |
| | AVSC 1100 | Ground I - Private | 3 |
| | AVSC 2070 | Communications for Aviation Professionals | 3 |
| or | MKTG 220G | Written Business Communication WE (3.0) | |
| | AVSC 2110 | Aviation Weather | 3 |
| | AVSC 2130 | Aviation Safety | 3 |
| | AVSC 2150 | Air Transportation Management | 3 |
| Elective Requirements: | | | 9 Credits |
| | Elective credits | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 62 or more semester credits.
2. Overall grade point average of 2.0 (C) or above. Aviation courses require a C- or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

Footnotes

1. If student chooses HIST 2700 and HIST 2710 as the additional hours may be used towards a social science distribution requirement.
2. PHYS 1850 recommended
3. METO 1010 recommended
4. COMM 1020 and COMM 1025 recommended
5. PSY 1010 recommended

## Aviation Science, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Aviation Science is available for all UVU students with a particular focus designed to provide high school students an opportunity to obtain a stackable certificate of proficiency with an emphasis in career and technical education while still enrolled in high school. This certificate is available from the University for college students/adults looking for basic entry-level skills leading to further academic advancement.

**Total Program Credits: 16**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writin | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | MAT 1010 | Intermediate Algebra | 4 |
| | HIST 1700 | American Civilization | 3 |
| | AVSC 1010 | Survey of Aviation Science | 3 |
| | AVSC 1100 | Ground I - Private | 3 |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above.
2. Completion of 16 credit hours in subjects included in the course list.
3. All courses must be completed with a grade of C- or better.

## Aerospace Technology Management, B.S.

### *Requirements*

The BS in Aerospace Technology Management from Utah Valley University is designed to prepare graduates for various technical aerospace professional roles across a products life cycle. Skills associated with air and space vehicle sustainability systems and risk management, customer management, project management, aftermarket services, business development, manufacturing and inspection processes, safety management systems, and process improvement will be learned and applied. The program will provide a completion degree for students who possess the Airframe and Powerplant ratings of an

FAA issued Aircraft Maintenance Technician Certificate under the rules defined by FAR Part 65 or possess a license as an Aircraft Maintenance Engineer (Cat B1) issued under EASA Part 66 regulations.

**Total Program Credits: 123**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Completion of a Technical Specialty associated with FAA issued Airframe & Powerplant Maintenance Technician Certificate issued under rules of FAR Part 65 OR Completion of an Associates in Science or an Associates of Applied Science Degree from a regionally accredited institution of higher education with a designated technical specialty associated with FAA issued Airframe & Powerplant Maintenance Technician Certificate issued under the rules of FAR Part 147 OR possess a license as an Aircraft Maintenance Engineer (AME) (Cat B1) issued under EASA Part 66 regulations. A total not to exceed 45 credit hours will be awarded for evidence of the possession of the A&P or AME certificate. | | | |
| General Education Requirements | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| Biology | | | 3 |
| Physical Science (PHYS 1850 recommended) | | | 3 |
| Humanities (ENGL 2310 recommended) | | | 3 |
| Fine Arts | | | 3 |
| Social/Behavioral Science | | | 3 |
| Additional Biology or Physical Science (TECH 1010 or METO 1010 recommended) | | | 3 |

| | | | |
|---|---|---|---|
| Technical Core Requirement | | | 45 Credits |
| Completion of a Technical Specialty associated with FAA issued Airframe & Powerplant Maintenance Technician Certificate issued under rules of FAR Part 65 OR Completion of an Associates in Science or an Associates of Applied Science Degree from a regionally accredited institution of higher education with a designated technical specialty associated with FAA issued Airframe & Powerplant Maintenance Technician Certificate issued under the rules of FAR Part 147 OR possess a license as an Aircraft Maintenance Engineer (AME) (Cat B1) issued under EASA Part 66 regulations. A total not to exceed 45 credit hours will be awarded for evidence of the possession of the A&P or AME certificate. | | | 45 |
| Discipline Core Requirements | | | 30 Credits |
| | TECH 3400 | Project Management WE | 3 |
| | TECH 3850 | Quality Management in Technology | 3 |
| | AVSC 2150 | Air Transportation Management | 3 |
| | AVSC 3320 | Aviation Managerial Accounting | 3 |
| | AVSC 4500 | Aerospace Aftermarket Support Services | 3 |
| | AVSC 4550 | Aerospace Vehicle Certification-Reliability-Maintainability Systems | 3 |
| | AVSC 4950 | Aerospace Technology Management Capstone Project | 3 |
| | AVSC 410G | Global Ethical and Professional Issues in Aviation | 3 |
| Complete (2) of the following: | | | 6 |
| | AVSC 3100 | Corporate Aviation Management (3) | |
| | AVSC 3020 | Aviation Insurance and Risk Management (3) | |
| | AVSC 3090 | Airline and Dispatch Operations (3) | |
| | AVSC 3310 | Aviation Logistics Management (3) | |
| | AVSC 3150 | Principles of Aviation Management (3) | |
| | AVSC 3350 | Aviation Labor and Human Resource (3) | |
| | AVSC 4160 | Aviation Law (3) | |
| Elective Requirements | | | 13 Credits |
| Complete 13 upper division credits | | | 13 |

**Graduation Requirements:**

1. Completion of a minimum of 123 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. No grade lower than a C- in any AVSC or TECH course.
4. Residency hours - Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of GE and specified departmental requirements.
6. Successful completion of at least one (1) Global/Intercultural course.

## Aviation Management, B.S.

### *Requirements*

This degree is designed to develop practical leadership skills for a variety of careers in the aviation industry. Courses are based on real world aviation needs and are developed through ties with industry experts. The curriculum will prepare students with a broad range of

knowledge and skills, including airline and airport management, aviation security and safety, marketing, aviation finance, human resources, and many others.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Students seeking admission to the program will be required to meet the following admissions requirements:<br>1. Completion of ENGL 1010 or ENGH 1005 and 25 aviation credits with a grade of C+ or higher<br>2. Overall GPA of at least 2.5 | | | |
| **General Education Requirements:** | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Complete one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3)[1] | |
| and | HIST 2710 | US History since 1877 (3)[1] | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology (BIOL 1010 recommended) | | 3 |
| | Physical Science[2] | | 3 |
| | Additional Biology or Physical Science[3] | | 3 |
| | Humanities Distribution[4] | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science[5] | | 3 |
| Discipline Core Requirements: | | | 85 Credits |
| | AVSC 1010 | Survey of Aviation Science | 3 |
| | AVSC 1100 | Ground I - Private | 3 |
| | AVSC 2070 | Communications for Aviation Professionals | 3 |
| or | MKTG 220G | Written Business Communication WE (3) | |
| | AVSC 2090 | Air Transport Economics | 3 |
| or | ECON 2020 | Principles of Economics II (3) | |
| | AVSC 2110 | Aviation Weather | 3 |
| | AVSC 2130 | Aviation Safety | 3 |
| | AVSC 2150 | Air Transportation Management | 3 |
| | AVSC 2180 | Managing Technology in Aviation | 3 |
| | AVSC 2250 | Aviation Business Statistics | 3 |
| | AVSC 2710 | Aviation Marketing | 3 |
| | AVSC 3020 | Aviation Insurance and Risk Management | 3 |
| | AVSC 3030 | Air Traffic Control I | 3 |
| | AVSC 3060 | Airline Management | 3 |
| | AVSC 3090 | Airline and Dispatch Operations | 3 |
| | AVSC 3100 | Corporate Aviation Management | 3 |
| | AVSC 3120 | Airport Management | 3 |
| | AVSC 3150 | Principles of Aviation Management | 3 |
| | AVSC 3320 | Aviation Managerial Accounting | 3 |
| | AVSC 4020 | Applied Aviation Finance | 3 |
| | AVSC 410G | Global Ethical and Professional Issues in Aviation | 3 |
| | AVSC 4160 | Aviation Law | 3 |
| | AVSC 4700 | Aviation Professional Seminars | 3 |
| | AVSC 4710 | Aviation Career Preparation | 1 |
| | AVSC 4900 | Strategic Aviation Management Capstone | 3 |
| Elective Requirements: | | | 15 Credits |
| Must complete 15 credits. | | | 15 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, with a minimum of 40 upper division semester credits.
2. Overall grade point average of 2.0 (C) or above. Aviation courses require a C- or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Students may count no more than 8 credit hours of total cooperative work experience (AVSC 281R/AVSC 285R /AVSC 481R/AVSC 485R toward the degree requirement without department approval.
5. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| 1- If student chooses HIST 2700 and HIST 2710, the additional hours may be used towards a social science distribution requirement. |
| 2-PHYS 1010 Elementary Physics PP recommended |
| 3-METO 1010 Introduction to Meteorology PP recommended |
| 4-COMM 1020 Public Speaking and COMM 1025 Public Speaking Lab recommended |
| 5-PSY 1010 General Psychology SS recommended |

# Professional Pilot, B.S.

## *Requirements*

The Bachelor of Science in Professional Pilot prepares students to enter the work force as a certified flight instructor and commercial, multi-engine rated pilot. Students receive specific training under Federal Aviation Administration (FAA) 14 CFR Part 141 and Restricted Air Transport Pilot (R-ATP) regulations to qualify for specialized employment requirements with a regional airline. Delivery focuses on technical training and applied exercises providing the knowledge and skills required for several licenses and ratings.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| Students seeking admission to the program will be required to meet the following admission requirements:<br>1. Hold a second class FAA medical certificate from an FAA designated Medical.<br>2. An overall GPA of at least 2.5.<br>3. Due to limited availability of flight training resources, flight student admission into the on-campus AVSC 1110 Flight I - Private Pilot course, when necessary, may require selection through a competitive point based application. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education,Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0)[1] | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science[2] | | 3 |
| | Additional Biology or Physical Science[3] | | 3 |
| | Humanities Distribution[4] | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science[5] | | 3 |
| Discipline Core Requirements: | | | 68 Credits |
| | AVSC 1010 | Survey of Aviation Science | 3 |
| | AVSC 1100 | Ground I - Private | 3 |
| | AVSC 1110 | Flight I - Private | 3 |
| | AVSC 1240 | Ground II - Instrument | 3 |
| | AVSC 1250 | Flight II - Instrument II | 3 |
| | AVSC 2070 | Communications for Aviation Professionals | 3 |
| | AVSC 2110 | Aviation Weather | 3 |
| | AVSC 2130 | Aviation Safety | 3 |
| | AVSC 2150 | Air Transportation Management | 3 |
| | AVSC 2300 | Ground IV - Commercial | 3 |
| | AVSC 2310 | Flight IV - Commercial | 3 |
| | AVSC 2440 | Ground III - Multi Engine | 1 |
| | AVSC 2450 | Flight III - Multi Engine | 1 |
| | AVSC 3030 | Air Traffic Control I | 3 |
| | AVSC 3090 | Airline and Dispatch Operation | 3 |
| | AVSC 3200 | Flight Physiology | 3 |
| | AVSC 3300 | Jet Transport Systems | 3 |
| | AVSC 3400 | International Flight Operations | 3 |
| | AVSC 3530 | Flight Aerodynamic | 3 |
| | AVSC 3600 | Multi-piloted Operations | 3 |
| | AVSC 410G | Global Ethical and Professional Issues in Aviation | 3 |
| | AVSC 4160 | Aviation Law | 3 |
| | AVSC 4700 | Aviation Professional Seminars | 3 |
| | AVSC 4800 | Professional Pilot Capstone | 3 |
| Elective Requirements: | | | 17 Credits |
| Upper division elective credits | | | 9 |
| 1000+ Electives | | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, with a minimum of 40 upper division semester credits.
2. Overall grade point average of 2.0 (C) or above. Aviation courses require a C- or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of Commercial Pilot Certificate.
5. Students in the Professional Pilot degree should obtain an FAA Class I or II Medical Certificate prior to beginning flight training.
6. Students may count no more than 8 credit hours of total cooperative work experience (AVSC 281R/285R/481R/485R) toward the degree requirements without department approval.

7. Successful completion of at least one Global/Intercultural course.

| Footnote: |
| --- |
| 1- If student chooses HIST 2700 and HIST 2710, the additional hours may be used towards a social science distribution requirement. |
| 2- PHYS 1850 recommended |
| 3- METO 1010 recommended |
| 4- COMM 1020 and 1025 recommended |
| 5- PSY 1010 recommended |

# Behavioral Science

## Behavioral Science

The Behavioral Science department is in the College of Humanities and Social Sciences. To find the most up-to-date information from the Behavioral Science department, visit their website.

Behavioral Science department

**CLINICAL DIRECTOR**

**PETERSON, Colleen** *Assistant Professor*

**DEPARTMENT CHAIR**

**JOHN, Cameron R.** *Associate Professor*

**FACULTY**

**ANDELIN, Lane B.** *Lecturer*
**ANDERSON, Christopher D** *Assistant Professor*
**AROCHO, Rachel** *Assistant Professor*
**BODEN, Jeremy** *Associate Professor*
**BRETON, Brett** *Assistant Professor*
**CHAKRAVARTY, Debjani** *Associate Professor*
**CHOU, Grace** *Professor*
**COTTLE, Nathan** *Professor*
**DRAPER, Matthew** *Professor*
**DULIN, John** *Assistant Professor*
**EGGERTSEN, Lars** *Associate Professor*
**FAWCETT, Elizabeth** *Assistant Professor*
**HAMMOND, Ronald J.** *Professor*
**HANKS, Julie** *Assistant Professor*
**HASLAM, Darryl R.** *Assistant Professor*
**HILL, Jessica** *Associate Professor*
**HYDO, Mykenzie** *Assistant Professor*
**HYDO, Richard J.** *Lecturer*
**JOHN, Cameron R.** *Associate Professor*
**JORGENSEN, Claudia** *Associate Professor*
**KNOWLTON, David Clark** *Professor*
**KOPP, Kristopher** *Assistant Professor*
**LAFKAS, Sara** *Assistant Professor*
**LAMBERT, Kristin** *Assistant Professor*
**MCDONELL, Martin** *Associate Professor*
**MISBACH, Alan R.** *Associate Professor*
**NELSON, Julie** *Assistant Professor*
**NIELSON, Elijah K.** *Assistant Professor*
**OLDROYD, Kristina** *Assistant Professor*
**OVEROYE, Acacia** *Assistant Professor*
**PANOS, Angelea** *Assistant Professor*
**PETERSON, Colleen** *Assistant Professor*
**PETERSON, Katelyn** *Lecturer*
**POSTLER, Kaicee** *Assistant Professor*
**POULSON, Barton** *Associate Professor*
**ROBBINS, John** *Lecturer*
**SCHLOSNAGLE, Leo** *Assistant Professor*
**SHUBERT, Jennifer** *Assistant Professor*
**SIMON, Alexander** *Professor*
**SPENCER, Todd A.** *Assistant Professor*
**TAYLOR, James** *Assistant Professor*
**TOLMAN, Anton** *Professor*
**WARNE, Russell T.** *Associate Professor*
**WILLIAMS, Lashawn** *Assistant Professor*

## Course Descriptions

Anthropology....477
Autism Studies....502

Behavioral Science....511
Clin Mental Health Counseling....538
Family Science....637
Psychology....757
Sociology....771
Substance Use Disorder Counsel....778
Social Work....781

# Degrees & Programs

## Behavioral Science, A.A.

### *Requirements*

The UVU Behavioral Science Department offers classes that fulfill the social science distribution requirements for graduation, the Behavioral Science pre-major for the associate degree, the Behavioral Science major for the bachelor degree (with an emphasis in Anthropology, Family Studies, Psychology, or Sociology, a Bachelor of Social Work, and a Certificate of Proficiency in Substance Use Disorder Counseling (SUDC).

**Total Program Credits: 61**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) [2] | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | PSY 1010 | General Psychology (Social/Behavioral Science) | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| Complete the following four courses: | | | 12 |
| | ANTH 101G | Social/Cultural Anthropology (3.0) | |
| | SOC 1010 | Introduction to Sociology (3.0) | |
| | FAMS 101G | Contemporary Families (3.0) | |
| | SW 1010 | Introduction to Social Work (3.0) | |
| Complete any two courses from the following: | | | 6 |
| | ANTH 1020 | Biological Anthropology (3.0) | |
| | ANTH 103G | World Prehistory (3.0) | |
| | AIST 180G | Introduction to American Indian Studies (3.0) | |
| | ANTH 2030 | Archeological Method and Theory (3.0) | |
| | FAMS 1150 | Marriage and Relationship Skills (3.0)[3] | |
| | FAMS 2705 | Ethics for Family Interventions (3.0) | |
| | PSY 1100 | Human Development Life Span (3.0)[3] | |
| | PSY 2250 | Psychology of Interpersonal Relationships (3.0) | |
| | PSY 2400 | Positive Psychology (3.0) | |
| | PSY 275R | Survey of Current Topics (1.0) | |
| | PSY 2800 | Human Sexuality (3.0)[3] | |
| | SOC 1020 | Modern Social Problems (3.0) | |
| | SOC 107G | Multicultural Societies (3.0) | |
| | SOC 2370 | Sociology of Gender (3.0) | |
| | SOC 275R | Survey of Current Topics (1.0) | |
| | SW 275R | Survey of Current Topics (3.0) | |
| Elective Requirements: | | | 8 Credits |
| | Complete 1010 and 1020 of the same Foreign Language | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 61 semester credits.
2. Overall GPA of 2.0 or above upon graduation.
3. Minimum of a 2.5 cumulative GPA or higher in the Behavioral Science courses (ANTH, BESC, FAMS, SW, SOC, PSY).
4. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
5. All major course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.

Note: Students would need to pass ENGL 1010 or ENGH 1005 and ENGL 2010 with a C+ or higher as prerequisites for the Behavioral Science Bachelor degree courses.

| Footnote |
|---|
| [2] Recommended if student is considering an MSW program. |
| [3] Recommended for students considering the Family Science Bachelor degree. |

# Behavioral Science, A.S.

## *Requirements*

The UVU Behavioral Science Department offers classes that fulfill the social science distribution requirements for graduation, the Behavioral Science pre-major for the associate degree, the Behavioral Science major for the bachelor degree (with an emphasis in Anthropology, Family Studies, Psychology, or Sociology, a Bachelor of Social Work, and a Certificate of Proficiency in Substance Use Disorder Counseling (SUDC).

**Total Program Credits: 61**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) [1] | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | PSY 1010 | General Psychology (Social/Behavioral Science) | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| Complete the following four courses: | | | 12 |
| | ANTH 101G | Social/Cultural Anthropology (3.0) | |
| | SOC 1010 | Introduction to Sociology (3.0) | |
| | FAMS 101G | Contemporary Families (3.0) | |
| | SW 1010 | Introduction to Social Work (3.0) | |
| Complete any two courses from the following: | | | 6 |
| | ANTH 1020 | Biological Anthropology (3.0) | |
| | ANTH 103G | World Prehistory (3.0) | |
| | AIST180G | Introduction to American Indian Studies (3.0) | |
| | ANTH 2030 | Archeological Method and Theory (3.0) | |
| | FAMS 1150 | Marriage and Relationship Skills (3.0) [2] | |
| | FAMS 2705 | Ethics for Family Interventions (3.0) | |
| | PSY 1100 | Human Development Life Span (3.0)[2] | |
| | PSY 2250 | Psychology of Interpersonal Relationships (3.0)[2] | |
| | PSY 2400 | Positive Psychology (3.0) | |
| | PSY 275R | Survey of Current Topics (1.0) | |
| | PSY 2800 | Human Sexuality (3.0) [2] | |
| | SOC 1020 | Modern Social Problems (3) | |
| | SOC 107G | Multicultural Societies (3.0) | |
| | SOC 2370 | Sociology of Gender (3.0) | |
| | SOC 275R | Survey of Current Topics (1.0) | |
| | SW 275R | Survey of Current Topics (3.0) | |
| Elective Requirements: | | | 8 Credits |
| | Any additional courses 1000-level or higher. | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 61 semester credits.
2. Overall GPA of 2.0 or above upon graduation.
3. Minimum of a 2.5 cumulative GPA or higher in the Behavioral Science courses (ANTH, BESC, FAMS, SW, SOC, PSY).
4. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
5. All major course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.

Note: Students would need to pass ENGL 1010 or ENGH 1005 and ENGL 2010 with a C+ or higher as prerequisites for the Behavioral Science Bachelor degree courses.

| Footnote |
|---|
| [1] Recommended if student is considering an MSW program. |
| [2] Recommended for students considering the Family Science Bachelor degree. |

# Advanced Substance Use Disorder Counseling, Certificate of Proficiency

## *Requirements*

The UVU Behavioral Science Department offers classes that fulfill the social science distribution requirements for graduation, the Behavioral Science pre-major for the associate degree, the Behavioral Science major for the bachelor degree (with an emphasis in Anthropology, Family Studies, Psychology, or Sociology, a Bachelor of Social Work,

and a Certificate of Proficiency in Substance Use Disorder Counseling (SUDC).

**Total Program Credits: 32**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | 9 Credits |
| Students must apply and be admitted to the UVU SUDC program. The following three courses must be completed with a C- grade or higher prior to starting the SUDC program and must be verified on the application for admission. For additional admission information for this program please visit www.uvu.edu/besc/sudc.html. | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | PSY 1010 | General Psychology | 3 |
| | PSY 1100 | Human Development Life Span | 3 |
| Discipline Core Requirements: | | | 23 Credits |
| | SUDC 4710 | Introduction to Professional Development | 2 |
| | SUDC 4300 | Introduction to Substance Use Disorder Counseling | 3 |
| | SUDC 3470 | Dynamics of Addiction | 3 |
| | SUDC 3430 | Psychopharmacology for the Substance Use Disorder Counseling Field | 3 |
| | SUDC 4400 | Advanced Substance Use Disorder Counseling | 3 |
| | SUDC 4720 | Advanced Professional Development | 3 |
| | SUDC 481R | Internship | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 32 semester credits.
2. Overall grade point average of a 2.0 (C) or above. All courses must be passed with a C- grade or higher in order for students to receive their Certificate of Proficiency from this program.
3. Upon completion of the UVU SUDC Certificate of Proficiency program, students will work with the Utah Division of Occupational and Professional Licensing (DOPL) in regards to meeting the additional licensing requirements and obtaining their SUDC or ASUDC license(s).
4. Residency hours -- minimum of 8 credit hours through course attendance at UVU.

## Interdisciplinary Gerontology, Certificate of Proficiency

### *Requirements*

The certificate will be housed in the Department of Behavioral Science yet is an interdisciplinary (Public and Community Health, Nursing, and Behavioral Science: Psychology, Sociology, Social Work, and Family Studies) undergraduate gerontology certificate that allows students to build a unique set of credentials they compose from a menu of existing UVU courses that meet the guidelines set forth by the Association for Gerontology in Higher Education (AGHE).

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 9 Credits |
| Complete 9 credits from this list of core classes: | | | 9 |
| | PSY 1100 | Human Development Life Span (3) | |
| or | FAMS 1100 | Life Span Development in the Family (3) | |
| | SOC 375G | Sociology of Aging (3) | |
| | SW 355G | Thanatology--Death and Dying (3) | |
| Elective Requirements: | | | 9 Credits |
| Complete 6 credits from this list of core classes: | | | 6 |
| | FAMS 3850 | Adult Development and Aging (3) | |
| | EXSC 4100 | Fitness Across the Lifespan (3) | |
| | FAMS 2800 | Teaching Human Sexuality (3) | |
| or | HLTH 2800 | Human Sexuality (3) | |
| or | PSY 2800 | Human Sexuality (3) | |
| | FAMS 3410 | Fundamentals of Mediation and Negotiation (3) | |
| or | COMM 3410 | Fundamentals of Mediation and Negotiation (3) | |
| | FAMS 4200 | Advanced Mediation and Negotiation (3) | |
| or | COMM 4200 | Advanced Mediation and Negotiation (3) | |
| | FAMS 4300 | Family Dispute Resolution (3) | |
| | FAMS 4500 | Family Life Education Methodology (3) | |
| | FAMS 4660 | Family Financial and Resource Management (3) | |
| | HLTH 3240 | Womens Health Issues (3) | |
| | HLTH 350G | International Health (3) | |
| | HLTH 3300 | Health Promotion for Older Adults (3) | |
| | HLTH 3400 | Human Diseases (3) | |
| | HLTH 3800 | Epidemiology (3) | |
| | NURS 2325 | Nursing Practice Simulation and Skills Lab I (2) | |
| or | NURS 2415 | Nursing Care of Adults with Common Health Needs Clinical (2) | |
| or | NURS 3335 | Nursing Care of Individuals with Complex Health Needs Clinical (2) | |
| or | NURS 3405 | Patient Care Coordination and Management Preceptorship (2) | |
| or | NURS 4325 | Nursing in the Community Clinical (1) | |
| | NURS 2420 | Nursing Care of the Aging Population (2) | |
| | NURS 4230 | Palliative Care in Nursing (3) | |
| | NUTR 2020 | Nutrition Through the Life Cycle (3) | |
| | PSY 2300 | Abnormal Psychology (3) | |
| | PSY 3220 | Adult Development (3) | |
| | PSY 3420 | Cognitive Psychology WE (3) | |
| | SW 1010 | Introduction to Social Work (3) | |
| | SW 2100 | Human Behavior and the Social Environment I (3) | |
| | SW 3400 | Human Behavior and the Social Environment II (3) | |
| Complete any 3 credits from AGHE Competency III (part 11) Internship/Research Courses: | | | 3 |

| | | | |
|---|---|---|---|
| | BESC 481R | Senior Internship (1) | |
| | EXSC 481R | Internship in Exercise Science (1) | |
| | FAMS 481R | Community Practicum (1) | |
| | HLTH 482R | Community Health Internship (1) | |
| | NURS 4240 | Promoting Active Senior Lifestyles (2) | |
| | NURS 481R | Internship in Nursing (1) | |
| | NURS 489R | Undergraduate Research in Nursing (1) | |
| | NURS 490R | Special Topics in Nursing (1) [1,2] | |
| | NURS 495R | Independent Study in Nursing (1) | |
| | PSY 482R | Internship Seminar (1) | |
| | SW 481R | Field Placement (1) | |

**Graduation Requirements:**

1. Completion of a Minimum of 18 Semester Credits.
2. Overall GPA of 2.0 or above upon graduation.
3. Residency hours -- minimum of 5 credit hours through course attendance at UVU.

| Footnotes: |
|---|
| 1-If course not already taken. |
| 2-Must have departmental approval as course matter rotates. |

## Substance Use Disorder Counseling, Certificate of Proficiency

### *Requirements*

The UVU Behavioral Science Department offers classes that fulfill the social science distribution requirements for graduation, the Behavioral Science pre-major for the associate degree, the Behavioral Science major for the bachelor degree (with an emphasis in Anthropology, Family Studies, Psychology, or Sociology, a Bachelor of Social Work, and a Certificate of Proficiency in Substance Use Disorder Counseling (SUDC).

**Total Program Credits: 23**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | 9 Credits |
| Students must apply and be admitted to the UVU SUDC program. The following three courses must be completed with a C- grade or higher prior to starting the SUDC program and must be verified on the application for admission. For additional admission information for this program please visit www.uvu.edu/besc/sudc.html. | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | PSY 1010 | General Psychology | 3 |
| | PSY 1100 | Human Development Life Span | 3 |
| Discipline Core Requirements: | | | 14 Credits |
| | SUDC 4710 | Introduction to Professional Development | 2 |
| | SUDC 4300 | Introduction to Substance Use Disorder Counseling | 3 |
| | SUDC 3470 | Dynamics of Addiction | 3 |
| | SUDC 3430 | Psychopharmacology for the Substance Use Disorder Counseling Field | 3 |
| | SUDC 481R | Internship (1.0) | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 23 semester credits.
2. Overall grade point average of 2.0 (C) or above. All courses must be passed with a C- grade or higher in order for students to receive their certificate of completion from this program.
3. Upon completion of the UVU SUDC Certificate of Proficiency program, students will work with the Utah Division of Occupational and Professional Licensing (DOPL) in regards to meeting additional licensing requirements and obtaining their SUDC or ASUDC license(s).
4. Residency hours -- Minimum of 6 credit hours through course attendance at UVU.

## Anthropology, Minor

### *Requirements*

The BA/BS/Minor will give students the opportunity to earn a full major/minor in the field of anthropology. Students who obtain this degree will a) develop anthropological knowledge, enabling them to analyze trends in culture and society, b) methodological competence, learning to apply anthropological methods for learning about cultural/ideological differences and navigating them in daily life, and c) essential skills, written and spoken communication, analytic reading and writing, building rapport with people from different backgrounds. The Minor in Anthropology will allow students pursuing other majors to earn a credential that suggests critical thinking skills, writing ability, and cultural sensitivity.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 6 Credits |
| | ANTH 101G | Social Cultural Anthropology | 3 |
| | ANTH 2880 | Introduction to Theory and Ethnography WE | 3 |
| Elective Requirements: | | | 12 Credits |
| | Any anthropology course numbered 3000 or higher | | 12 |

## Family Science, Minor

### *Requirements*

This minor provides individuals insight into relationship and group dynamics. This include important relationship skills, such as speaking, listening, and other communication skills that could be applied to family and professional settings. Content in the minor may also include important research findings and evidence-based curricula listed on the National Registry of Evidenced-based Programs and Practices (NREPP) on the SAMHSA website.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 18 Credits |
| | FAMS 101G | Contemporary Families | 3 |
| Complete 15 credits from the following: | | | 15 |
| | FAMS 1100 | Life Span Development in the Family (3.0) | |
| | FAMS 1150 | Marriage and Relationship Skills (3.0) | |

| | | | |
|---|---|---|---|
| | FAMS 3250 | Applied Parenting (3.0) | |
| | FAMS 3800 | Early Development in Families (3.0) | |
| | FAMS 3850 | Adult Development and Aging (3.0) | |
| | FAMS 4660 | Family Financial and Resource Management (3.0) | |
| | FAMS 4670 | Family Dynamics and Systems (3.0) | |

**Graduation Requirements:**

1. All course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.

## Psychology, Minor

### *Requirements*

The Minor in Psychology is designed for students who desire a full bachelor's degree in psychology. The degree will prepare students for careers and further education in Utah, the Mountain West, and nationwide by (a) creating a curriculum built around the five pillars of psychology described by the American Psychological Association (APA); (b) emphasizing skills desired by employers (e.g., written communication, critical thinking, working in teams); and (c) providing engaged learning experiences (e.g., service-learning, internship, capstone) about current psychological topics.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | PSY 1010 | General Psychology | 3 |
| | PSY 2300 | Abnormal Psychology | 3 |
| | PSY 2710 | Introduction to Brain and Behavior | 3 |
| | PSY 3420 | Cognitive Psychology WE | 3 |
| | PSY 350G | Social Psychology | 3 |
| Development Requirement | | | |
| Complete ONE of the following: | | | 3 |
| | PSY 3200 | Infancy and Childhood Development (3) | |
| | PSY 3210 | Adolescent Development (3) | |
| | PSY 3220 | Adult Development (3) | |

**Graduation Requirements:**

1. All course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.

## Sociology, Minor

### *Requirements*

Sociology is the scientific study of society which includes studying individuals in their primary and secondary groups and larger social institutions. It examines the social context of individual and collective lives. Sociology is a relatively young discipline that describes, explains, and predicts social interactions and institutions using theoretical as well as social scientific methods of inquiry. According to the American Sociological Association, the essential concepts that students will learn within sociology are social construction of everyday life and sociological imagination; social structure; socialization; social stratification, and social change. Students will also gain competencies in critical and theoretical thinking and application of social scientific methodology towards rigorous data analysis.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| Complete 2 requied classes | | | 6 |
| | SOC 1010 | Introduction to Sociology (3) | |
| | SOC 1020 | Modern Social Problems (3) | |
| Complete any 4 of the following classes (with at least 3 upper division) | | | 12 |
| | BESC 3020 | Research Methods for the Behavioral Sciences (3) | |
| | PSY 3110 | Statistics for the Behavioral Sciences (4) | |
| | SOC 1200 | Sociology of the Family (3) | |
| | SOC 2370 | Sociology of Gender (3) | |
| | SOC 320G | Race and Minority Relations (3) | |
| | SOC 3400 | Sociology of Religion (3) | |
| | SOC 3460 | Political Sociology (3) | |
| | SOC 3520 | Environmental Sociology (3) | |
| | SOC 3690 | Internet and Society (3) | |
| | SOC 375G | Sociology of Aging (3) | |
| | SOC 3800 | Animals and Society (3) | |
| | SOC 4000 | Classical Social Theory (3) | |
| | SOC 4020 | Survey Research Design (3) | |
| | SOC 4100 | Contemporary Social Theory WE (3) | |
| | SOC 4400 | Social Change (3) | |
| | SOC 475R | Current Topics in Sociology (1) | |
| | SOC 490R | Independent Studies (1) | |

**Graduation Requirements:**

All course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.

## Anthropology, B.A.

### *Requirements*

The BA/BS/Minor will give students the opportunity to earn a full major/minor in the field of anthropology. Students who obtain this degree will a) develop anthropological knowledge, enabling them to analyze trends in culture and society, b) methodological competence, learning to apply anthropological methods for learning about cultural/ideological differences and navigating them in daily life, and c) essential skills, written and spoken communication, analytic reading and writing, building rapport with people from different backgrounds. The Minor in Anthropology will allow students pursuing other majors to earn a credential that suggests critical thinking skills, writing ability, and cultural sensitivity.

**Total Program Credits: 120**

| General Education Requirements: | | | 36 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |

| | | | |
|---|---|---|---|
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | ANTH 101G | Social/Cultural Anthropology | 3 |
| | ANTH 1020 | Biological Anthropology | 3 |
| | Humanities Distribution (Fulfilled with Foreign Language 2020/202G course) | | 4 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | ANTH 103G | World Prehistory | 3 |
| | ANTH 2880 | Introduction to Theory and Ethnography WE | 3 |
| | ANTH 3000 | Language and Culture | 3 |
| | ANTH 3850 | Ethnographic Methods WE | 3 |
| | ANTH 4120 | History of Anthropological Thought | 3 |
| | ANTH 4130 | Contemporary Theory and Debates | 3 |
| | Anthropology Electives: Any anthropology elective numbered 3000 or higher | | 18 |
| Elective Requirements: | | | 48 Credits |
| | Language Requirement | | 12 |
| | Any course numbered 3000 or higher | | 10 |
| | Any course numbered 1000 or higher | | 26 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum UVU GPA of 2.0 upon graduation.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor for an explanation of all program requirements, a list of recommended classes, and for assistance with creating an academic plan for graduation.

Note: If a student has completed an associate degree through another institution, the required general education courses may be waived.

## Anthropology, B.S.

### *Requirements*

The BA/BS/Minor will give students the opportunity to earn a full major/minor in the field of anthropology. Students who obtain this degree will a) develop anthropological knowledge, enabling them to analyze trends in culture and society, b) methodological competence, learning to apply anthropological methods for learning about cultural/ideological differences and navigating them in daily life, and c) essential skills, written and spoken communication, analytic reading and writing, building rapport with people from different backgrounds. The Minor in Anthropology will allow students pursuing other majors to earn a credential that suggests critical thinking skills, writing ability, and cultural sensitivity.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |

| | | | |
|---|---|---|---|
| | Biology | | 3 |
| | Physical Science | | 3 |
| | ANTH 101G | Social/Cultural Anthropology | 3 |
| | ANTH 1020 | Biological Anthropology | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 36 Credits |
| | ANTH 103G | World Prehistory | 3 |
| | ANTH 2880 | Introduction to Theory and Ethnography WE | 3 |
| | ANTH 3000 | Language and Culture | 3 |
| | ANTH 3850 | Ethnographic Methods WE | 3 |
| | ANTH 4120 | History of Anthropological Thought | 3 |
| | ANTH 4130 | Contemporary Theory and Debates | 3 |
| | Anthropology Electives: Any anthropology elective numbered 3000 or higher | | 18 |
| Elective Requirements: | | | 49 Credits |
| | Any course numbered 3000 or higher | | 10 |
| | Any course numbered 1000 or higher | | 39 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum UVU GPA of 2.0 upon graduation.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor for an explanation of all program requirements, a list of recommended classes, and for assistance with creating an academic plan for graduation.

Note: If a student has completed an associate degree through another institution, the required general education courses may be waived.

## Family Science, B.A.

### *Requirements*

The Family Science program closely aligns with the requirements of the National Council on Family Relations (NCFR). [NCFR is the premier professional association in the family science field, and these standards require that students gain knowledge and expertise in ten key areas] and is an approved program for the Certified Family Life Educator (CFLE).

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Third Science - Additional Biology or Physical Science | | 3 |
| | Humanities (Fulfilled with Foreign Language 2020/202G course) | | 4 |
| | Fine Arts | | 3 |
| | Social Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 67 Credits |
| | FAMS 101G | Contemporary Families (3.0) | 3 |
| | FAMS 1100 | Life Span Development in the Family | 3 |
| | FAMS 1150 | Marriage and Relationship Skills | 3 |
| | FAMS 2705 | Ethics for Family Interventions | 3 |
| | FAMS 2800 | Teaching Human Sexuality | 3 |
| | FAMS 3000 | Social Work Practice I | 3 |
| | FAMS 3250 | Applied Parenting | 3 |
| | FAMS 4400 | Family Policy | 3 |
| | FAMS 4500 | Family Life Education Methodology | 3 |
| | FAMS 4660 | Family Financial and Resource Management | 3 |
| | FAMS 4670 | Family Dynamics and Systems | 3 |
| Internship Requirement: | | | 2 |
| | FAMS 482R | Stronger Families Internship (1) | |
| | FAMS 481R | Community Internship (1) | |
| | FAMS 483R | Research Internship (1) | |
| Elective Requirements: | | | 49 Credits |
| | Complete 25 hours of electives (20 of which must be upper division). Students should select courses | | 25 |

| | | |
|---|---|---|
| | that complement FamilyScience or that meet their personal goals. | |
| | Complete 12 credits in the same foreign language, includes ASL | 12 |
| | Any course numbered 1000 or higher | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum overall UVU GPA of 2.0 upon graduation.
3. Minimum 2.5 program GPA upon graduation.
4. Residency hours – minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. All major course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.
6. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, 202G/2020 levels or transferred equivalents.
7. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor for explanation of all program requirements, a list of recommended classes, and for assistance with creating an academic plan for graduation.

Note: If a student has completed an associate degree through another institution, the required general education courses may be waived.

Note: Students would need to pass ENGL 1010 or ENGH 1005 and ENGL 2010 with a C+ or higher for the Family Science degree courses.

## Family Science, B.S.

### *Requirements*

**The Family Science program closely aligns with the requirements of the National Council on Family Relations (NCFR). [NCFR is the premier professional association in the family science field, and these standards require that students gain knowledge and expertise in ten key areas] and is an approved program for the Certified Family Life Educator (CFLE).**

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Third Science - Additional Biology of Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 35 Credits |
| | FAMS 101G | Contemporary Families | 3 |
| | FAMS 1100 | Life Span Development in the Family | 3 |
| | FAMS 1150 | Marriage and Relationship Skills | 3 |
| | FAMS 2705 | Ethics for Family Interventions | 3 |
| | FAMS 2800 | Teaching Human Sexuality | 3 |
| | FAMS 3000 | Social Work Practice I | 3 |
| | FAMS 3250 | Applied Parenting | 3 |
| | FAMS 4400 | Family Policy | 3 |
| | FAMS 4500 | Family Life Education Methodology | 3 |
| | FAMS 4660 | Family Financial and Resource Management | 3 |
| | FAMS 4670 | Family Dynamics and Systems | 3 |
| Internship Requirement: Complete 2 credits from the following: | | | 2 |
| | FAMS 482R | Stronger Families Practicum (1.0) | |
| | FAMS 481R | Community Practicum (1.0) | |
| | FAMS 483R | Research Internship (1.0) | |
| Elective Requirements: | | | 50 Credits |
| | Complete 25 hours of electives (20 of which must be upper division). Students should select courses that complement FamilyScience or that meet their personal goals. | | 25 |
| | Any course numbered 1000 or higher | | 25 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum overall UVU GPA of 2.0 upon graduation.
3. Minimum 2.5 program GPA upon graduation.
4. Residency hours – minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.

5. All major course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.
6. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor for explanation of all program requirements, a list of recommended classes, and for assistance with creating an academic plan for graduation.

Note: If a student has completed an associate degree through another institution, the required general education courses may be waived.

Note: Students would need to pass ENGL 1010 or ENGH 1005 and ENGL 2010 with a C+ or higher for the Family Science degree courses.

## Psychology, B.A.

### *Requirements*

The BA in Psychology is designed for students who desire a full bachelor's degree in psychology. The degree will prepare students for careers and further education in Utah, the Mountain West, and nationwide by (a) creating a curriculum built around the five pillars of psychology described by the American Psychological Association (APA); (b) emphasizing skills desired by employers (e.g., written communication, critical thinking, working in teams); and (c) providing engaged learning experiences (e.g., service-learning, internship, capstone) about current psychological topics.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Course Requirements | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (Fulfilled with Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| | PSY 1010 | General Psychology (Fulfills Social/ Behavioral Science) | 3 |
| Discipline Core Requirements: | | | 33 Credits |
| Psychology Core | | | |
| | PSY 2020 | Psychology as a Science and Profession WE | 3 |
| | PSY 3030 | Research Methods for Psychology | 4 |
| | PSY 3110 | Statistics for the Behavioral Sciences | 4 |
| Psychology Foundations | | | |
| | Complete 9 credits: | | 9 |
| | PSY 1100 | Human Development Life Span (3) | |
| | PSY 2300 | Abnormal Psychology (3) | |
| | PSY 2710 | Introduction to Brain and Behavior (3) | |
| | PSY 3420 | Cognitive Psychology WE (3) | |
| | PSY 350G | Social Psychology (3) | |
| Individual Differences Requirement | | | |
| | Complete 3 credits: | | 3 |
| | PSY 2800 | Human Sexuality (3) | |
| | PSY 3100 | Psychology of Gender (3) | |
| | PSY 3300 | Motivation and Emotion (3) | |
| | PSY 3460 | Personality Theory (3) | |
| | PSY 4150 | Tests and Measurements (3) | |
| | PSY 4690 | Human Intelligence (3) | |
| | PSY 480G | Cross-Cultural Psychology (3) | |
| Advanced Psychology Requirement | | | |
| | Complete 10 credits: | | 10 |
| | PSY 3105 | Health Psychology (3) | |
| | PSY 3200 | Infancy and Childhood Development (3) | |
| | PSY 3210 | Adolescent Development (3) | |
| | PSY 3220 | Adult Development (3) | |
| | PSY 3425 | Cognitive Psychology Lab (1) | |
| | PSY 3430 | Psychopharmacology WE (3) | |
| | PSY 3450 | Behavioral Neuroscience (4) | |
| | PSY 3480 | Principles of Learning (4) | |
| | PSY 3490 | Sensation and Perception WE (4) | |
| | PSY 3710 | Introduction to Forensic Psychology (3) | |
| | PSY 4300 | Introduction to Counseling and Psychotherapy (3) | |
| | PSY 4500 | History and Systems of Psychology (3) | |
| | PSY 4850 | Introduction to Pedagogy (3) | |
| | | | |

| | | |
|---|---|---|
| Elective Requirements: | | 51 Credits |
| | Complete 12 credits of one Foreign Language, including ASL (Foreign Language 202G/2020 course fulfills Humanities Distribution) | 12 |
| | Complete 39 credits of 1000-level or higher coursework from any subject | 39 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum overall UVU GPA of 2.0 upon graduation.
3. Minimum 2.5 program GPA upon graduation.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. All major course work taken to meet Psychology requirements must be completed with a grade of C- or better.
6. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, 202G/2020 levels or transferred equivalents.
7. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor for explanation of all program requirements, a list of recommended classes, and for assistance with creating an academic plan for graduation.

Note: If a student has completed an associate degree through another institution, the required general education courses may be waived.

Note: Students would need to pass ENGL 1010 or ENGH 1005 and ENGL 2010 with a C+ or higher as prerequisites for the Psychology Bachelor degree courses.

## Psychology, B.S.

### *Requirements*

The BS in Psychology is designed for students who desire a full bachelor's degree in psychology. The degree will prepare students for careers and further education in Utah, the Mountain West, and nationwide by (a) creating a curriculum built around the five pillars of psychology described by the American Psychological Association (APA); (b) emphasizing skills desired by employers (e.g., written communication, critical thinking, working in teams); and (c) providing engaged learning experiences (e.g., service-learning, internship, capstone) about current psychological topics.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Course Requirements | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (Fulfilled with Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| | PSY 1010 | General Psychology (Fulfills Social/ Behavioral Science) | 3 |
| Discipline Core Requirements: | | | 33 Credits |
| Psychology Core | | | |
| | PSY 2020 | Psychology as a Science and Profession WE | 3 |
| | PSY 3030 | Research Methods for Psychology | 4 |
| | PSY 3110 | Statistics for the Behavioral Sciences | 4 |
| Psychology Foundations | | | |
| | Complete 9 credits: | | 9 |
| | PSY 1100 | Human Development Life Span (3) | |
| | PSY 2300 | Abnormal Psychology(3) | |
| | PSY 2710 | Introduction to Brain and Behavior (3) | |
| | PSY 3420 | Cognitive Psychology WE (3) | |
| | PSY 350G | Social Psychology (3) | |
| Individual Differences Requirement | | | |
| | Complete 3 credits: | | 3 |
| | PSY 2800 | Human Sexuality (3) | |
| | PSY 3100 | Psychology of Gender (3) | |
| | PSY 3300 | Motivation and Emotion (3) | |
| | PSY 3460 | Personality Theory (3) | |
| | PSY 4150 | Tests and Measurements (3) | |
| | PSY 4690 | Human Intelligence (3) | |
| | PSY 480G | Cross-Cultural Psychology (3) | |
| Advanced Psychology Requirement | | | |
| | Complete 10 credits: | | 10 |
| | PSY 3105 | Health Psychology (3) | |

| | | | |
|---|---|---|---|
| | PSY 3200 | Infancy and Childhood Development (3) | |
| | PSY 3210 | Adolescent Development (3) | |
| | PSY 3220 | Adult Development (3) | |
| | PSY 3425 | Cognitive Psychology Lab (1) | |
| | PSY 3430 | Psychopharmacology WE (3) | |
| | PSY 3450 | Behavioral Neuroscience (4) | |
| | PSY 3480 | Principles of Learning (4) | |
| | PSY 3490 | Sensation and Perception WE (4) | |
| | PSY 3710 | Introduction to Forensic Psychology (3) | |
| | PSY 4300 | Introduction to Counseling and Psychotherapy (3) | |
| | PSY 4500 | History and Systems of Psychology (3) | |
| | PSY 4850 | Introduction to Pedagogy (3) | |
| Elective Requirements: | | | 52 Credits |
| | Complete 52 credits of 1000-level or higher coursework from any subject | | 52 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum overall UVU GPA of 2.0 upon graduation.
3. Minimum 2.5 program GPA upon graduation.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. All major course work taken to meet Psychology requirements must be completed with a grade of C- or better.
6. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor for explanation of all program requirements, a list of recommended classes, and for assistance with creating an academic plan for graduation.

Note: If a student has completed an associate degree through another institution, the required general education courses may be waived.

Note: Students would need to pass ENGL 1010 or ENGH 1005 and ENGL 2010 with a C+ or higher as prerequisites for the Psychology Bachelor degree courses.

## Social Work, B.S.W.

### *Requirements*

The UVU Behavioral Science Department offers classes that fulfill the social science distribution requirements for graduation, the Behavioral Science pre-major for the associate degree, the Behavioral Science major for the bachelor degree (with an emphasis in Anthropology, Family Studies, Psychology, or Sociology, a Bachelor of Social Work, and a Certificate of Proficiency in Substance Use Disorder Counseling (SUDC).

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| Admission to the BSW program includes the following requirements:<br>1. Completion of all general education courses.<br>2. Completion of SW 1010 with a B- grade or higher.<br>3. Completion of ENGL 1010 or ENGH 1005 and ENGL 2010 with a C+ grade or higher.<br>4. Overall GPA of 2.5 or higher.<br>5. Approval of the Social Work Admissions Committee. |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | STAT 1040 | Introduction to Statistics | 3 |
| or | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Complete one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | PSY 1010 | General Psychology (Social/Behavioral Science) | 3 |
| Discipline Core Requirements: | | | 64 Credits |
| Social Work Core - Complete the following courses: | | | |
| | BESC 3020 | Research Methods for the Behavioral Sciences | 3 |
| | PSY 3110 | Statistics for the Behavioral Sciences | 4 |
| | SW 1010 | Introduction to Social Work | 3 |
| | SW 2100 | Human Behavior and the Social Environment I * | 3 |
| | SW 3000 | Social Work Practice I * | 3 |
| | SW 3100 | Social Work Practice II * | 3 |
| | SW 3200 | Social Work Practice III * | 3 |
| | SW 3400 | Human Behavior and the Social Environment II * | 3 |
| | SW 3500 | Social Welfare Policies and Services * | 3 |
| | SW 3600 | Ethics and Values in Social Work Practice * | 3 |
| | SW 371G | Diversity Issues in Social Work Practice * | 3 |
| | SW 3860 | Interviewing Skills | 3 |
| | SW 4800 | Integrated Seminar I * | 1 |
| | SW 481R | Field Placement * (1.0) | 5 |

| | | | |
|---|---|---|---|
| | SW 481R | Field Placement * (1.0) | 5 |
| | SW 4850 | Integrated Seminar II * | 1 |
| Social Work Electives - Complete 15 credits of approved social work electives. Choose from the following courses: | | | 15 |
| | FAMS 3410 | Fundamentals of Mediation and Negotiation (3) | |
| | BESC 3100 | Career and Graduate School Preparation for Behavioral Science Majors (3) | |
| | BESC 4050 | Clinical Research (3) | |
| | SOC 4020 | Survey Research Design (3) | |
| | PSY 2300 | Abnormal Psychology (3) | |
| | SW 3510 | International Social Work (3) | |
| | SW 3750 | Child Abuse/Neglect and Domestic Violence (3) | |
| | SW 4500 | Crisis Intervention (3) | |
| | SW 4700 | Case Management in Social Work Practice (3) | |
| | SW 475R | Current Topics in Social Work (3) | |
| | SW 489R | Advanced Research in Social Work (1) | |
| | SW 490R | Independent Studies (1) | |
| Elective Requirements: | | | 21 Credits |
| | Complete 21 additional credits of any courses 1000 to 4000 level. | | 21 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 of which must be upper division.
2. Overall grade point average of 2.5 or above.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 credit hours earned in the last 45 credit hours.
4. Complete PSY 3110 and BESC 3020 with a grade of C- or higher. All other BSW Social Work Core requirements must be completed with a grade of B- or higher.
5. All 15 credits of Social Work electives must be completed with a C- grade or higher.
6. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor to make an academic plan and for an explanation of all admission and program requirements.

| Footnote |
|---|
| * Students must be formally admitted into the BSW program before they can register for this course. |

## Sociology, B.A.

### *Requirements*

Sociology is the scientific study of society which includes studying individuals in their primary and secondary groups and larger social institutions. It examines the social context of individual and collective lives. Sociology is a relatively young discipline that describes, explains, and predicts social interactions and institutions using theoretical as well as social scientific methods of inquiry. According to the American Sociological Association, the essential concepts that students will learn within sociology are social construction of everyday life and sociological imagination; social structure; socialization; social stratification, and social change. Students will also gain competencies in critical and theoretical thinking and application of social scientific methodology towards rigorous data analysis.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra 4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Third Science Distribution | | 3 |
| | Humanities Distribution (Fulfilled with Foreign Language 202G/2020 course)* | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 37 Credits |
| | BESC 3020 | Research Methods for the Behavioral Sciences | 3 |
| | PSY 3110 | Statistics for the Behavioral Sciences | 4 |
| | SOC 1010 | Introduction to Sociology | 3 |
| | SOC 1020 | Modern Social Problems | 3 |
| | SOC 4000 | Classical Social Theory | 3 |
| | SOC 4100 | Contemporary Social Theory WE | 3 |
| Complete any 6 of the SOC classes | | | 18 |
| | SOC 1200 | Sociology of the Family (3) | |

| | | | |
|---|---|---|---|
| | SOC 2370 | Sociology of Gender (3) | |
| | SOC 3400 | Sociology of Religion (3) | |
| | SOC 320G | Race and Minority Relations (3) | |
| | SOC 3460 | Political Sociology (3) | |
| | SOC 3520 | Environmental Sociology (3) | |
| | SOC 3690 | Internet and Society (3) | |
| | SOC 375G | Sociology of Aging (3) | |
| | SOC 3800 | Animals and Society (3) | |
| | SOC 4020 | Survey Research Design (3) | |
| | SOC 4400 | Social Change (3) | |
| | SOC 475R | Current Topics in Sociology (1) | |
| | SOC 490R | Independent Studies (1) | |
| Elective Requirements: | | | 47 Credits |
| 15 credits any course number 3000 or higher | | | 15 |
| 20 credits any course numbered 1000 or higher | | | 20 |
| Complete 12 credits of one Foreign Language, including ASL (Foreign Language 202G/2020* course fulfills Humanities Distribution)* | | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum overall UVU GPA of 2.0 upon graduation.
3. Minimum 2.5 program GPA upon graduation.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. All major course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.
6. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, 202G/2020 levels or transferred equivalents.
7. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor for explanation of all program requirements, a list of recommended classes, and for assistance with creating an academic plan for graduation.

Note: If a student has completed an associate degree through another institution, the required general education courses may be waived.

Note: Students would need to pass ENGL 1010 and ENGL 2010 with a C+ or higher as prerequisites for the Behavioral Science Bachelor degree courses.

## Sociology, B.S.

### *Requirements*

Sociology is the scientific study of society which includes studying individuals in their primary and secondary groups and larger social institutions. It examines the social context of individual and collective lives. Sociology is a relatively young discipline that describes, explains, and predicts social interactions and institutions using theoretical as well as social scientific methods of inquiry. According to the American Sociological Association, the essential concepts that students will learn within sociology are social construction of everyday life and sociological imagination; social structure; socialization; social stratification, and social change. Students will also gain competencies in critical and theoretical thinking and application of social scientific methodology towards rigorous data analysis.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra 4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Third Science Distribution | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 37 Credits |
| | BESC 3020 | Research Methods for the Behavioral Sciences | 3 |
| | PSY 3110 | Statistics for the Behavioral Sciences | 4 |
| | SOC 1010 | Introduction to Sociology | 3 |
| | SOC 1020 | Modern Social Problems | 3 |
| | SOC 4000 | Classical Social Theory | 3 |
| | SOC 4100 | Contemporary Social Theory WE | 3 |
| Complete any 6 of the SOC classes | | | 18 |
| | SOC 1200 | Sociology of the Family (3) | |
| | SOC 2370 | Sociology of Gender (3) | |
| | SOC 3400 | Sociology of Religion (3) | |
| | SOC 320G | Race and Minority Relations (3) | |
| | SOC 3460 | Political Sociology (3) | |

| | | | |
|---|---|---|---|
| | SOC 3520 | Environmental Sociology (3) | |
| | SOC 3690 | Internet and Society (3) | |
| | SOC 375G | Sociology of Aging (3) | |
| | SOC 3800 | Animals and Society (3) | |
| | SOC 4020 | Survey Research Design (3) | |
| | SOC 4400 | Social Change (3) | |
| | SOC 475R | Current Topics in Sociology (1) | |
| | SOC 490R | Independent Studies (1) | |
| Elective Requirements: | | | 48 Credits |
| 15 credits any course number 3000 or higher | | | 15 |
| 33 credits any course numbered 1000 or higher | | | 33 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum overall UVU GPA of 2.0 upon graduation.
3. Minimum 2.5 program GPA upon graduation.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. All major course work taken to meet Behavioral Science requirements must be completed with a grade of C- or better.
6. Successful completion of at least one Global/Intercultural course.

Note: Please see department advisor for explanation of all program requirements, a list of recommended classes, and for assistance with creating an academic plan for graduation.

Note: If a student has completed an associate degree through another institution, the required general education courses may be waived.

Note: Students would need to pass ENGL 1010 and ENGL 2010 with a C+ or higher as prerequisites for the Behavioral Science Bachelor degree courses.

# Biology

## Biology

The Biology department is in the College of Science. To find the most up-to-date information from the Biology department, visit their website.

Biology department

**DEPARTMENT CHAIR**

**PRICE, James V.** *Professor*

**FACULTY**

**BAYER, Virginia E.** *Associate Professor*
**BEUCHER, Margaret** *Lecturer*
**BRADSHAW, James** *Lecturer*
**BROOKS, Lauren** *Assistant Professor*
**BYBEE, Paul** *Professor*
**CUSICK, Jessica** *Assistant Professor*
**DOMYAN, Eric** *Assistant Professor*
**DUNN, Paul H.** *Assistant Professor*
**EGAN, Ashley** *Assistant Professor*
**FAIRBANKS, Daniel** *Professor*
**FLOOD, Sara** *Associate Professor*
**GAZDIK, Michaela** *Associate Professor*
**HJELMAN, Carl** *Assistant Professor*
**HOUGH, Colleen** *Associate Professor*
**HUYNH, Mark** *Lecturer*
**KARAFIATH, Summer** *Assistant Professor*
**KOPP, Olga R.** *Professor*
**KUDDUS, Ruhul H.** *Professor*
**LANEY, Alma Glenn** *Assistant Professor*
**MUGLESTON, Joseph** *Lecturer*
**OGDEN, T. Heath** *Associate Professor*
**PRICE, James V.** *Professor*
**ROBBINS, Robert R.** *Professor*
**ROTTER, Michael** *Assistant Professor*
**STEVENS, Michael T.** *Professor*
**TAUZIN, Sebstien** *Assistant Professor*
**TAYLOR, Danielle** *Assistant Professor*
**TAYLOR, Devin** *Assistant Professor*
**THOMPSON, Zoe** *Assistant Professor*
**WAGNER, Jessica** *Lecturer - Placeholder*
**WELLES, Shana** *Assistant Professor*
**WHALEY, Wayne** *Professor*
**WILSON-ASHWORTH, Heather A.** *Professor*
**WOODWARD, Scott** *Lecturer*
**WYATT, Brittney** *Assistant Professor*
**ZAHN, Geoffrey** *Assistant Professor*
**DE NESNERA, Kristin** *Assistant Professor*

## Course Descriptions


Biology..... 512
Botany..... 517
Biotechnology..... 519
Microbiology..... 709
Zoology..... 798


# Degrees & Programs

## Biology, A.A.

### *Requirements*

Students interested in biology, or related fields, are encouraged to earn at least a baccalaureate degree (BS). Many professions (e.g., Pharmacy or Medicine) require additional post-baccalaureate education. The AS/AA degree is intended for students who plan to use it as a first step toward a baccalaureate degree. The AS/AA degree may be granted to those who do not continue in a bachelor's program and meet the minimum requirements.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I (To be taken with BIOL 1615) | 4 |
| | CHEM 1210 | Principles of Chemistry I (To be taken with CHEM 1215) | 4 |
| | CHEM 1220 | Principles of Chemistry II (To be taken with CHEM 1225) | 4 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 13 Credits |
| Complete the following: | | | |
| | BIOL 1615 | College Biology I Laboratory (To be taken with BIOL 1610) | 1 |
| | BIOL 1620 | College Biology II | 3 |
| and | BIOL 1625 | College Biology II Laboratory | 1 |

| | | | |
|---|---|---|---|
| | CHEM 1215 | Principles of Chemistry I Laboratory (To be taken with CHEM 1210) | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory (To be taken with CHEM 1220) | 1 |
| | Minimum of 2 additional biology courses (BIOL, BOT, MICR, or ZOOL prefixes). BIOL 1010 and BIOL 1050 cannot be used to meet this requirement. See Biology Advisor.[1] | | 6 |
| Elective Requirements: | | | 8 Credits |
| | Same Foreign Language. | | 8 |

Graduation Requirements:

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one language.

| Footnote |
|---|
| [1]BIOL 1010 cannot be used to meet this requirement. See Biology Advisor |

## Biology, A.S.

### *Requirements*

Students interested in biology, or related fields, are encouraged to earn at least a baccalaureate degree (BS). Many professions (e.g., Pharmacy or Medicine) require additional post-baccalaureate education. The AS/AA degree is intended for students who plan to use it as a first step toward a baccalaureate degree. The AS/AA degree may be granted to those who do not continue in a bachelor's program and meet the minimum requirements.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I (To be taken with BIOL 1615) | 4 |
| | CHEM 1210 | Principles of Chemistry I (To be taken with CHEM 1215) | 4 |
| | CHEM 1220 | Principles of Chemistry II (To be taken with CHEM 1225) | 4 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| Complete the following: | | | |
| | BIOL 1615 | College Biology I Laboratory (To be taken with BIOL 1610) | 1 |
| | BIOL 1620 | College Biology II | 3 |
| and | BIOL 1625 | College Biology II Laboratory | 1 |
| | CHEM 1215 | Principles of Chemistry I Laboratory (To be taken with CHEM 1210) | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory (To be taken with CHEM 1220) | 1 |
| | Minimum of 3 additional biology courses (BIOL, BOT, MICR, or ZOOL prefixes).[1] | | 8 |
| Elective Requirements: | | | 6 Credits |
| | Complete any course 1000 or higher. See Biology Advisor. | | 6 |

Graduation Requirements:

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

| Footnote |
|---|
| [1]BIOL 1010 cannot be used to meet this requirement. See Biology Advisor. |

## Biology, Minor

### *Requirements*

The minor is a way for students to investigate the Biology Degree.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 21 Credits |
| Complete the following with a grade of C- or better: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | BIOL 1620 | College Biology II | 3 |

| | | | |
|---|---|---|---|
| | BIOL 1625 | College Biology II Laboratory | 1 |
| Complete 12 upper-division credits from any BIOL, BOT, MICR, or ZOOL courses with a grade of C- or higher in each. BIOL 489R, BIOL 499R, cannot be used to meet this requirement. | | | 12 |

## Bioinformatics, B.S.

### *Requirements*

Bioinformatics is the fastest growing field in Biology. In general terms, bioinformatics is the synthesis of computational methods and biological systems and comprises many sub-fields that approach different questions in biology. A Bachelor of Science in Bioinformatics will prepare students to enter a variety of fields such as: medical informatics and interventions, new agricultural paradigms, pharmaceutical discovery, and molecular genealogy predictions, among others. This degree would provide students with the knowledge, skills, and experience to be competitive for both graduate school and employment opportunities.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| BIOL 1610 with C- or higher<br><br>CS 1400 with a C+ or higher, and approval of Biology Department or Computer Science Department advisor. | | | |
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 50 Credits |
| | BIOL 1011 | Introduction to Bioinformatics | 3 |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | BIOL 3100 | Introduction to Data Analysis for Biologists | 3 |
| | BIOL 3500 | Genetics | 3 |
| | BIOL 3550 | Molecular Biology | 3 |
| | BIOL 492R | Professional Development | 1 |
| | BIOL 494R | Student Seminar WE | 2 |
| | BIOL 497R | Biology Colloquium (0.5 cr, two required) | 1 |
| | BIOL 4550 | Molecular Evolution and Bioinformatics WE | 3 |
| | BIOL 4600 | Bioinformatics Capstone | 3 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 305G | Global Social and Ethical Issues in Computing | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| Elective Requirements: | | | 31 Credits |
| | Choose 6 credits from any general electives.[1] | | 6 |
| | Choose 25 credits from list below or approved by advisor | | 25 |
| | BIOL 3700 | General Ecology (3) | |
| | BIOL 4300 | Bioinformatics and Genome Analysis (4) | |
| | BIOL 4400 | Genomics (3) | |
| | BIOL 4500 | Principles of Evolution WE (3) | |
| | BIOL 489R | Student Research (1) | |
| | BIOL 490R | Special Topics in Biology (1) | |
| | BIOL 499R | Senior Thesis (1) | |
| | MICR 2060 | Microbiology for Health Professions (3) | |
| | MICR 3200 | Emerging and Re Emerging Diseases and Zoonoses (3) | |
| | MICR 3450 | General Microbiology (3) | |
| | CS 3270 | Python Software Development (3) | |
| | CS 3320 | Numerical Software Development (3) | |
| | CS 3520 | Database Theory (3) | |
| | CS 3530 | Data Management For Data Sciences (3) | |
| | STAT 4100 | Design of Experiment (3) | |
| | STAT 4400 | Multivariate Analysis WE (3) | |
| | STAT 4710 | Mathematical Statistics-Probability and Statistics (3) | |

| | | | |
|---|---|---|---|
| | STAT 4720 | Mathematical Statistics-Statistical Inference (3) | |
| | MATH 1210 | Calculus I (5) | |
| or | MATH 121H | Calculus I (5) | |
| | MATH 1220 | Calculus II (5) | |
| or | MATH 122H | Calculus II (5) | |
| | MATH 2210 | Calculus III (3) | |
| or | MATH 222H | Calculus III (3) | |
| | MATH 2270 | Linear Algebra (3) | |

**Graduation Requirements:**

1. Complete the required minimum credit hours.
2. If an AA or AS degree has been earned, a maximum of 64 of these credits may apply toward the BS.
3. At least 30 credit hours in residence at UVU or satellite sites are required, with 10 hours earned during the last 45 hours.
4. A minimum of 40 credits must be upper-division (numbered 3000 or above).
5. A minimum of 40 credits must be in the major, 30 of which must be upper-division. A minimum of nine Department credits must be taken at UVU.
6. Except for 490R Special Topics courses, a maximum cumulative total of 9 credits in any combination of upper division Departmental courses with an"R" designation may count toward graduation.
7. Complete Biology Department core courses with a grade of "C-" or higher in each course.
8. Achieve a minimum overall GPA of 2.0 with a minimum GPA of 2.25 in biology department courses.
9. Complete the appropriate application for graduation form.
10. Successful completion of at least one Global/Intercultural course.

| Footnotes: |
|---|
| [1] Upper division is suggested to meet upper division requirements |

## Biology Education, B.S.

### *Requirements*

Biology is the study of living organisms and includes study of subjects such as evolution, ecology, zoology, physiology, anatomy, and botany among other subjects. Completion of this degree will prepare students to teach classes in high school biology, and related subjects, plus integrated science at the 7th grade level.

**Total Program Credits: 126**

| Matriculation Requirements: |
|---|
| Admission to Professional Education status is a requirement for enrollment in professional studies level courses. Admission criteria includes:<br>1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or if student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check. |

| General Education Requirements: | | | 38 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences | 4 |
| | PHYS 1010 | Elementary Physics | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science Distribution | | 3 |
| Discipline Core Requirements: | | | 88 Credits |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | BIOL 1620 | College Biology II | 3 |
| | BIOL 1625 | College Biology II Laboratory | 1 |
| | MICR 2060 | Microbiology for Health Professions | 3 |
| and | MICR 2065 | Microbiology for Health Professions Laboratory | 1 |
| or | MICR 3450 | General Microbiology (3.0) | |
| and | MICR 3455 | General Microbiology Laboratory (1.0) | |
| | BIOL 3500 | Genetics | 3 |
| | BIOL 3700 | General Ecology | 3 |
| | BIOL 4200 | Teaching Methods in Science | 3 |
| | BIOL 4500 | Principles of Evolution WE | 3 |
| | BIOL 494R | Student Seminar WE | 2 |
| | BOT 2050 | Field Botany | 3 |
| or | BOT 2100 | Flora of Utah (3.0) | |
| or | BOT 4300 | Native Trees and Shrubs of Utah (3.0) | |
| | BOT 3340 | Plant Biology | 4 |
| | ZOOL 2320 | Human Anatomy | 3 |
| | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| | ZOOL 2420 | Human Physiology | 3 |
| | ZOOL 2425 | Human Physiology Laboratory | 1 |

| | | | |
|---|---|---|---|
| | ZOOL 3100 | Vertebrate Zoology | 3 |
| | ZOOL 3105 | Vertebrate Zoology Laboratory | 1 |
| | ZOOL 3200 | Invertebrate Zoology | 3 |
| | ZOOL 3205 | Invertebrate Zoology | 1 |
| | CHEM 1115 | Elementary Chemistry Laboratory | 1 |
| | CHEM 1120 | Elementary Organic Bio-Chemistry | 4 |
| | CHEM 1125 | Elementary Organic Bio-Chemistry Laboratory | 1 |
| | GEO 1010 | Introduction to Geology | 3 |
| | GEO 1015 | Introduction to Geology Laboratory | 1 |
| Education Courses:[1] | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| | EDSP 340G | Exceptional Students | 2 |

**Graduation Requirements:**

1. Complete the required minimum credit hours.
2. If an AA or AS degree has been earned, a maximum of 64 of these credits may apply toward the BS.
3. At least 30 credit hours in residence at UVU or satellite sites are required, with 10 hours earned during the last 45 hours.
4. A minimum of 40 credits must be upper-division (numbered 3000 or above).
5. A minimum of 30 credits must be in the major (BIOL, BOT, MICR, or ZOOL prefixes), courses as follows: minimum of 9 Biology credits must be taken at UVU and a minimum of 20 Biology credits must be upper-division.
6. Complete the appropriate application for graduation form.
7. Successful completion of at least one Global/Intercultural course.
8. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses.

| Footnotes: |
|---|
| 1-Must be completed with a grade of B- or higher. |

## Biology, B.S.

### *Requirements*

Students interested in Biology, or related fields, are encouraged to earn at least a baccalaureate degree (BS). Many professions (e.g., Pharmacy or Medicine) require additional post -baccalaureate education. The BS degree in Biology may be used for entry into a career or in preparation for graduate (Masters/PhD) or professional schools (medical, dental, pharmacy, etc.).

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| BIOL 1610 with C- or higher and approval of Biology Department advisor. | | | |
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values (3) | |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 53 Credits |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | BIOL 1620 | College Biology II | 3 |
| | BIOL 1625 | College Biology II Laboratory | 1 |
| | BIOL 3400 | Cell Biology | 3 |
| | BIOL 3500 | Genetics | 3 |
| | BIOL 3550 | Molecular Biology | 3 |
| | BIOL 3600 | Biological Chemistry | 3 |
| | BIOL 3700 | General Ecology | 3 |
| | BIOL 4500 | Principles of Evolution WE | 3 |
| | BIOL 492R | Professional Development | 1 |
| | BIOL 494R | Student Seminar WE | 2 |
| | BIOL 497R | Biology Colloquium (0.5 cr, two required) | 1 |
| | STAT 2040 | Principles of Statistics | 4 |
| or | MATH 1060 | Trigonometry (3) | |
| and | MATH 1210 | Calculus I (5) | |
| | PHYS 2010 | College Physics I | 4 |

| | | | |
|---|---|---|---|
| | PHYS 2015 | College Physics I Lab | 1 |
| | PHYS 2020 | College Physics II | 4 |
| | PHYS 2025 | College Physics II Lab | 1 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | CHEM 2320 | Organic Chemistry II | 4 |
| | CHEM 2325 | Organic Chemistry II Laboratory | 1 |
| Elective Requirements: | | | 28 Credits |
| | Choose 3 credits from any BOT electives.[1] | | 3 |
| | Choose 4 credits from any MICR electives.[1] | | 4 |
| | Choose 3 credits from any ZOOL electives.[1] | | 3 |
| | Additional credits to meet credit and upper-division requirements. | | 18 |

**Graduation Requirements:**

1. Complete the required minimum credit hours.
2. If an AA or AS degree has been earned, a maximum of 64 of these credits may apply toward the BS.
3. At least 30 credit hours in residence at UVU or satellite sites are required, with 10 hours earned during the last 45 hours.
4. A minimum of 40 credits must be upper-division (numbered 3000 or above).
5. A minimum of 40 credits must be in the major (BIOL, BOT, BTEC, MICR, or ZOOL prefixes), 30 of which must be upper-division. A minimum of nine Department credits must be taken at UVU.
6. Except for 490R Special Topics courses, a maximum cumulative total of 9 credits in any combination of upper division Departmental courses with an "R" designation may count toward graduation.
7. Complete Biology Department core courses with a grade of "C-" or higher in each course.
8. Achieve a minimum overall GPA of 2.0 with a minimum GPA of 2.25 in biology department courses.
9. Complete the appropriate application for graduation form.
10. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1]Upper division is suggested to meet upper division requirements |

## Biotechnology, B.S.

### *Requirements*

The Bachelor's Degree in Biotechnology will prepare students to enter the field of research, education, pharmaceuticals, forensics, and a variety of other careers. It is also great preparation for advanced degrees in the sciences.

**Total Program Credits: 124**

| General Education Requirements: | | | 39 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 73 Credits |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | BIOL 3400 | Cell Biology | 3 |
| | BIOL 3500 | Genetics | 3 |
| | BIOL 3550 | Molecular Biology | 3 |
| | BIOL 3600 | Biological Chemistry | 3 |
| | BIOL 4550 | Molecular Evolution and Bioinformatics WE | 3 |
| | BTEC 494R | Student Seminar WE | 2 |
| | Choose any 2 from the followingStudent must complete at least 2 of the courses listed even if itexceeds the required 3 credit hours | | 3 |
| | BIOL 3100 | Introduction to Data Analysis for Biologists (3) | |
| | BIOL 3405 | Cell Biology Laboratory (1) | |
| | BIOL 3515 | Advanced Genetics Laboratory (1) | |
| | BIOL 3555 | Experiments in Molecular Biology (1) | |
| | BIOL 3605 | Biological Chemistry Lab (1) | |
| | BTEC 3300 | Biomolecular Modeling and Simulations (4) | |
| | BOT 4700 | Plant Tissue Culture WE (4) | |
| | CHEM 3005 | Analytical Chemistry Laboratory (2) | |
| | ZOOL 4300 | Histology (4) | |
| | Choose any from the following: | | 8 |
| | BTEC 481R | Biotechnology Internship (1) | |
| | BIOL 489R | Student Research (1) | |
| | BTEC 489R | Student Research (1) | |
| | BTEC 499R | Senior Thesis (1) | |

| | | | |
|---|---|---|---|
| | Choose from 1 MICR course and accompanying lab from the following: | | 4 |
| | MICR 2060 | Microbiology for Health Professions (3) | |
| | MICR 2065 | Microbiology for Health Professions Laboratory (1) | |
| | MICR 3450 | General Microbiology (3) (***Recommended***) | |
| | MICR 3455 | General Microbiology Laboratory (1) | |
| | Complete the following: | | |
| | STAT 2040 | Principles of Statistics | 4 |
| | PHYS 2010 | College Physics I | 4 |
| | PHYS 2015 | College Physics I Lab | 1 |
| | PHYS 2020 | College Physics II | 4 |
| | PHYS 2025 | College Physics II Lab | 1 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | CHEM 2320 | Organic Chemistry II | 4 |
| | CHEM 2325 | Organic Chemistry II Laboratory | 1 |
| | BTEC 1010 | Fundamentals of Biotechnology I Career Survey | 3 |
| | BTEC 2010 | DNA Manipulation and Analysis | 3 |
| | BTEC 2020 | Protein Purification and Analysis | 3 |
| | BTEC 2030 | Cell Culture Techniques | 2 |
| | BTEC 2040 | Advanced Nucleic Acid Laboratory | 3 |
| Elective Requirements: | | | 12 Credits |
| | Additional credits to meet credit and upper-division requirements. | | 12 |

**Graduation Requirements:**

1. Complete the required minimum credit hours.
2. At least 30 credit hours in residence at UVU or satellite sites are required, with 10 hours earned during the last 45 hours.
3. A minimum of 40 credits must be upper-division (numbered 3000 or above).
4. Complete core courses with a grade of "C" or higher in each BTEC course and a "C-" or higher in all other core courses.
5. Achieve a minimum overall GPA of 2.0 with a minimum GPA of 2.25 in core courses.
6. Successful completion of at least one Global/Intercultural course.

## Botany, B.S.

### *Requirements*

Students interested in botany, or related fields, are strongly encouraged to earn at least a baccalaureate degree (BS). To be competitive in the job market additional post-baccalaureate education is suggested. The BS degree in Botany may be used for entry into a career or in preparation for graduate (Masters/ PhD) or professional schools (medical, pharmacy etc.).

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. BIOL 1610 with C- or higher and approval of Biology Department adviser. | | | |
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 63 Credits |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | BIOL 1620 | College Biology II | 3 |
| | BIOL 1625 | College Biology II Laboratory | 1 |
| | BIOL 3400 | Cell Biology | 3 |
| | BIOL 3500 | Genetics | 3 |
| | BIOL 4500 | Principles of Evolution WE | 3 |
| | BIOL 492R | Professional Development | 1 |
| | BIOL 494R | Student Seminar WE | 2 |
| | BIOL 497R | Biology Colloquium (0.5 cr, two required) | 1 |
| | BOT 2100 | Flora of Utah | 3 |
| or | BOT 2050 | Field Botany (3) | |
| | BOT 2400 | Plant Kingdom | 4 |
| | BOT 4050 | Plant Ecology | 3 |
| | BOT 4055 | Plant Ecology Laboratory | 1 |
| | BOT 4100 | Plant Anatomy | 4 |
| | BOT 4200 | Plant Systematics | 3 |
| | BOT 4300 | Native Trees and Shrubs of Utah | 3 |

| | | | |
|---|---|---|---|
| or | BOT 4500 | Introduction to Grasses (3) | |
| | BOT 4600 | Plant Physiology | 3 |
| and | BOT 4605 | Plant Physiology Laboratory WE | 1 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | STAT 2040 | Principles of Statistics | 4 |
| or | MATH 1060 | Trigonometry (3) | |
| and | MATH 1210 | Calculus I (5) | |
| | MICR 3450 | General Microbiology | 3 |
| and | MICR 3455 | General Microbiology Laboratory | 1 |
| | PHYS 2010 | College Physics I | 4 |
| | PHYS 2015 | College Physics I Lab | 1 |
| Elective Requirements: | | | 18 Credits |
| | Additional credits to meet credit and upper-division requirements. | | 18 |

**Graduation Requirements:**

1. Complete the required minimum credit hours.
2. Completion of GE and specified departmental requirements.
3. If an AA or AS degree has been earned, a maximum of 64 of these credits may apply toward the BS.
4. At least 30 credit hours in residence at UVU or satellite sites are required, with 10 hours earned during the last 45 hours.
5. A minimum of 40 credits must be upper-division (numbered 3000 or above).
6. A minimum of 40 credits must be in the Biology Department (BIOL, BOT, BTEC, MICR, or ZOOL prefixes), 30 of which must be upper-division. A minimum of nine Biology Department credits must be taken at UVU.
7. Complete discipline core courses with a grade of "C-" or higher in each course.
8. Achieve a minimum overall GPA of 2.0 with a minimum GPA of 2.25 in Biology Department courses.
9. Complete the appropriate application for graduation form.
10. Successful completion of at least one Global/Intercultural course.

## Microbiology, B.S.

### *Requirements*

Microbiology is the study of microorganisms, the smallest living things on earth, including bacteria, viruses, fungi, protozoa, and algae. While microorganisms are most known for their ability to cause disease, they are actually ubiquitous on earth and central to many of the essential life processes on this planet. The field of microbiology is a major contributor to human, animal, plant, and environmental health as well as central to the food/beverage, biotechnology, bioremediation, and pharmaceutical industries. This curriculum will examine the diverse roles of microorganisms and cover the fundamentals of microbial diversity, physiology, and genetics. Students will examine the roles and interactions of microbial populations in aquatic, terrestrial, human, animal, and plant systems.

A degree in microbiology can open the door to a wide variety of careers in different industries. Studying microbiology will prepare students to go to medical, dental, veterinary, or graduate school, and also provides them a highly employable career option in healthcare, industry, or government agencies. A degree in microbiology allows students to easily enter the workforce or continue on to a professional or graduate program.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| BIOL 1610 with C- or higher and approval of Biology Department advisor. | | | |
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 53 Credits |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | BIOL 1620 | College Biology II | 3 |
| | BIOL 1625 | College Biology II Laboratory | 1 |
| | BIOL 3600 | Biological Chemistry | 3 |
| | BIOL 3605 | Biological Chemistry Lab | 1 |
| | BIOL 4500 | Principles of Evolution WE | 3 |
| | BIOL 492R | Professional Development | 1 |
| | BIOL 497R | Biology Colloquium (0.5 cr, two required) | 1 |
| | MICR 3150 | Microbial Ecology WE | 4 |
| | MICR 3450 | General Microbiology | 3 |
| | MICR 3455 | General Microbiology Laboratory | 1 |
| | MICR 3550 | Microbial Physiology | 4 |
| | MICR 3650 | Microbial Genetics | 4 |
| | MICR 494R | Student Seminar WE | 2 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |

| | | | |
|---|---|---|---|
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | CHEM 2320 | Organic Chemistry II | 4 |
| | CHEM 2325 | Organic Chemistry II Laboratory | 1 |
| | MATH 1100 | Introduction to Calculus | 4 |
| | PHYS 2010 | College Physics I | 4 |
| | PHYS 2015 | College Physics I | 1 |
| Elective Requirements: | | | 28 Credits |
| | Choose a minimum of 18 credits from: (Upper division courses are encouraged to meet upper division credit requirements) | | 18 |
| | MICR 3200 | Emerging and Re Emerging Diseases and Zoonoses (3) | |
| | MICR 4100 | Parasitology (4) | |
| | MICR 4200 | Microbiomes (3) | |
| | MICR 4300 | Pathogenic Microbiology (4) | |
| | MICR 4450 | Immunology (3) | |
| | MICR 4455 | Immunology Laboratory (1) | |
| | MICR 4500 | Virology (3) | |
| | MICR 4505 | Applied Virological Methods (3) | |
| | MICR 4600 | Arthropod-Borne Pathogens (3) | |
| | MICR 490R | Special Topics in Microbiology (1) | |
| | BIOL 3400 | Cell Biology (3) | |
| | BIOL 3405 | Cell Biology Laboratory (1) | |
| | BIOL 3550 | Molecular Biology (3) | |
| | BIOL 3555 | Experiments in Molecular Biology (1) | |
| | BIOL 4550 | Molecular Evolution and Bioinformatics WE (3) | |
| | BTEC 1010 | Fundamentals of Biotechnology I Career Survey (3) | |
| | BTEC 2010 | DNA Manipulation and Analysis (3) | |
| | BTEC 2020 | Protein Purification and Analysis (3) | |
| | BTEC 2030 | Cell Culture Techniques (2) | |
| | BTEC 2040 | Advanced Nucleic Acid Laboratory (3) | |
| | BOT 3500 | Mycology (4) | |
| | BOT 4430 | Plant Pathology (3) | |
| | CHEM 3020 | Environmental Chemistry (3) | |
| | CHEM 3025 | Environmental Chemistry Laboratory (1) | |
| | ENVT 1270 | Environmental Microbiology (3) | |
| | Choose 6 credits from: | | 6 |
| | MICR 489R | Student Research (1) | |
| | BIOL 3100 | Introduction to Data Analysis for Biologists (3) | |
| | BIOL 369R | Introduction to Undergraduate Research (1) | |
| | BIOL 4300 | Bioinformatics and Genome Analysis (4) | |
| | Choose 4 credits from BIOL, BOT, BTEC, ZOOL, or CHEM[1] | | 4 |

**Graduation Requirements:**

1. Complete the required minimum credit hours.
2. If an AA or AS degree has been earned, a maximum of 64 of these credits may apply toward the BS.
3. At least 30 credit hours in residence at UVU or satellite sites are required, with 10 hours earned during the last 45 hours.
4. A minimum of 40 credits must be upper-division (numbered 3000 or above).
5. A minimum of 40 credits must be in the Biology Department (BIOL, BOT, BTEC, MICR, or ZOOL prefixes), 30 of which must be upper-division. Aminimum of nine Department credits must be taken at UVU.
6. Except for 490R Special Topics courses, a maximum cumulative total of 13 credits in any combination of upper division Departmental courses withan "R" designation may count toward graduation.
7. Complete Biology Department core courses with a grade of "C-" or higher in each course.
8. Achieve a minimum overall GPA of 2.0 with a minimum GPA of 2.25 in biology department courses.
9. Complete the appropriate application for graduation form.
10. Successful completion of at least one Global/Intercultural course.

| Footnotes: |
|---|
| [1] Upper division is suggested to meet upper division requirements |

# Business Graduate Programs

## Master of Business Administration Graduate Program

The Master of Business Administration Graduate Program is in the Woodbury School of Business. To find the most up-to-date information on Master of Business Administration Graduate Program, visit their website.

Master of Business Administration Graduate Program

**FACULTY**

**BAILEY, James** *Professor*
**CHAN, Leo** *Associate Professor*
**CIESLEWICZ, Joshua** *Associate Professor*
**COX, Vaughn** *Professional in Residence*
**GLENN, Lowell M.** *Associate Professor*
**HELQUIST, Joel** *Associate Professor*
**HUFF, Steven** *Associate Professor*
**MORTENSEN, James** *Professional In Residence*
**PETERSON, Jeffrey** *Associate Professor*
**ROBINSON, Peter B.** *Professor*
**ROSSI DE OLIVEIRA, Andre** *Associate Professor*
**SMITH, Kevin** *Professor*

## Course Descriptions

Accounting..... 468
Economics.....585
Finance..... 639
Legal Studies.....689
Business Management..... 704
Marketing..... 711

## Degrees & Programs

### Master of Business Administration - Finance Emphasis, M.B.A.

#### *Requirements*

The UVU Master of Business Administration is an applied graduate degree that reflects the Woodbury School of Business's long and distinguished history of providing excellence in business education. Our innovative team-based curriculum reaches beyond the walls and textbooks of a traditional program and includes not only instruction in the disciplines of business, but also offers many opportunities to apply important skills such as leadership, teamwork, ethical decision making, critical thinking and problem solving, written and oral communication as they are woven throughout the curriculum. Students immerse themselves in all aspects of business management, including accounting, marketing, economics, and social responsibility. Students participate in an international project and travel to the country of their project hosts. The program culminates with a comprehensive real-life consulting project with a company operating in our region.

The full-time track for the Master of Business Administration program at Utah Valley University is a one year, accelerated MBA program that offers either of two concentration areas in management or accounting.

The part-time track for the Master of Business Administration program at Utah Valley University is a two year plan for working professionals which embraces the university's designation as an engaged learning campus and also offers either of two concentration areas in management or accounting.

The MBA program is AACSB accredited.

**Total Program Credits: 36**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 27 Credits |
| | ACC 6350 | Management Control Systems | 3 |
| | FIN 6150 | Financial Management | 3 |
| | ECON 6300 | Managerial Economics | 3 |
| | MGMT 6000 | Career Development and Advancement | 1.5 |
| | MGMT 6500 | Managing Individuals and Groups | 3 |
| | MGMT 6800 | Global Business Strategy | 3 |
| | MGMT 6910 | Designing Business | 1.5 |
| | MGMT 6930 | International Engagement | 1.5 |
| | MGMT 6940 | MBA Consulting Project | 3 |
| | MKTG 6600 | Marketing Strategy (3.0) | 3 |
| | MKTG 6920 | Creativity and Innovative Problem Solving | 1.5 |
| Emphasis Requirements: | | | 9 Credits |
| | FIN 6130 | Financial Statement Analysis and Modeling | 3 |
| | FIN 6160 | International Financial Management | 3 |
| | FIN 6170 | Investment Analysis and Portfolio Analysis | 3 |

**Graduation Requirements:**

1. Completion of 36 hours of approved credit with no grade lower than a "C" as described in this program.
2. Graduates may not transfer more than ten hours into this MBA program, preferably from an AACSB accredited institution. All transfer courses will be reviewed by a graduate committee managed by the Woodbury School of Business.
3. Final approval for graduation will be determined by the MBA graduate committee of the Woodbury School of Business.
4. A minimum cumulative GPA of 3.0 or higher must be maintained within program.

### Master of Business Administration - Management Emphasis, M.B.A.

#### *Requirements*

The UVU Master of Business Administration is an applied graduate degree that reflects the Woodbury School of Business's long and distinguished history of providing excellence in business education. Our innovative team-based curriculum reaches beyond the walls and textbooks of a traditional program and includes not only instruction in the disciplines of business, but also offers many opportunities to apply important skills such as leadership, teamwork, ethical decision making, critical thinking and problem solving, written and oral communication as they are woven throughout the curriculum. Students immerse themselves in all aspects of business management, including accounting, marketing, economics, and social responsibility. Students participate in an international project and travel to the country of their project hosts. The program culminates with a comprehensive real-life consulting project with a company operating in our region.

The full-time track for the Master of Business Administration program at Utah Valley University is a one year, accelerated MBA program that offers either of two concentration areas in management or accounting.

The part-time track for the Master of Business Administration program at Utah Valley University is a two year plan for working professionals which embraces the university's designation as an engaged learning campus and also offers either of two concentration areas in management or accounting.

The MBA program is AACSB accredited.

**Total Program Credits: 36**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 27 Credits |
| | ACC 6350 | Management Control Systems | 3 |
| | FIN 6150 | Financial Management | 3 |
| | ECON 6300 | Managerial Economics | 3 |
| | MGMT 6000 | Career Development and Advancement | 1.5 |
| | MGMT 6500 | Managing Individuals and Groups | 3 |
| | MGMT 6800 | Global Business Strategy | 3 |
| | MGMT 6910 | Designing Business | 1.5 |
| | MGMT 6930 | International Engagement | 1.5 |
| | MGMT 6940 | MBA Consulting Project | 3 |
| | MKTG 6600 | Marketing Strategy (3.0) | 3 |
| | MKTG 6920 | Creativity and Innovative Problem Solving | 1.5 |
| Emphasis Requirements: | | | 9 Credits |
| | MKTG 6860 | Applied Business Research | 3 |
| | MGMT 6510 | Information Systems and Project Management | 3 |
| | MGMT 6740 | Operations and Supply Chain Management | 3 |

**Graduation Requirements:**

1. Completion of 36 hours of approved credit with no grade lower than a "C" as described in this program.
2. Graduates may not transfer more than ten hours into this MBA program, preferably from an AACSB accredited institution. All transfer courses will be reviewed by a graduate committee managed by the Woodbury School of Business.
3. Final approval for graduation will be determined by the MBA graduate committee of the Woodbury School of Business.
4. A minimum cumulative GPA of 3.0 or higher must be maintained within program.

## Master of Business Administration - Marketing Emphasis, M.B.A.

### *Requirements*

The UVU Master of Business Administration is an applied graduate degree that reflects the Woodbury School of Business's long and distinguished history of providing excellence in business education. Our innovative team-based curriculum reaches beyond the walls and textbooks of a traditional program and includes not only instruction in the disciplines of business, but also offers many opportunities to apply important skills such as leadership, teamwork, ethical decision making, critical thinking and problem solving, written and oral communication as they are woven throughout the curriculum. Students immerse themselves in all aspects of business management, including accounting, marketing, economics, and social responsibility. Students participate in an international project and travel to the country of their project hosts. The program culminates with a comprehensive real-life consulting project with a company operating in our region.

The full-time track for the Master of Business Administration program at Utah Valley University is a one year, accelerated MBA program that offers either of two concentration areas in management or accounting.

The part-time track for the Master of Business Administration program at Utah Valley University is a two year plan for working professionals which embraces the university's designation as an engaged learning campus and also offers either of two concentration areas in management or accounting.

The MBA program is AACSB accredited.

**Total Program Credits: 36**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 27 Credits |
| | ACC 6350 | Management Control Systems | 3 |
| | FIN 6150 | Financial Management | 3 |
| | ECON 6300 | Managerial Economics | 3 |
| | MGMT 6000 | Career Development and Advancement | 1.5 |
| | MGMT 6500 | Managing Individuals and Groups | 3 |
| | MGMT 6800 | Global Business Strategy | 3 |
| | MGMT 6910 | Designing Business | 1.5 |
| | MGMT 6930 | International Engagement | 1.5 |
| | MGMT 6940 | MBA Consulting Project | 3 |
| | MKTG 6600 | Marketing Strategy (3.0) | 3 |
| | MKTG 6920 | Creativity and Innovative Problem Solving | 1.5 |
| Emphasis Requirements: | | | 9 Credits |
| | MKTG 6620 | Marketing Research and Analytics | 3 |
| | MKTG 6640 | Brand, Product, and Services Management | 3 |
| | MKTG 6660 | Marketing Channels and Communications | 3 |

**Graduation Requirements:**

1. Completion of 36 hours of approved credit with no grade lower than a "C" as described in this program.
2. Graduates may not transfer more than ten hours into this MBA program, preferably from an AACSB accredited institution. All transfer courses will be reviewed by a graduate committee managed by the Woodbury School of Business.
3. Final approval for graduation will be determined by the MBA graduate committee of the Woodbury School of Business.
4. A minimum cumulative GPA of 3.0 or higher must be maintained within program.

## Master of Business Administration - Technology Management Emphasis, M.B.A.

### *Requirements*

The UVU Master of Business Administration is an applied graduate degree that reflects the Woodbury School of Business's long and distinguished history of providing excellence in business education. Our innovative team-based curriculum reaches beyond the walls and textbooks of a traditional program and includes not only instruction

in the disciplines of business, but also offers many opportunities to apply important skills such as leadership, teamwork, ethical decision making, critical thinking and problem solving, written and oral communication as they are woven throughout the curriculum. Students immerse themselves in all aspects of business management, including accounting, marketing, economics, and social responsibility. Students participate in an international project and travel to the country of their project hosts. The program culminates with a comprehensive real-life consulting project with a company operating in our region.

The full-time track for the Master of Business Administration program at Utah Valley University is a one year, accelerated MBA program that offers either of two concentration areas in management or accounting.

The part-time track for the Master of Business Administration program at Utah Valley University is a two year plan for working professionals which embraces the university's designation as an engaged learning campus and also offers either of two concentration areas in management or accounting.

The MBA program is AACSB accredited.

**Total Program Credits: 36**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 27 Credits |
| | ACC 6350 | Management Control Systems | 3 |
| | FIN 6150 | Financial Management | 3 |
| | ECON 6300 | Managerial Economics | 3 |
| | MGMT 6000 | Career Development and Advancement | 1.5 |
| | MGMT 6500 | Managing Individuals and Groups | 3 |
| | MGMT 6800 | Global Business Strategy | 3 |
| | MGMT 6910 | Designing Business | 1.5 |
| | MGMT 6930 | International Engagement | 1.5 |
| | MGMT 6940 | MBA Consulting Project | 3 |
| | MKTG 6600 | Marketing Strategy | 3 |
| | MKTG 6920 | Creativity and Innovative Problem Solving | 1.5 |
| Emphasis Requirements: | | | 9 Credits |
| | MKTG 6400 | Technology Marketing and Customer Experience | 3 |
| | MGMT 6440 | Advanced Project Management | 3 |
| | MGMT 6470 | Organization Information Technologies | 3 |

**Graduation Requirements:**

1. Completion of 36 hours of approved credit with no grade lower than a "C" as described in this program.
2. Graduates may not transfer more than ten hours into this MBA program, preferably from an AACSB accredited institution. All transfer courses will be reviewed by a graduate committee managed by the Woodbury School of Business.
3. Final approval for graduation will be determined by the MBA graduate committee of the Woodbury School of Business.
4. A minimum cumulative GPA of 3.0 or higher must be maintained within program.

# Chemistry

## Chemistry

The Chemistry department is in the College of Science. To find the most up-to-date information from the Chemistry department, visit their website.

Chemistry department

**DEPARTMENT CHAIR**

**CAKA, Fern** *Associate Professor*

**FACULTY**

**BOND, Calvin A.** *Associate Professor*
**CAKA, Fern** *Associate Professor*
**CHAMBERLAND, Stephen** *Associate Professor*
**GOLDFARB, Nathan E.** *Assistant Professor*
**GUNAWARDENA, Gamini U.** *Associate Professor*
**HALLING, Merrill** *Associate Professor*
**HAM, Young W.** *Associate Professor*
**HEIDER, Emily** *Assistant Professor*
**HERRON, Stevens** *Lecturer*
**HOPOATE-SITAKE, Moana** *Lecturer - Placeholder*
**HORN, Matthew** *Associate Professor*
**LARICHEVA, Elena** *Assistant Professor*
**ROCKS, Sally** *Assistant Professor*
**SHURTLEFF, James K.** *Associate Professor*
**THULIN, Craig** *Professor*
**VISWANATH, Lakshmi** *Associate Professor*
**WATHEN, Mark D.** *Associate Professor*
**WHITE, Lilia** *Lecturer*
**WILSON, Bruce E.** *Associate Professor*
**YU, Ming** *Assistant Professor*

# Course Descriptions

Chemistry.....524

# Degrees & Programs

## Chemistry, Minor

### *Requirements*

**Total Program Credits: 27**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 24 Credits |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2320 | Organic Chemistry II | 4 |
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | CHEM 2325 | Organic Chemistry II Laboratory | 1 |
| | CHEM 3000 | Analytical Chemistry | 2 |
| | CHEM 3005 | Analytical Chemistry Laboratory | 2 |
| Elective Requirements: | | | 3 Credits |
| | Any upper-division chemistry class numbered above 3000 with a minimum of 3 credit hours | | 3 |

**Graduation Requirements:**

1. Complete all courses with a minimum grade of "C-" or better.

## Chemistry - Biochemistry Emphasis, B.S.

### *Requirements*

Biochemistry studies the chemical composition of living things. Biochemistry combines the study of biology with organic and inorganic chemistry as applied to topics such as enzymology, genetics, toxicology, pharmacology, food science, and medicine. Students with this degree may pursue graduate study or work in the field of biotechnology or in one of the many related areas or be eligible for many employment opportunities in chemistry and biology.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| To matriculate into the Chemistry degree, students must have adviser approval, and completed CHEM 1210, CHEM 1220, CHEM 1250, and CHEM 1260 all with a C- or higher. | | | |
| General Education Requirements: | | | 40 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | 3 |
| | PHIL 2050 | Ethics and Values | |
| or | PHIL 205G | Ethics and Values | |
| or | PHIL 205H | Ethics and Values | |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I [1] | 4 |
| | CHEM 1220 | Principles of Chemistry II [2] | 4 |
| | Fine Arts | | 3 |
| | Humanities | | 3 |

| | | | |
|---|---|---|---|
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 41 Credits |
| | CHEM 1215 | Principles of Chemistry I Laboratory [3] | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory [4] | 1 |
| | CHEM 1250 | Chemistry Cornerstone- Research and Careers | 1 |
| | CHEM 1260 | Chemistry Cornerstone- Ethics | 1 |
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | CHEM 2320 | Organic Chemistry II | 4 |
| | CHEM 2325 | Organic Chemistry II Laboratory | 1 |
| | CHEM 3000 | Analytical Chemistry | 2 |
| | CHEM 3005 | Analytical Chemistry Laboratory | 2 |
| | CHEM 3600 | Biological Chemistry | 3 |
| | CHEM 3605 | Biological Chemistry Lab | 1 |
| | CHEM 4000 | Instrumental Analysis WE | 2 |
| | CHEM 4005 | Instrumental Analysis Laboratory | 2 |
| | MATH 1220 | Calculus II | 5 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| Emphasis Requirements: | | | 18 Credits |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | BIOL 3400 | Cell Biology | 3 |
| | BIOL 3405 | Cell Biology Laboratory | 1 |
| | CHEM 3060 | Physical Chemistry I | 4 |
| | CHEM 3065 | Physical Chemistry I Lab | 1 |
| | CHEM 3100 | Advanced Inorganic Chemistry | 4 |
| | CHEM 3115 | Advanced Inorganic Chemistry Lab | 1 |
| | CHEM 3620 | Biological Chemistry II | 3 |
| Emphasis Elective Requirements: | | | 21 Credits |
| Chemistry Electives (10 credits) from the following: | | | 10 |
| | CHEM 3020 | Environmental Chemistry (3.0) | |
| | CHEM 3025 | Environmental Chemistry Laboratory (1.0) | |
| | CHEM 3300 | Biomolecular Modeling and Simulations (4.0) | |
| | CHEM 3800 | Energy Use on Earth (3.0) | |
| | CHEM 4030 | Radiochemistry (3.0) | |
| | CHEM 4600 | Structure Determination (3.0) | |
| | CHEM 4605 | Structure Determination Laboratory (1.0) | |
| | CHEM 4800 | Pharmacology (3.0) | |
| | CHEM 482R | Chemistry Internship (1.0) | |
| | CHEM 489R | Undergraduate Research in Chemistry (1.0) | |
| | CHEM 495R | Advanced Topics in Organic Chemistry (3.0) | |
| | CHEM 496R | Special Topics in Chemistry (1.0) | |
| | CHEM 499R | Independent Study and Research (1.0) | |
| Biology Electives (11 credits) from the following: | | | 11 |
| | BIOL 3300 | Developmental Biology (3.0) | |
| | BIOL 3500 | Genetics (3.0) | |
| | BIOL 3515 | Advanced Genetics Laboratory (1.0) | |
| | BIOL 3550 | Molecular Biology (3.0) | |
| | BIOL 4300 | Bioinformatics and Genome Analysis (4.0) | |
| | BIOL 4450 | Immunology (3.0) | |
| | BIOL 4455 | Immunology Laboratory (1.0) | |
| | BIOL 4550 | Molecular Evolution and Bioinformatics WE (3.0) | |
| | MICR 3450 | General Microbiology (3.0) | |
| | MICR 3455 | General Microbiology Laboratory (1.0) | |
| | ZOOL 2320 | Human Anatomy (3.0) | |
| and | ZOOL 2325 | Human Anatomy Laboratory (1.0) | |
| | ZOOL 2420 | Human Physiology (3.0) | |
| and | ZOOL 2425 | Human Physiology Laboratory (1.0) | |
| | ZOOL 4300 | Histology (4.0) | |
| | ZOOL 4700 | Advanced Anatomy (4.0) | |
| | ZOOL 4780 | Neuroscience (4.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 (C) or above with a minimum of 2.25 in Major.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. A minimum of 54 credit hours must be in the major with a minimum of 20 credits taken at UVU. A minimum of 28 chemistry credits must be upper-division.
6. Complete all chemistry and physics courses with a minimum grade of "C-" or better.
7. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| 1-To be taken with CHEM 1215 Principles of Chemistry I Laboratory |
| 2-To be taken with CHEM 1225 Principles of Chemistry II Laboratory |
| 3-To be taken with CHEM 1210 Principles of Chemistry I |
| 4-To be taken with CHEM 1220 Principles of Chemistry II |

# Chemistry - Professional Chemistry Emphasis, B.S.

## *Requirements*

This bachelor's degree in professional chemistry prepares a student for employment as a chemist. It also prepares a student for further study in a graduate degree or professional program. This degree is designed to meet American Chemical standards for a bachelor degree. Job opportunities for students with this degree are very good. Students with this degree can have careers in test laboratories, government laboratories, hospital laboratories, research and development, quality control, manufacturing, and many other areas.

In obtaining this degree, students will learn how to:
Use modern scientific instruments and interpret results
Apply principles used in chemistry to solve everyday problems
Think analytically
Use problem solving skills
Categorize information
Apply learned math skills
Develop laboratory skills

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| To matriculate into the Chemistry degree, students must have adviser approval, and completed CHEM 1210, CHEM 1220, CHEM 1250, and CHEM 1260 all with a C- or higher. | | | |
| General Education Requirements: | | | 40 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values | |
| or | PHIL 205H | Ethics and Values | |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I [1] | 4 |
| | CHEM 1220 | Principles of Chemistry II [2] | 4 |
| | Fine Arts | | 3 |
| | Humanities | | 3 |
| | Social/Behavioral Science | | 3 |

| Discipline Core Requirements: | | | 41 Credits |
|---|---|---|---|
| | CHEM 1215 | Principles of Chemistry I Laboratory [3] | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory [4] | 1 |
| | CHEM 1250 | Chemistry Cornerstone- Research and Careers | 1 |
| | CHEM 1260 | Chemistry Cornerstone- Ethics | 1 |
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | CHEM 2320 | Organic Chemistry II | 4 |
| | CHEM 2325 | Organic Chemistry II Laboratory | 1 |
| | CHEM 3000 | Analytical Chemistry | 2 |
| | CHEM 3005 | Analytical Chemistry Laboratory | 2 |
| | CHEM 3600 | Biological Chemistry | 3 |
| | CHEM 3605 | Biological Chemistry Lab | 1 |
| | CHEM 4000 | Instrumental Analysis WE | 2 |
| | CHEM 4005 | Instrumental Analysis Laboratory | 2 |
| | MATH 1220 | Calculus II | 5 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| Emphasis Requirements: | | | 39 Credits |
| | CHEM 3060 | Physical Chemistry I | 4 |
| | CHEM 3065 | Physical Chemistry I Lab | 1 |
| | CHEM 3070 | Physical Chemistry II | 4 |
| | CHEM 3075 | Physical Chemistry II Lab | 1 |
| | CHEM 3100 | Advanced Inorganic Chemistry | 4 |
| | CHEM 3115 | Advanced Inorganic Chemistry Lab | 1 |
| | MATH 2210 | Calculus III | 3 |
| | MATH 2280 | Ordinary Differential Equations | 3 |
| | PHYS 3300 | Mathematical Physics | 3 |
| Chemistry Electives (15 credits) from the following: | | | 15 |
| | CHEM 3020 | Environmental Chemistry (3.0) | |
| | CHEM 3025 | Environmental Chemistry Laboratory (1.0) | |
| | CHEM 3080 | Physical Chemistry III (3.0) | |
| | CHEM 3300 | Biomolecular Modeling and Simulations (4.0) | |
| | CHEM 3620 | Biological Chemistry II (3.0) | |
| | CHEM 3800 | Energy Use on Earth (3.0) | |
| | CHEM 4030 | Radiochemistry (3.0) | |
| | CHEM 4600 | Structure Determination (3.0) | |
| | CHEM 4605 | Structure Determination Laboratory (1.0) | |
| | CHEM 4800 | Pharmacology (3.0) | |
| | CHEM 482R | Chemistry Internship (1.0) | |

| | | | |
|---|---|---|---|
| | CHEM 489R | Undergraduate Research in Chemistry (1.0) | |
| | CHEM 491R | Advanced Topics in Inorganic Chemistry (3.0) | |
| | CHEM 495R | Advanced Topics in Organic Chemistry (3.0) | |
| | CHEM 496R | Special Topics in Chemistry (3.0) | |
| | CHEM 499R | Independent Study and Research (1.0) | |
| | PHYS 2800 | Introduction to Materials Physics (3.0) | |
| | PHYS 3500 | Thermodynamics (3.0) | |
| | PHYS 4250 | Nuclear Physics (3.0) | |
| | PHYS 4510 | Quantum Mechanics I (3.0) | |
| | PHYS 4520 | Quantum Mechanics II (3.0) | |
| | PHYS 4800 | Solid State Physics (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 (C) or above with a minimum of 2.25 in Major.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. A minimum of 54 credit hours must be in the major with a minimum of 20 credits taken at UVU. A minimum of 28 chemistry credits must be upper-division.
6. Complete all chemistry and physics courses with a minimum grade of "C-" or better.
7. Successful completion of at least one Global/Intercultural course.

| Footnote: | |
|---|---|
| 1 To be taken with CHEM 1215 Principles of Chemistry I Laboratory | |
| 2 To be taken with CHEM 1225 Principles of Chemistry II Laboratory | |
| 3 To be taken with CHEM 1210 Principles of Chemistry I | |
| 4 To be taken with CHEM 1220 Principles of Chemistry II | |

# Chemistry Education, B.S.

## *Requirements*

The degree in chemistry education prepares a student to teach chemistry in secondary education. Students that complete this degree receive endorsements to teach chemistry. Completion of this program is dependent upon being accepted into the Secondary Education program through the School of Education. There is a great demand for teachers in chemistry and employment opportunities are excellent.
In obtaining this degree, students will learn how to:
Use modern scientific instruments and interpret results
Apply principles used in chemistry to solve everyday problems
Think analytically
Use problem solving skills
Categorize information
Apply learned math skills
Develop laboratory skills

**Total Program Credits: 122**

| Matriculation Requirements: |
|---|
| 1. Students are admitted directly to the Baccalaureate degree program in Chemistry Education upon acceptance to the Secondary Education Program.<br>2. Students must obtain the departmental Advisor's signature on an approved program plan prior to enrollment in their second semester of study.<br><br>Secondary Education Requirements:<br>1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check. |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | CHEM 1210 | Principles of Chemistry I [1] | 4 |
| | CHEM 1220 | Principles of Chemistry II [2] | 4 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 83 Credits |
| Chemistry Discipline Core Courses: | | | |
| | CHEM 1215 | Principles of Chemistry I Laboratory [3] | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory [4] | 1 |
| | CHEM 1250 | Chemistry Cornerstone- Research and Careers | 1 |
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2320 | Organic Chemistry II | 4 |

| | | | |
|---|---|---|---|
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | CHEM 2325 | Organic Chemistry II Laboratory | 1 |
| | CHEM 3000 | Analytical Chemistry | 2 |
| | CHEM 3005 | Analytical Chemistry Laboratory | 2 |
| | CHEM 3060 | Physical Chemistry I | 4 |
| | CHEM 3065 | Physical Chemistry I Laboratory | 1 |
| | CHEM 3100 | Advanced Inorganic Chemistry | 4 |
| | CHEM 4200 | Teaching Methods in Science | 3 |
| | MATH 1220 | Calculus II | 5 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| | CHEM 3600 | Biological Chemistry | 3 |
| | CHEM 4000 | Instrumental Analysis WE | 2 |
| | CHEM 4005 | Instrumental Analysis Laboratory | 2 |
| Education Discipline Core Courses: Must be completed with a B- or higher | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| | EDSP 340G | Exceptional Students | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 122 semester credits with a minimum of 40 upper-division credits.
2. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. A minimum of 52 credit hours must be in the major with a minimum of 20 credits taken at UVU. A minimum of 24 chemistry and physics credits must be upper-division.
6. Complete all chemistry courses with a minimum grade of "C-" or better.
7. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| 1-To be taken with CHEM 1215 Principles of Chemistry I Laboratory |
| 2-To be taken with CHEM 1225 Principles of Chemistry II Laboratory |
| 3-To be taken with CHEM 1210 Principles of Chemistry I |
| 4-To be taken with CHEM 1220 Principles of Chemistry II |

# Clinical Mental Health Counseling Graduate Programs

## Clinical Mental Health Counseling Graduate Program

The Clinical Mental Health Counseling Graduate Program is in the College of Humanities and Social Sciences. To find the most up-to-date information on the Clininal Mental Health Counseling Graduate Program, visit their website.

Clininal Mental Health Counseling Graduate Program

## Course Descriptions

Clin Mental Health Counseling.....538

## Degrees & Programs

### Clinical Mental Health Counseling, M.S.

#### *Requirements*

The Master in Clinical Mental Health Counseling (CMHC) prepares individuals to provide counseling services, mental health evaluations, and referrals to ameliorate and prevent cognitive and emotional crises as well as personal and interpersonal problems. Instruction will include coursework on individual and group counseling, psychotherapy theory and practice, human development, psychological assessment, psychopathology and diagnostics, professional standards and ethics as well as the governing laws and regulations of the field. Successful graduates will be eligible for employment and licensure as a Clinical Mental Health Counselor in the state of Utah.

**Total Program Credits: 62**

Matriculation Requirements:

1. Bachelor's degree from a regionally accredited institution of higher education (with official transcripts from all institutions attended). The degree can be in any discipline, provided student meets the expected GPA and prerequisite coursework.
2. GPA Requirements: The minimum cumulative GPA is 3.4 on a 4.0 scale.
3. Prerequisite Coursework:
   General or Introductory Psychology, Abnormal Psychology, Intro to Counseling (or equivalent),
   Research Methods, Statistics
4. Complete the UVU Graduate School Application.
5. Personal Interview: All candidates will be screened and those deemed to meet or exceed basic application requirements may be invited for an interview. Thisinterview does not guarantee acceptance into the program as students will compete with all other applicants for matriculation into acohort.
6. Three total letters of recommendation from academic and professional sources.

| Discipline Core Requirements: | | | 62 Credits |
|---|---|---|---|
| | CMHC 6000 | ACA Ethics | 3 |
| | CMHC 6010 | Theories of Counseling | 3 |
| | CMHC 6020 | Techniques of Counseling | 3 |
| | CMHC 6030 | DSM Diagnostics | 4 |
| | CMHC 6040 | Professional Orientation | 3 |
| | CMHC 6050 | Career Counseling | 3 |
| | CMHC 6060 | Psychological Assessment | 3 |
| | CMHC 6070 | Group Counseling | 3 |
| | CMHC 6080 | Eastern Counseling Approaches | 3 |
| | CMHC 6090 | Psychopharmacology | 3 |
| | CMHC 6100 | Crisis Management | 3 |
| | CMHC 6110 | Research Methods | 3 |
| | CMHC 6120 | Addiction Counseling | 3 |
| | CMHC 6130 | Multicultural Counseling | 3 |
| | CMHC 6140 | Program Evaluation | 3 |
| | CMHC 6150 | Cognitive Therapies | 3 |
| | CMHC 6160 | Human Development | 3 |
| | CMHC 671R | Practicum | 4 |
| | CMHC 689R | Internship | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 62 semester credits.
2. A minimum cumulative GPA of 3.0 must be maintained within the program.
3. A grade of 'B' or higher required in all courses.
4. 1,000 clinical hours are required for completion.
5. Residency hours: Minimum of 42 graduate credit hours completed at UVU in the CMHC program.

# Communication

## Communication

The Communication department is in the College of Humanities and Social Sciences. To find the most up-to-date information from the Communication department, visit their website.

Communication department

**DEPARTMENT CHAIR**

**MORIN, David T.** *Associate Professor*

**FACULTY**

**ALLEN, Jordan** *Assistant Professor*
**AUSTIN, Brent** *Lecturer*
**BALLARD, Jessica** *Professional in Residence*
**BLEVINS, Maria** *Associate Professor*
**FISHER, James** *Lecturer*
**FITZ, Juliann** *Lecturer*
**GORDON, Philip** *Associate Professor*
**GRECU, Natalie** *Assistant Professor*
**HALL, Kelly** *Assistant Professor*
**HANSON, Kimberly** *Lecturer*
**HERNANDEZ, Leandra** *Assistant Professor*
**LIANG, Jingdong** *Associate Professor*
**MCKASY, Meaghan** *Assistant Professor*
**MORIN, David T.** *Associate Professor*
**MUNZ, Stevie M.** *Assistant Professor*
**MURPHY, Jeremy N.C.** *Lecturer*
**PAULY, Jessica A.** *Assistant Professor*
**RAWAT, Meghana** *Assistant Professor*
**SANDERS, Farah** *Lecturer*
**SAPIENZA, Zachary** *Lecturer*
**SCOTT, David W.** *Professor*
**WASSINK, Benjamin** *Lecturer*

# Course Descriptions

Communication..... 541

# Degrees & Programs

## Humanities and Social Sciences, A.A.

### *Requirements*

The AA/AS in Humanities and Social Sciences is designed to (a) allow students to explore different majors and career paths within the humanities and social sciences, (b) provide a completion point for students who do not want to pursue a bachelor's degree, and (c) facilitate transfer to another institution for students who would like to finish their bachelor's degree elsewhere. The curriculum consists of 35 credits of general education,12credits of electives in the College of Humanities and Social Sciences, and 13 free electives from any college within the university.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions Majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business Majors) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 12 Credits |
| Any additional Humanities and Social Sciences Course 1000 or 2000 level with the following prefix: AIST, AMST, ANTH, ASL, BESC, CHIN, CHST, CINE, CLST, CNST, COMM, ENGL, FAMS, FREN, GER, GRK, HIST, HUM, IS, LATN, PHIL, POLS, PORT, PSY, RUS, SOC, SOSC, SPAN, SW | | | 12 |
| Elective Requirements: | | | 13 Credits |
| Same foreign :anguage | | | 8 |
| Complete 5 credits in any course 1000 level and above | | | 5 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.

2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 20 credit hours through course attendance at UVU,
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one language.

## Humanities and Social Sciences, A.S.

### *Requirements*

The AA/AS in Humanities and Social Sciences is designed to (a) allow students to explore different majors and career paths within the humanities and social sciences, (b) provide a completion point for students who do not want to pursue a bachelor's degree, and (c) facilitate transfer to another institution for students who would like to finish their bachelor's degree elsewhere. The curriculum consists of 35 credits of general education,12credits of electives in the College of Humanities and Social Sciences, and 13 free electives from any college within the university.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 12 Credits |
| Any additional Humanities and Social Sciences Course 1000 or 2000 level with the following prefix: AIST, AMST, ANTH, ASL, BESC, CHIN, CHST, CINE, CLST, CNST, COMM, ENGL, FAMS, FREN, GER, GRK, HIST, HUM, IS, LANG, LATN, PHIL, POLS, PORT, PSY, RUS, SOC, SOSC, SPAN, SW | | | 12 |
| Elective Requirements: | | | 13 Credits |
| Complete 13 credits in any course 1000 level and above | | | 13 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 20 credit hours through course attendance at UVU,
4. Completion of GE and specified departmental requirements.

## Applied Communication, Minor

### *Requirements*

The BA/BS/Minor will give students the opportunity to earn a full major/minor in the field of applied communication. This degree prepares students with the necessary skills to (a) examine a wide range of diverse issues, including the communication needs of organizations, effective social interaction, improvement of health care understandings or delivery, implementation of behavioral interventions, training to improve communication, and activist efforts to achieve social change, (b) methodological and (c) theoretical competence to address issues of applied communication, and (d) to practice oral, written, and critical thinking skills.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | Credits |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab | 1 |
| | COMM 1050 | Introduction to Communication | 3 |
| | COMM 3050 | Theories of Communication and Culture WE | 3 |
| Elective Requirements: | | | 9 Credits |
| | Complete 9 credits in the Communication department; 6 of those credits must be upper-division credits (3000-4000 levelclasses) | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of18 or more semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Completion of COMM courses with a C- or higher

## Public Relations and Strategic Communication, Minor

### *Requirements*

Programs of study in Communication at UVU offer a balance of analytic and applied approaches to study in the field. The department offers an expanding menu of beginning and advanced courses in mass communication, public relations, media studies, interpersonal communication, intercultural communication, international communication, organizational communication, and journalism.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 18 Credits |
| | COMM 2300 | Introduction to Public Relations and Strategic Communication | 3 |
| | COMM 3520 | Public Relations and Strategic Communication Case Studies | 3 |
| | COMM 3530 | Public Relations and Strategic Communication Writing | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 18 or more semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Complete all communication classes with a C- or better

## Applied Communication, B.A.

### *Requirements*

The BA/BS/Minor will give students the opportunity to earn a full major/minor in the field of applied communication. This degree prepares students with the necessary skills to (a) examine a wide range of diverse issues, including the communication needs of organizations, effective social interaction, improvement of health care understandings or delivery, implementation of behavioral interventions, training to improve communication, and activist efforts to achieve social change, (b) methodological and (c) theoretical competence to address issues of applied communication, and (d) to practice oral, written, and critical thinking skills.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | STAT 1040 | Introduction to Statistics | 3 |
| or | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (Any Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 36 Credits |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab | 1 |
| | COMM 1050 | Introduction to Communication | 3 |
| | COMM 3020 | Communication Research Methods WE | 3 |
| | COMM 3050 | Theories of Communication and Culture WE | 3 |
| | COMM 319G | Intercultural Communication Encounters | 3 |
| | COMM 4930 | Communication Capstone | 3 |
| | Complete 18 credits within the Communication Major; 9 must be at the 3000-4000 level. | | 18 |
| Elective Requirements: | | | 48 Credits |
| | One foreign language | | 12 |
| | Any courses numbered 1000 or higher; specific upper-division credits may be needed to fulfill the university's upper-divisionrequirement | | 36 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Completion of COMM courses with a C- or higher.
7. Successful completion of at least one Global/Intercultural course.

## Applied Communication, B.S.

### *Requirements*

The BA/BS/Minor will give students the opportunity to earn a full major/minor in the field of applied communication. This degree prepares students with the necessary skills to (a) examine a wide range of diverse issues, including the communication needs of organizations, effective social interaction, improvement of health care understandings or delivery, implementation of behavioral interventions, training to

improve communication, and activist efforts to achieve social change, (b) methodological and (c) theoretical competence to address issues of applied communication, and (d) to practice oral, written, and critical thinking skills.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | STAT 1040 | Introduction to Statistics | 3 |
| or | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 36 Credits |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab | 1 |
| | COMM 1050 | Introduction to Communication | 3 |
| | COMM 3020 | Communication Research Methods WE | 3 |
| | COMM 3050 | Theories of Communication and Culture WE | 3 |
| | COMM 319G | Intercultural Communication Encounters | 3 |
| | COMM 4930 | Communication Capstone | 3 |
| | Complete 18 credits within the Communication Major; 9 must be at the 3000-4000 level. | | 18 |
| Elective Requirements: | | | 49 Credits |
| | Any courses numbered 1000 or higher; specific upper-division credits may be needed to fulfill the university's upper-divisionrequirement | | 49 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Completion of COMM courses with a C- or higher.
7. Successful completion of at least one Global/Intercultural course.

## Public Relations and Strategic Communication, B.A.

### *Requirements*

The BA/BS/Minor will give students the opportunity to earn a full major/minor in the field of public relations and strategic communication. This degree prepares students with the necessary skills to communicate (a) visually, (b) orally, and through the (c) written word in traditional and digital mediums, as demanded by the ever-changing nature of strategic communication and public relations.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | STAT 1040 | Introduction to Statistics | 3 |
| or | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (Any Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts | | 3 |
| | Behavioral/Social Science | | 3 |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 18 Credits |
| | COMM 2300 | Introduction to Public Relations and Strategic Communication | 3 |
| | COMM 3020 | Communication Research Methods WE | 3 |
| | COMM 3050 | Theories of Communication and Culture WE | 3 |
| | COMM 3520 | Public Relations and Strategic Communication Case Studies | 3 |
| | COMM 3530 | Public Relations and Strategic Communication Writing | 3 |
| | COMM 4850 | Public Relations and Strategic Communication Campaigns | 3 |
| Elective Requirements: | | | 64 Credits |
| | Complete 18 credits within the Communication Major, 9 must be at the 3000-4000 level | | 18 |
| | Complete 12 credits from one foreign language to include the 1010, 1020, and 2010 levels. | | 12 |
| | Any courses numbered 1000 or higher, specific upper-division credits may be needed to fulfill the university's upper-division requirement, completion of one G/I course is required. | | 36 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Completion of COMM courses with a C- or higher.
7. Successful completion of at least one Global/Intercultural course.

## Public Relations and Strategic Communication, B.S.

### *Requirements*

The BA/BS/Minor will give students the opportunity to earn a full major/minor in the field of public relations and strategic communication. This degree prepares students with the necessary skills to communicate (a) visually, (b) orally, and through the (c) written word in traditional and digital mediums, as demanded by the ever-changing nature of strategic communication and public relations.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | STAT 1040 | Introduction to Statistics | 3 |
| or | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Behavioral/Social Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | COMM 2300 | Introduction to Public Relations and Strategic Communication | 3 |
| | COMM 3020 | Communication Research Methods WE | 3 |
| | COMM 3050 | Theories of Communication and Culture WE | 3 |
| | COMM 3520 | Public Relations and Strategic Communication Case Studies | 3 |
| | COMM 3530 | Public Relations and Strategic Communication Writing | 3 |
| | COMM 4850 | Public Relations and Strategic Communication Campaigns | 3 |
| Elective Requirements: | | | 67 Credits |
| | Complete 18 credits within the Communication Major, 9 must be at the 3000-4000 level | | 18 |
| | Any courses numbered 1000 or higher, specific upper-division credits may be needed to fulfill the university's upper-division requirement, completion of one G/I course is required. | | 49 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of COMM courses with a C- or higher.
6. Successful completion of at least one Global/Intercultural course.

# Computer Science

## Computer Science

The Computer Science department is in the College of Engineering & Technology. To find the most up-to-date information from the Computer Science department, visit their website.

Computer Science department

**DEPARTMENT CHAIR**

**HARRISON, Neil B.** *Professor*

**FACULTY**

**ALDOUS, Peter** *Assistant Professor*
**ALLISON, Charles** *Professor*
**DURNEY, Brian** *Associate Professor*
**HARRISON, Neil B.** *Professor*
**JENSON, Kenneth** *Lecturer*
**JENSON, Kenneth** *Lecturer*
**KNAEBLE, Brian** *Assistant Professor*
**KNUTSON, Charles D.** *Associate Professor*
**MORTENSEN, Gregory** *Lecturer*
**PETERSON, Todd** *Associate Professor*
**RUDOLPH, George** *Associate Professor*
**SAJAL, Sayeed** *Assistant Professor*
**SANATI-MEHRIZY, Reza** *Professor*
**SHARP, Craig** *Lecturer*
**TANG, Jingpeng** *Associate Professor*
**TENG, Abraham** *Associate Professor*
**THACKERAY, Lynn Roy** *Lecturer*
**WAGSTAFF, David** *Lecturer*
**ZENG, Larry** *Associate Professor*

# Course Descriptions

Computer Science..... 549

# Degrees & Programs

## Computer Science - Computer Engineering Emphasis, A.A.S.

### *Requirements*

The program introduces the student to a wide range of computer systems hardware, software, device drivers and peripheral devices.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 13 Credits |
| | A minimum of 16 credits of General Education requirements are required for graduation. Not all GE requirements are listed in this section (see Specialty Core requirements for more details). | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | HUMANITIES/FINE ARTS/FOREIGN LANGUAGE[1] | | 3 |
| | COMM 2110 | Interpersonal Communication (Minimum grade of C- required) | 3 |
| | BIOLOGY | | 3 |
| or | PHYS 2210 | Physics for Scientists and Engineers I (4) (Minimum grade of C- required) | |
| | PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT [2] | | 1 |
| Discipline Core Requirements: | | | 9 Credits |
| Complete the following: | | | |
| | CS 1400 | Fundamentals of Programming (Minimum grade of C- required) | 3 |
| | CS 2600 | Computer Networks I (Minimum grade of C- required) | 3 |
| | CS 2810 | Computer Organization and Architecture (Minimum grade of C- required) | 3 |
| Emphasis Requirements: | | | 28 Credits |
| Complete the following (minimum grade of C- required): | | | |
| | ECE 1000 | Introduction to Electrical and Computer Engineering | 3 |
| | ECE 2250 | Circuit Theory | 3 |
| | ECE 2255 | Circuit Theory Lab | 1 |
| | ECE 2700 | Digital Design I | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | MATH 1210 | Calculus I (fulfills GE requirement) | 5 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2370 | C plus plus Programmin WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | ECE 2705 | Digital Design I Lab | 1 |
| Emphasis Elective Requirements: | | | 13 Credits |
| Complete 10 credits from the following courses (minimum grade of C- required). (Must be approved by CSE Department. See CSE Advisor): | | | 10 |
| | CS 2300 | Discrete Mathematical Structures I (3) | |
| | CS 2450 | Software Engineering (3) | |
| | CS 2550 | Web Programming I (3) | |
| | MATH 1220 | Calculus II (5) | |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab (1) | |
| | Complete 3 credits of any CS or ECE course 1000 or higher. | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.

| Footnote: |
|---|
| [1] COMM 1020 and COMM 1025 recommended |
| [2] HLTH 1100 or PES 1097 recommended |

## Computer Science - Computing and Networking Sciences Emphasis, A.A.S.

### *Requirements*

The program introduces the student to a wide range of networking and data communications technologies and entry level programming.

**Total Program Credits: 64**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 13 Credits |
| | A minimum of 16 credits of General Education requirements are required for graduation. Not all GE requirements are listed in this section (see Specialty Core requirements for more details). | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | HUMANITIES/FINE ARTS/FOREIGN LANGUAGE [1] | | 3 |
| | COMM 2110 | Interpersonal Communication (Minimum grade of C- required) | 3 |
| | BIOLOGY | | 3 |
| or | PHYS 2210 | Physics for Scientists and Engineers I (4) (Minimum grade of C- required) | |
| | PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT [2] | | 1 |
| Discipline Core Requirements: | | | 9 Credits |
| Complete the following: | | | |
| | CS 1400 | Fundamentals of Programming (Minimum grade of C- required) | 3 |
| | CS 2600 | Computer Networks I (Minimum grade of C- required) | 3 |
| | CS 2810 | Computer Organization and Architecture (Minimum grade of C- required) | 3 |
| Emphasis Requirements: | | | 26 Credits |
| Complete the following: | | | |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2370 | C plus plus Programming WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 2450 | Software Engineering | 3 |
| | CS 2550 | Web Programming I | 3 |
| | CS 2690 | Computer Networks II | 3 |
| | MATH 1210 | Calculus | 5 |
| Emphasis Elective Requirements: | | | 16 Credits |
| Complete 16 credits from the following courses (minimum grade of C- required). (Must be approved by CSE Department. See CSE Advisor): | | | 16 |
| | CS 1030 | Foundations of Computer Science (3) | |
| | CS 281R | Internship (3.0 credits max.) (1) | |
| | ECE 2700 | Digital Design I (3) | |
| and | ECE 2705 | Digital Design I Lab (1) | |
| | IT 1510 | Introduction to System Administration--Linux/UNIX (3) | |
| | MATH 1220 | Calculus II (5) | |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab (1) | |

**Graduation Requirements:**

1. Completion of a minimum of 64 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.

| Footnote: |
|---|
| [1] COMM 1020 and COMM 1025 recommended |
| [2] HLTH 1100 or PES 1097 recommended |

## Computer Science, A.S.

### *Requirements*

The CS Associate degree is a transfer degree used when a student is contemplating changing schools. Because it includes all general education classes, attempting to earn this degree four semesters will necessarily lengthen the time to earn a BS degree.

**Total Program Credits: 62**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |

| | | | |
|---|---|---|---|
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses | | | |
| Humanities: | | | |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab (recommended) | 1 |
| Social Science: | | | |
| | COMM 2110 | Interpersonal Communication (recommended) | 3 |
| Physical Science: | | | |
| | PHYS 2210 | Physics for Scientists and Engineers I [1] | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab [1] | 1 |
| Additional Physical Science: | | | |
| | PHYS 2220 | Physics for Scientists and Engineers II [1] | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab [1] | 1 |
| Additional Distribution Courses | | | |
| | Biology | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 23 Credits |
| | CS 1400 | Fundamentals of Programming [1] | 3 |
| | CS 1410 | Object-Oriented Programming [1] | 3 |
| | CS 2300 | Discrete Mathematical Structures I [1] | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures [1] | 3 |
| | CS 2550 | Web Programming I | 3 |
| | CS 2810 | Computer Organization and Architecture [1] | 3 |
| | MATH 1210 | Calculus I [1] | 5 |

**Graduation Requirements:**

1. Completion of a minimum of 62 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a C- in Discipline Core courses.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

| Footnote |
|---|
| [1]Minimum grade of C- required |

## Programmer, Certificate of Completion

### *Requirements*

The program introduces the students to basic, entry level programming.

**Total Program Credits: 30**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 21 Credits |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 2600 | Computer Networks I | 3 |
| | CS 2810 | Computer Organization and Architecture | 3 |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| Elective Requirements: | | | 9 Credits |
| Choose 9 credits from the following courses (Must be approved by CSE Department. See CSE adviser): | | | 9 |
| | CS 2450 | Software Engineering (3.0) | |
| | CS 2550 | Web Programming I (3.0) | |
| | CS 281R | Internship (1.0) (Must be taken for 3 credits) | |
| | CS 3060 | Operating Systems Theory (3.0) | |
| | CS 3250 | Java Software Development (3.0) | |
| | CS 3260 | CsharpNET Software Development (3.0) | |
| | CS 3520 | Database Theory (3.0) | |
| | CS 3370 | C plus plus Software Development (3.0) | |
| | IT 1510 | Introduction to System Administration--Linux/UNIX (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 30 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours -- minimum of 10 credit hours through course attendance at UVU.

## Computer Science, Minor

### *Requirements*

The program provides the student with entry level programming instruction, and an overview of some portions of the program.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 9 Credits |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| Elective Requirements: | | | 9 Credits |
| | Complete at least three CS courses numbered 3060 or above | | 9 |

**Graduation Requirements:**

1. To fill the requirements for a computer science minor students must have no course grade lower than C- in any of the CNS courses required for the computer science minor

## Computational Data Science, B.S.

### *Requirements*

The BS in Computational Data Science develops strong interdisciplinary skills in mathematics, statistics, computer science, and big data processing. The program teaches how to create algorithms and write code and scripts to solve problems beyond the basic use of existing tools in support of an industrial, enterprise-level big data pipeline. The mix of competencies and experiences required for data science differs significantly from those developed in the individual degree programs in the four areas mentioned above. Students will gain real-world experience as a springboard to working in industry as a data scientist or to pursue a graduate degree.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | COMM 1020 | Public Speaking * | 2 |
| and | COMM 1025 | Public Speaking Lab* | 1 |
| | COMM 2110 | Interpersonal Communication * | 3 |
| | Biology (choose from list) | | 3 |
| | Fine Arts Distribution (choose from list) | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I * | 4 |
| and | PHYS 2215 | Physics for Scientists and Engineers I Lab* | 1 |
| Discipline Core Requirements: | | | 72 Credits |
| Complete one of the following GE course/lab combinations: | | | 5 |
| | BIOL 1610 | College Biology I (4) | |
| and | BIOL 1615 | College Biology I Laboratory (1) | |
| or | CHEM 1210 | Principles of Chemistry I (4) | |
| and | CHEM 1215 | Principles of Chemistry I Laboratory (1) | |
| or | PHYS 2020 | College Physics II (4) | |
| and | PHYS 2025 | College Physics II Lab (1) | |
| or | PHYS 2220 | Physics for Scientists and Engineers II (4) | |
| and | PHYS 2225 | Physics for Scientists and Engineers II Lab (1) | |
| Minimum grade of C- required in these courses. | | | |
| Computer Science | | | |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 305G | Global Social and Ethical Issues in Computing | 3 |
| | CS 3100 | Data Privacy and Security | 3 |

| | | | |
|---|---|---|---|
| | CS 3270 | Python Software Development | 3 |
| | CS 3320 | Numerical Software Development | 3 |
| | CS 3520 | Database Theory | 3 |
| | CS 3530 | Data Management For Data Sciences | 3 |
| | CS 3800 | Data Science Through Statistical Reasoning | 3 |
| | CS 3810 | Applied Data Science | 3 |
| | CS 3820 | Visualization Analytics for Data Science | 3 |
| | CS 4700 | Machine Learning I | 3 |
| | CS 4710 | Machine Learning II | 3 |
| | CS 4800 | Data Science Capstone | 3 |
| | CS 496R | Senior Seminar | 1 |
| Mathematics | | | |
| | MATH 1220 | Calculus II | 5 |
| | MATH 2210 | Calculus III | 3 |
| | MATH 2270 | Linear Algebra | 3 |
| Statistics | | | |
| | ECE 3710 | Applied Probability and Statistics for Engineers and Scientists | 3 |
| | STAT 2050 | Introduction to Statistical Methods | 4 |
| Discipline Core Requirements: | | | 12 Credits |
| Complete 12 credits from any of the following (A minimum grade of C- is required): | | | 12 |
| | 4 courses from another discipline, at least 6 hours of which must be 3000 level or higher. Requires department head approval. | | |
| | Any CS 3000 or 4000 level course not already required | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 or above.
3. Must have a minimum grade of C- with a combined GPA of 2.5 or higher in all discipline requirements and the General Education requirements thatare marked with an *.
4. Residency hours -- minimum of 30 credit hours through course attendance at UVU. 10 of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved Computational Data Science (CDS) courses.
5. All transfer credit must be approved in writing by UVU.
6. No more than 80 semester hours and no more than 20 hours in CDS type courses of transfer credit from a two-year college.
7. No more than 30 semester hours may be earned through independent study and/or extension classes.
8. Successful completion of at least one Global/Intercultural course. CS 305G satisfies this requirement.

## Computer Science - Computer Networking Emphasis, B.S.

### *Requirements*

The Networking specialization in the Computer Science degree program is designed to prepare students with strong internet-related programming and/or engineering skills. In addition to core Computer Science courses, it requires in-depth courses in network and Internet operations as well as extensive experience in web and network software development.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of CS 1400, CS 1410, CS 2300, and CS 2420 with a grade of C+ better.<br>2. Completion of MATH 1210 and ENGL 1010 or ENGH 1005 with a grade of C or better.<br>3. Each of CS 1400, CS 1410, CS 2300, CS 2420, MATH 1210, and (ENGL 1010 or ENGH 1005) cannot be taken more than twice to obtain the required grade.<br>4. Overall GPA of 2.5 or higher. | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I [1] | 5 |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |

| | | | |
|---|---|---|---|
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | COMM 1020 | Public Speaking [1] | 2 |
| and | COMM 1025 | Public Speaking Lab [1] | 1 |
| | COMM 2110 | Interpersonal Communication [1] | 3 |
| | Fine Arts Distribution (choose from list) | | 3 |
| | Biology (choose from list) | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I [1] | 4 |
| and | PHYS 2215 | Physics for Scientists and Engineers I Lab[1] | 1 |
| | Additional GE to be completed in the core. | | |
| Discipline Core Requirements: | | | 54 Credits |
| Complete one of the following additional GE course/lab combinations: | | | 5 |
| | BIOL 1610 | College Biology I (4) | |
| and | BIOL 1615 | College Biology I Laboratory (1) | |
| or | CHEM 1210 | Principles of Chemistry I (4) | |
| and | CHEM 1215 | Principles of Chemistry I Laboratory (1) | |
| or | PHYS 2020 | College Physics II (4) | |
| and | PHYS 2025 | College Physics II Lab (1) | |
| or | PHYS 2220 | Physics for Scientists and Engineers II (4) | |
| and | PHYS 2225 | Physics for Scientists and Engineers II Lab (1) | |
| or | GEO 1010 | Introduction to Geology (3) | |
| and | GEO 1015 | Introduction to Geology Laboratory (1) | |
| and | GEO 202R | Science Excursion (1) | |
| Minimum grade of C- required in these courses. | | | |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2370 | C plus plus Programming WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 2550 | Web Programming I | 3 |
| | CS 2600 | Computer Networks I | 3 |
| | CS 2690 | Computer Networks II | 3 |
| | CS 2810 | Computer Organization and Architecture | 3 |
| | CS 305G | Global Social and Ethical Issues in Computing | 3 |
| | CS 3060 | Operating Systems Theory | 3 |
| | CS 3100 | Data Privacy and Security | 3 |
| | CS 3240 | Discrete Mathematical Structures II | 3 |
| | CS 3320 | Numerical Software Development | 3 |
| | CS 3520 | Database Theory | 3 |
| | CS 496R | Senior Seminar (1 credit required for graduation) | 1 |
| | ECE 3710 | Applied Probability and Statistics for Engineers and Scientists | 3 |
| Emphasis Requirements: | | | 27 Credits |
| Minimum grade of C- required in these courses: | | | |
| | CS 2450 | Software Engineering | 3 |

| | | | |
|---|---|---|---|
| | CS 3660 | Web Programming II | 3 |
| | CS 3670 | Network Programming | 3 |
| | CS 4610 | TCP IP Internet Architecture | 3 |
| | CS 4670 | Undergraduate Research Project for Networking Specialization | 3 |
| | CS 4690 | Distributed Internet Application Development | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 3510 | Advanced System Administration--Linux/UNIX | 3 |
| | Complete one of the following: | | 3 |
| | CS 3250 | Java Software Development (3) | |
| | CS 3270 | Python Software Development (3) | |
| | CS 3380 | JavaScript Software Development (3) | |
| Emphasis Elective Requirements: | | | 3 Credits |
| Complete 3 credits from the following or any CS 3000 or 4000 level course not already required. A minimum grade of C- is required in these courses. | | | 3 |
| | CS 3370 | C plus plus Software Development (3) | |
| | CS 3540 | Game Programming (3) | |
| | CS 3680 | Mobile Device Programming (3) | |
| | CS 479R | Advanced Current Topics in Computer Science (1) | |
| | ECE 2700 | Digital Design I (3) | |
| and | ECE 2705 | Digital Design I Lab (1) | |
| | ECE 4780 | Wireless and Mobile Communications (3) | |
| | IT 2700 | Information Security Fundamentals (3) | |
| | IT 2800 | Computer Forensic Fundamentals (3) | |
| | IT 3600 | Internetworking and Router Management (3) | |
| | IT 3700 | Information Security--Network Defense and Countermeasures (3) | |
| | MATH 1220 | Calculus II (5) | |
| | MATH 2270 | Linear Algebra (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 or above. Must have a minimum grade of C- with a combined GPA of 2.5 or higher in all discipline core and emphasis requirements and the General Education requirements marked with a footnote.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU. 10 of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved CSE Department courses.
4. All transfer credit must be approved in writing by UVU.
5. No more than 80 semester hours and no more than 20 hours in CS type courses of transfer credit from a two-year college.
6. No more than 30 semester hours may be earned through independent study and/or extension classes.
7. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| [1] Minimum grade required (see Graduation Requirements) |

## Computer Science - Computer Science Emphasis, B.S.

### *Requirements*

Computer Science spans the range from theory through programming to cutting-edge development of computing solutions. Computer Scientists master the theory and practice of computing, and explore new and exciting ways to use computers. Systems like Google and Amazon are created by computer scientists.

**Total Program Credits: 120**

| Matriculation Requirements: | |
|---|---|
| 1. Completion of CS 1400, CS 1410, CS 2300, and CS 2420 with a grade of C+ better.<br>2. Completion of MATH 1210 and ENGL 1010 with a grade of C or better.<br>3. Each of CS 1400, CS 1410, CS 2300, CS 2420, MATH 1210, and (ENGL 1010 or ENGH 1005) cannot be taken more than twice to obtain the required grade. | |

4. Overall GPA of 2.5 or higher.

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I [1] | 5 |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | COMM 1020 | Public Speaking [1] | 2 |
| and | COMM 1025 | Public Speaking Lab [1] | 1 |
| | COMM 2110 | Interpersonal Communication [1] | 3 |
| | Fine Arts Distribution (choose from list) | | 3 |
| | Biology (choose from list) | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I [1] | 4 |
| and | PHYS 2215 | Physics for Scientists and Engineers I Lab [1] | 1 |
| | Additional GE to be completed in the core. | | |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 54 Credits |
| Complete one of the following additional GE course/lab combinations: | | | 5 |
| | BIOL 1610 | College Biology I (4) | |
| and | BIOL 1615 | College Biology I Laboratory (1) | |
| or | CHEM 1210 | Principles of Chemistry I (4) | |
| and | CHEM 1215 | Principles of Chemistry I Laboratory (1) | |
| or | PHYS 2020 | College Physics II (4) | |
| and | PHYS 2025 | College Physics II Lab (1) | |
| or | PHYS 2220 | Physics for Scientists and Engineers II (4) | |
| and | PHYS 2225 | Physics for Scientists and Engineers II Lab (1) | |
| or | GEO 1010 | Introduction to Geology (3) | |
| and | GEO 1015 | Introduction to Geology Laboratory (1) | |
| and | GEO 202R | Science Excursion (1) | |
| | Minimum grade of C- required in these courses. | | |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2370 | C plus plus Programming WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 2550 | Web Programming I | 3 |
| | CS 2600 | Computer Networks I | 3 |
| | CS 2690 | Computer Networks II | 3 |
| | CS 2810 | Computer Organization and Architecture | 3 |
| | CS 305G | Global Social and Ethical | 3 |

| | | | |
|---|---|---|---|
| | | Issues in Computing | |
| | CS 3060 | Operating Systems Theory | 3 |
| | CS 3100 | Data Privacy and Security | 3 |
| | CS 3240 | Discrete Mathematical Structures II | 3 |
| | CS 3320 | Numerical Software Development | 3 |
| | CS 3520 | Database Theory | 3 |
| | CS 496R | Senior Seminar (1 credit required for graduation) | 1 |
| | ECE 3710 | Applied Probability and Statistics for Engineers and Scientists | 3 |
| Emphasis Requirements: | | | 24 Credits |
| Minimum grade of C- required in these courses. | | | |
| | CS 2450 | Software Engineering | 3 |
| | CS 3250 | Java Software Development | 3 |
| or | CS 3260 | CsharpNET Software Development (3) | |
| or | CS 3270 | Python Software Development (3) | |
| or | CS 3370 | C Plus Plus Software Development (3) | |
| or | CS 3380 | JavaScript Software Development (3) | |
| | CS 3310 | Analysis of Algorithms | 3 |
| | CS 3450 | Principles and Patterns of Software Design | 3 |
| | CS 4380 | Advanced/ High-Performance Computer Architecture | 3 |
| | CS 4450 | Analysis of Programming Languages | 3 |
| | CS 4470 | Artificial Intelligence | 3 |
| | CS 4490 | Compiler Construction | 3 |

| | |
|---|---|
| Emphasis Elective Requirements: | 6 Credits |
| Complete 6 credits from the following: any CS 3000 or 4000 level course not already required. (Minimum grade of C- required inthese courses.): | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 or above. Must have a minimum grade of C- with a combined GPA of 2.5 or higher in all discipline core and emphasis requirements and the General Education requirements marked with a footnote..
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU. 10 of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved CSE Department courses.
4. All transfer credit must be approved in writing by UVU.
5. No more than 80 semester hours and no more than 20 hours in CS type courses of transfer credit from a two-year college.
6. No more than 30 semester hours may be earned through independent study and/or extension classes.
7. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1] Minimum grade required (see Graduation Requirements) |

## Computer Science - Full Stack Web Development Emphasis, B.S.

### *Requirements*

Computer Science spans the range from theory through programming to cutting-edge development of computing solutions. Computer Scientists master the theory and practice of computing, and explore new and exciting ways to use computers. Systems like Google and Amazon are created by computer scientists.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of CS 1400, CS 1410, CS 2300, and CS 2420 with a grade of C+ better.<br>2. Completion of MATH 1210 and ENGL 1010 or ENGH 1005 with a grade of C or better.<br>3. Each of CS 1400, CS 1410, CS 2300, CS 2420, MATH 1210, and (ENGL 1010 or ENGH 1005) cannot be taken more than twice to obtain the required grade.<br>4. Overall GPA of 2.5 or higher. | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/ Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I [1] | 5 |

| | | | |
|---|---|---|---|
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | COMM 1020 | Public Speaking [1] | 2 |
| and | COMM 1025 | Public Speaking Lab [1] | 1 |
| | COMM 2110 | Interpersonal Communication [1] | 3 |
| | Fine Arts Distribution (choose from list) | | 3 |
| | Biology (choose from list) | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I [1] | 4 |
| and | PHYS 2215 | Physics for Scientists and Engineers I Lab [1] | 1 |
| | Additional GE to be completed in the core. | | |
| Discipline Core Requirements: | | | 54 Credits |
| Complete one of the following additional GE course/lab combinations: | | | 5 |
| | BIOL 1610 | College Biology I (4) | |
| and | BIOL 1615 | College Biology I Laboratory (1) | |
| or | CHEM 1210 | Principles of Chemistry I (4) | |
| and | CHEM 1215 | Principles of Chemistry I Laboratory (1) | |
| or | PHYS 2020 | College Physics II (4) | |
| and | PHYS 2025 | College Physics II Lab (1) | |
| or | PHYS 2220 | Physics for Scientists and Engineers II (4) | |
| and | PHYS 2225 | Physics for Scientists and Engineers II Lab (1) | |
| or | GEO 1010 | Introduction to Geology (3) | |
| and | GEO 1015 | Introduction to Geology Laboratory (1) | |
| and | GEO 202R | Science Excursion (1) | |
| | Minimum grade of C- required in these courses. | | |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2370 | C plus plus Programming WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 2550 | Web Programming I | 3 |
| | CS 2600 | Computer Networks I | 3 |
| | CS 2690 | Computer Networks II | 3 |
| | CS 2810 | Computer Organization and Architecture | 3 |
| | CS 305G | Global Social and Ethical Issues in Computing | 3 |
| | CS 3060 | Operating Systems Theory | 3 |
| | CS 3100 | Data Privacy and Security | 3 |
| | CS 3240 | Discrete Mathematical Structures II | 3 |
| | CS 3320 | Numerical Software Development | 3 |

| | | | |
|---|---|---|---|
| | CS 3520 | Database Theory | 3 |
| | CS 496R | Senior Seminar (1 credit required for graduation) | 1 |
| | ECE 3710 | Applied Probability and Statistics for Engineers and Scientists | 3 |
| Emphasis Requirements: | | | 30 Credits |
| Minimum grade of C- required in these courses. | | | |
| | CS 2450 | Software Engineering | 3 |
| | CS 3250 | Java Software Development | 3 |
| or | CS 3260 | CsharpNET Software Development (3) | |
| or | CS 3370 | C plus plus Software Development (3) | |
| | CS 3380 | JavaScript Software Development | 3 |
| | CS 3410 | Human Factors in Software Development | 3 |
| | CS 3660 | Web Programming II | 3 |
| | CS 3680 | Mobile Device Programming | 3 |
| | CS 4660 | NoSQL Database Development | 3 |
| | CS 4690 | Distributed Internet Application Development | 3 |
| | CS 4880 | Cloud Computing | 3 |
| | CS 4900 | Full Stack Web Senior Capstone | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 or above. Must have a minimum grade of C- with a combined GPA of 2.5 or higher in all discipline core and emphasis requirements and the General Education requirements marked with aa footnote..
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU. 10 of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved CSE Department courses.
4. All transfer credit must be approved in writing by UVU.
5. No more than 80 semester hours and no more than 20 hours in CS type courses of transfer credit from a two-year college.
6. No more than 30 semester hours may be earned through independent study and/or extension classes.
7. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1] Minimum grade required (see Graduation Requirements) |

## Software Development, B.A.S.

### *Requirements*

The Bachelor of Applied Science in Software Development is a degree to provide a solid foundation of software development skills. It consists mainly of 45 credit hours of computer science classes: the core computer science classes, plus several additional computer science courses selected so as to have greatest practical applicability. The degree will qualify students for mid-level programming jobs with good long-term prospects but not necessarily technical leadership roles.

The program will appeal to students who largely complete a major, but realize that they need a different major in order to secure a good job. The program is also designed for individuals who have graduated from college, but find it necessary to be retrained in software development in order to enhance long-term employment prospects. For students who already have a baccalaureate degree, they can complete the computer science portion of the program in five to six semesters, depending on the desired course load.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Completion of CS 1400, CS 1410, CS 2300, and CS 2420 with a grade of C+ better.<br>2. Completion of MATH 1050 and ENGL 1010 with a grade of C or better.<br>3. Overall GPA of 2.5 or higher. | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | 5 |
| American Institutions, complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |

| | | | |
|---|---|---|---|
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Requirements: | | | |
| Biology distribution | | | 3 |
| Physical Science | | | 3 |
| Additional Biology or Physical Science | | | 3 |
| Humanities Distribution | | | 3 |
| Fine Arts Distribution | | | 3 |
| Social/Behavioral Science | | | 3 |
| Discipline Core Requirements: | | | 84 Credits |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2370 | C plus plus Programming WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 2450 | Software Engineering | 3 |
| | CS 2550 | Web Programming I | 3 |
| | CS 2600 | Computer Networks I | 3 |
| | CS 2810 | Computer Organization and Architecture | 3 |
| | CS 305G | Global Social and Ethical Issues in Computing | 3 |
| | CS 3060 | Operating Systems Theory | 3 |
| | CS 3450 | Principles and Patterns of Software Design | 3 |
| | CS 3520 | Database Theory | 3 |
| | CS 3660 | Web Programming II | 3 |
| | CS 3250 | Java Software Development | 3 |
| or | CS 3260 | CsharpNET Software Development (3) | |
| or | CS 3270 | Python Software Development (3) | |
| or | CS 3370 | Python Software Development (3) | |
| or | CS 3380 | JavaScript Software Development (3) | |
| Complete one of the following: | | | 3 |
| | CS 3410 | Human Factors in Software Development (3) | |
| | CS 3680 | Database Theory (3) | |
| | CS 481R | Internship (3) | |
| | One additional 3000-level CS Class not already taken | | 3 |
| Extra-Major Specialization: | | | |
| | Courses in a single major other than Computer Science or Software Engineering. At least 16 credit hours must be upper division | | 33 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 or above. Must have a minimum grade of C- with a combined GPA of 2.5 or higher in all discipline requirements.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU. Ten of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved Computer Science Department courses.
4. No more than 80 semester hours and no more than 20 hours of transfer credit from a two-year college may be applied to the core or elective courses.
5. No more than 30 semester hours may be earned through independent study.
6. Successful completion of at least one Global/Intercultural course.

## Software Engineering, B.S.

### *Requirements*

Software Engineers design and develop large software systems. In addition, they may lead teams of software developers or quality assurance engineers. They also work with users and customers to understand their needs. Software systems we take for granted, such as Microsoft Office, are implemented by software engineers. Software engineers employ innovative software development approaches, such as Agile software development, to effectively manage software development projects.

**Total Program Credits: 120**

| | |
|---|---|
| Matriculation Requirements: | |

1. Completion of CS 1400, CS 1410, CS 2300, and CS 2420 with a grade of C+ better.
2. Completion of MATH 1210 and (ENGL 1010 or ENGH 1005) with a grade of C or better.
3. Each of CS 1400, CS 1410, CS 2300, CS 2420, MATH 1210, and (ENGL ENGL 1010 or ENGH 1005) cannot be taken more than twice to obtain the required grade.
4. Overall GPA of 2.5 or higher.

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 41 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I[1] | 5 |
| American Institutions, complete one of the following: | | | 3 |
| | HIST 1740 | US Economic History (3) | |
| | HIST 1700 | American Civilization (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Requirements: | | | |
| | PHYS 2210 | Physics for Scientists and Engineers I (4) | 5 |
| and | PHYS 2215 | Physics for Scientists and Engineers I Lab (1) | |
| Biology distribution | | | 3 |
| Complete one of the following additional GE course/lab combinations: | | | 5 |
| | BIOL 1610 | College Biology I (4) | |
| and | BIOL 1615 | College Biology I Laboratory (1) | |
| | CHEM 1210 | Principles of Chemistry I (4) | |
| and | CHEM 1215 | Principles of Chemistry I Laboratory (1) | |
| | PHYS 2020 | College Physics II (4) | |
| and | PHYS 2025 | College Physics II Lab (1) | |
| | PHYS 2220 | Physics for Scientists and Engineers II (4) | |
| and | PHYS 2225 | Physics for Scientists and Engineers II Lab (1) | |
| | GEO 1010 | Introduction to Geology (3) | |
| and | GEO 1015 | Introduction to Geology Laboratory (1) | |
| and | GEO 202R | Science Excursion (1) | |
| Fine Arts Distribution | | | 3 |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking[1] | 1 |
| | COMM 2110 | Interpersonal Communication[1] | 3 |
| Discipline Core Requirements: | | | 70 Credits |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2810 | Computer Organization and Architecture | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2370 | C plus plus Programming WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 2450 | Software Engineering | 3 |
| | CS 2600 | Computer Networks I | 3 |
| | CS 2690 | Computer Networks II | 3 |
| | CS 305G | Global Social and Ethical Issues in Computing | 3 |

| | | | |
|---|---|---|---|
| | CS 3060 | Operating Systems Theory | 3 |
| | CS 3240 | Discrete Mathematical Structures II | 3 |
| | CS 3100 | Data Privacy and Security | 3 |
| | CS 3320 | Numerical Software Development | 3 |
| | CS 3250 | Java Software Development (3) | 3 |
| or | CS 3370 | C Plus Plus Software Development (3) | |
| or | CS 3260 | CsharpNET Software Development (3) | |
| or | CS 3270 | Python Software Development (3) | |
| or | CS 3380 | JavaScript Software Development (3) | |
| | CS 3450 | Principles and Patterns of Software Design | 3 |
| | CS 3410 | Human Factors in Software Development | 3 |
| | CS 3520 | Database Theory | 3 |
| | CS 4230 | Software Testing and Quality Engineering | 3 |
| | CS 4400 | Software Engineering II | 3 |
| | CS 4450 | Analysis of Programming Languages | 3 |
| | CS 4550 | Software Engineering III | 3 |
| | CS 496R | Senior Seminar | 1 |
| | ECE 3710 | Applied Probability and Statistics for Engineers and Scientists | 3 |
| Elective Requirements: | | | 9 Credits |
| Complete 9 credits from the following: | | | 9 |
| | Any CS course numbered 3000 or higher not already required. | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 or above. Must have a minimum grade of C- with a combined GPA of 2.5 or higher in all discipline core and elective requirements and the General Education requirements marked with a footnote 1.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU. Ten of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved CSE Department courses.
4. No more than 80 semester hours and no more than 20 hours of transfer credit from a two-year college may be applied to the core or elective courses.
5. No more than 6 semester hours may be earned through independent study.
6. Successful completion of at least one Global/Intercultural course.

Footnotes: [1]Minimum grade of C- required.

# Computer Science Graduate Programs

## Computer Science Graduate Programs

The Computer Science Graduate Program is in the College of Engineering and Technology. To find the most up-to-date information on Computer Science Graduate Program, visit their website.

Master of Computer Science Graduate Program

## Course Descriptions

Computer Science..... 549

## Degrees & Programs

### Computer Science, M.C.S.

#### *Requirements*

The Master of Computer Science (MCS) at Utah Valley University is an applied graduate program resulting in a professional degree. Students graduating with this degree will have a broad grounding in computer science as a discipline and be well equipped to take on leadership roles in a wide range of computing technology-related industries. Student education will be focused on developing software systems using current technologies while allowing them the freedom to explore and exploit new technologies to solve real-world problems. Students will be required to develop a broad base of competency by passing required courses in large scale implementation, applied mathematics computing, information management, and software engineering. Electives will allow a student to continue to add breadth to their education or allow them to focus on specific areas of computer science they find interesting or feel will best advance their professional objectives.

**Total Program Credits: 30**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Application for admission to the MCS will include letters of recommendation and a statement of purpose.<br><br>2. Applicants must have an overall grade point average in their undergraduate work of 3.0 or higher on a 4.0 scale.<br><br>3 For international students whose native language is not English, a TOEFL score of 80 iBT (550 pBT) or higher, or an IELTS band score of 6.5 or higher within the past two years, is required.<br><br>4. Applicants with a bachelor's degree in a computer-related field (Computer Science, Computer Engineering, Software Engineering, or a closely related field) who have completed the following courses (or equivalent courses from other institutions) with a C+ or better will be deemed to have the fundamental computer science background to enter the program:<br><br>• CS 2300 Discrete Structures I<br>• CS 2420 Introduction to Algorithms and Data Structures<br>• CS 2810 Computer Organization and Architecture<br>• CS 3060 Operating Systems Theory<br>• MATH 1210 Calculus I<br><br>5. Applicants without a bachelor's degree in a computer-related field or who have not completed the above courses with a C+ will be deemed lacking in fundamental computer science background to enter the program.<br><br>6. Applicants found lacking in fundamental computer science background can be conditionally admitted to the MCS. Conditionally admitted students will have an individualized MCS Leveling Plan (MCS LP) developed for them by the Computer Science Graduate Committee. Once the MCS LP has been met by the applicant, the applicant will be deemed to have the fundamental computer science background to enter the program. Graduate policy precludes conditionally admitted students from taking 6000 level courses.<br><br>7. All applicants will be subject to the approval of the Computer Science Graduate Committee. | | | |
| Discipline Core Requirements: | | | 18 Credits |
| | CS 6100 | Database Management System Construction | 3 |
| | CS 6150 | Advanced Algorithms | 3 |
| | CS 6300 | Software Engineering Leadership | 3 |
| | CS 6470 | Machine Learning | 3 |
| | CS 6500 | Software Architecture | 3 |
| | CS 6700 | Advanced Mathematics for Computer Science | 3 |
| Elective Requirements: | | | 12 Credits |
| Pick 4 courses, or other departmental approved electives to complete either the Graduate Project or Graduate Coursework Option: | | | 12 |
| | CS 6400 | Modern Databases (3.0) | |
| | CS 6480 | Advanced Machine Learning (3.0) | |
| | CS 6510 | Design and Simulation of Operating Systems (3.0) | |
| | CS 6600 | Graduate Project I (3.0) | |
| | CS 6610 | Graduate Project II (3.0) | |
| | CS 6620 | Advanced Data Mining and Visualization (3.0) | |
| | CS 6730 | Advanced Embedded Systems Engineering (3.0) | |
| | CS 6800 | Computer Graphics and Mixed Realities (3.0) | |

Graduation Requirements:

1. Completion of all courses with a grade of B- or better.
2. Graduate Project Option: Graduate project proposal presented to and accepted by the student's Advisory Committee.

3. Graduate Project Option: Completion and defense of graduate project (CS 6600 and CS 6610); defense must be accepted by the student's Advisory Committee.
4. Graduate Project Option: Completion of all required courses and elective courses for a total of 30 credit hours with an average GPA of 3.0 or higher.
5. Graduate Coursework Option: Completion of all required courses and elective courses (CS 6600 and CS 6610 do not count toward this option) for a total of 30 credit hours with an average GPA of 3.0 or higher.

# Construction Technologies

## Construction Technologies

The Construction Technologies department is in the College of Engineering & Technology. To find the most up-to-date information from the Construction Technologies department, visit their website.

Construction Technologies department

**DEPARTMENT CHAIR**

**WARCUP, Robert** *Associate Professor*

**FACULTY**

**ADAMS, Kenneth** *Assistant Professor*
**BAIRD, Kellan** *Associate Professor*
**COX, James** *Associate Professor*
**ERDMANN, DeWayne** *Associate Professor*
**HALLSTED, Barry** *Associate Professor*
**LINFIELD, J. Eric** *Associate Professor*
**SCHELLENBERG, Justin H.** *Assistant Professor*
**WARCUP, Robert** *Associate Professor*

## Course Descriptions

Building Inspection Technology....516
Cabinetry and Archit Woodwork....522
Civil Engineering....531
Construction Management....535
Facilities Management....637

## Degrees & Programs

### Building Inspection Technology, A.A.S.

#### *Requirements*

**NOT CURRENTLY ACCEPTING STUDENTS**

Students may earn a One-Year Certificate, an Associate in Applied Science Degree, or a Bachelor of Science Degree in Technology Management.

Reminder: an overall grade point average of 2.0 (C) or above is required for graduation.

**Total Program Credits: 64**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 17 Credits |
| | CMGT 1150 | Construction Safety | 2 |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab | 1 |
| | COMM 2110 | Interpersonal Communication | 3 |
| | EGDT 1600 | Technical Math--Algebra | 3 |
| or | MAT 1030 | Quantitative Reasoning (3) | |
| or | MAT 1035 | Quantitative Reasoning with Integrated Algebra QL (6) | |
| | PHSC 1000 | Survey of Physical Science (recommended for Biology/Physical Science requirement) | 3 |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Discipline Core Requirements: | | | 47 Credits |
| | BIT 1010 | Building Codes | 3 |
| | BIT 1170 | Field Lab--Building Codes | 1 |
| | BIT 1230 | Plan Review | 3 |
| | BIT 1240 | Plumbing Codes | 3 |
| | BIT 1330 | Mechanical Codes (recommended) | 3 |
| or | CMGT 3020 | Building Envelopes and Mechanical Systems (3) | |
| | BIT 1340 | Electrical Codes | 3 |
| | BIT 1380 | Ride-Along Lab | 1 |
| | EGDT 1020 | 3D Architectural Modeling | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | ESFO 2030 | Fire Inspector I | 3 |
| | IM 2010 | Business Computer Proficiency | 3 |
| or | IM 2600 | Spreadsheet Applications (3) | |
| or | IM 3700 | Database Applications (3) | |
| | CMGT 1010 | Introduction to Construction Management | 3 |
| | CMGT 1020 | Construction Materials and Methods I | 3 |
| | CMGT 2010 | Construction Materials and Methods II | 3 |
| | CMGT 1190 | Concrete and Framing Lab | 3 |
| or | CMGT 281R | Internship (1) | |
| | CMGT 1220 | Finishing Lab | 3 |
| or | CMGT 281R | Internship (1) | |
| | CMGT 3010 | Construction Materials Testing | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 64 semester credits.
2. Overall grade point average of 2.0 (C) or above (department may require a higher GPA).
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.

### Cabinetry and Architectural Woodwork, A.A.S.

#### *Requirements*

Students may receive a One-Year Certificate, a Diploma, an Associate in Applied Science degree, an Associate in Science degree, or a Bachelor of Science Degree in Technology Management.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 16 Credits |
| ENGLISH | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| MATHEMATICS | | | |
| | MAT 1010 | Intermediate Algebra (4) | |

| | | | |
|---|---|---|---|
| or | ACC 1150 | Fundamentals of Business Math | 3 |
| or | EGDT 1600 | Technical Math--Algebra (3) | |
| HUMANITIES/FINE ARTS/FOREIGN LANGUAGE | | | |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | 3 |
| SOCIAL AND BEHAVIORAL SCIENCE | | | |
| | Any approved Social or Behavioral Science Distribution course | | 3 |
| BIOLOGY OR PHYSICAL SCIENCE | | | |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT | | | |
| | Any approved Physical Education, Health, Safety or Environment Course | | 1 |
| Discipline Core Requirements: | | | 47 Credits |
| | CAW 140R | Millwork Technology (4) 1 | 16 |
| | CAW 1130 | Residential Cabinetry | 4 |
| | CAW 1150 | Design Drafting and Billing | 3 |
| | CAW 1170 | Finish Technology | 2 |
| | CAW 1210 | Cabinetmaking Materials and Hardware | 1 |
| | CAW 1250 | Drafting and Computer Applications for Cabinetmakers | 4 |
| | CAW 2250 | Computer Aided Manufacturing for Woodworking | 4 |
| | CAW 2300 | Counter-top Technology | 3 |
| | CAW 2430 | Commercial Cabinetry Technology | 4 |
| | CAW 2450 | Machine Maintenance and Upkeep | 2 |
| | CAW 299R | Skills USA | 1 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. Complete all core requirements with a minimum grade of "C-" or better.

| Footnote |
|---|
| 1 Four semesters required |

## Cabinetry and Architectural Woodwork, A.S.

### *Requirements*

Students may receive a One-Year Certificate, a Diploma, an Associate in Applied Science degree, an Associate in Science degree, or a Bachelor of Science Degree in Technology Management.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 28 Credits |
| | Choose from CAW courses 1000 level or higher | | 11 |
| | CAW 140R | Millwork Technology (4.0) 1 | 12 |
| | CAW 1150 | Design Drafting and Billing | 3 |
| | CAW 1170 | Finish Technology | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Construction Management, A.A.S.

### *Requirements*

Students may earn an Associate in Applied Science degree. The Clyde Institute of Construction Management Program has been designed to provide students a strong foundation in Construction Management that prepares them for jobs in construction site supervision and/or for advancement on to a BS degree in Construction Management. The program provides courses in building construction, construction management and construction science that apply to all segments of the construction industry with an emphasis on heavy civil and commercial construction. Students will learn about construction materials and methods through the use of readings, 3-D models, hands-on laboratory exercises, and site visits. Construction management courses in estimating and scheduling are also provided along with a strong background in mathematics, computer technology, business and other general education subjects. A supervisory course is also required so students can learn to manage workers at construction sites.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 18 Credits |
| | EGDT 1600 | Technical Math--Algebra | 3 |
| or | MAT 1030 | Quantitative Reasoning (3) | |
| or | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | Fine Arts or Humanities Distribution [1, 2] | | 3 |
| | Social Sciences Distribution [3] | | 3 |
| | Physical Science Distribution [4] | | 3 |
| | Science (3rd) Distribution [5] | | 3 |
| Discipline Core Requirements: | | | 36 Credits |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | EGDT 1610 | Technical Math Geometry Trig | 3 |
| | CMGT 1010 | Introduction to Construction Management | 3 |
| | CMGT 1020 | Construction Materials and Methods I | 3 |
| | CMGT 1150 | Construction Safety | 2 |
| | CMGT 1190 | Concrete and Framing Lab | 3 |
| or | CMGT 1220 | Finishing Lab (3) | |
| or | CMGT 281R | Internship (1) | |
| | CMGT 2010 | Construction Materials and Methods II | 3 |
| | CMGT 2035 | Construction Computer Applications (Recommended) | 3 |
| or | IM 2010 | Business Computer Proficiency (3) | |
| | CMGT 2060 | Construction Job Site Management | 3 |
| | CMGT 2080 | Principles of Construction Scheduling | 3 |
| | CMGT 289R | Construction Industry Seminar (Must be taken twice for a total of one credit.) | 1 |
| | Complete 6 credits from the following two specializations: | | 6 |
| Heavy/Civil | | | |
| | EGDT 2400 | Surveying Applications and Field Techniques II (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3) | |
| Commercial/Residential | | | |
| | BIT 1010 | Building Codes (3) | |
| or | BIT 1020 | Residential Codes (3) | |
| | EGDT 1020 | 3D Architectural Modeling (3) | |
| Elective Requirements: | | | 9 Credits |
| | Complete 9 credits of lower division courses from the following prefixes: CMGT/EGDT/TECH. See advisor for recommended courses | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Complete all core requirements with a minimum grade of C - or better.

Footnote:

[1] See catalog for approved listings

[2] Highly recommended: EGDT 1720 for Fine Arts or COMM 1020 and COMM 1025 for Humanities Distribution

[3] Recommended: MGMT 2110 or COMM 2110 or FIN 1060

[4] Recommended: PHYS 1010 or PHSC1000 or ENVT 1110

[5] Recommended: GEO 1010 or ENVT 1110. See catalog for approved listings.

## Facilities Management, A.A.S.

### *Requirements*

Two options are available: An Associate in Applied Science degree and a Bachelor of Science Degree in Technology Management.

**Total Program Credits: 65**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 17 Credits |
| | CMGT 1150 | Construction Safety | 2 |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | EGDT 1600 | Technical Math--Algebra | 3 |
| or | MAT 1030 | Quantitative Reasoning (3) | |
| or | MAT 1035 | Quantitative Reasoning with Integrated Algebra (3) | |
| | PHIL 2050 | Ethics and Values | 3 |
| | Any approved Biology or Physical Science Distribution Course[1] | | 3 |
| | TECH 200G | Technology and Human Life | 3 |
| Discipline Core Requirements: | | | 48 Credits |
| | ACC 2010 | Financial Accounting | 3 |

| | | | |
|---|---|---|---|
| | BIT 1010 | Building Codes | 3 |
| | BIT 1230 | Plan Review | 3 |
| | CMGT 1010 | Introduction to Construction Management | 3 |
| | CMGT 1190 | Concrete and Framing Lab | 3 |
| or | CMGT 281R | Internship (1) | |
| | CMGT 1220 | Finishing Lab | 3 |
| or | CMGT 281R | Internship (1) | |
| | CMGT 2035 | Construction Computer Applications | 3 |
| | CMGT 2080 | Principles of Construction Scheduling | 3 |
| | CMGT 3020 | Building Envelopes and Mechanical Systems | 3 |
| | CMGT 3160 | Building Information Modeling | 3 |
| | EGDT 1020 | 3D Architectural Modeling | 3 |
| | FAC 1010 | Survey of Facilities Management | 3 |
| | LEGL 3130 | Real Estate Principles and Finance | 3 |
| | LEGL 3140 | Real Estate Law | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 65 semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 20 credit hours through course attendance at UVU.

| Footnote |
|---|
| [1]Recommended PHYS 1010 |

## Building Inspection Technology, Certificate of Completion

### *Requirements*

**NOT CURRENTLY ACCEPTING STUDENTS**

Students may earn a One-Year Certificate, an Associate in Applied Science Degree, or a Bachelor of Science Degree in Technology Management.

**Total Program Credits: 31**

| Discipline Core Requirements: | | | 31 Credits |
|---|---|---|---|
| | COMM 2110 | Interpersonal Communication | 3 |
| | BIT 1010 | Building Codes | 3 |
| | BIT 1170 | Field Lab--Building Codes | 1 |
| | BIT 1240 | Plumbing Codes | 3 |
| | BIT 1330 | Mechanical Codes | 3 |
| | BIT 1340 | Electrical Codes | 3 |
| | BIT 1380 | Ride-Along Lab | 1 |
| | CMGT 1020 | Construction Materials and Methods I | 3 |
| | CMGT 1150 | Construction Safety | 2 |
| | CMGT 1190 | Concrete and Framing Lab (3.0) | |
| or | CMGT 281R | Internship | 3 |
| | CMGT 1220 | Finishing Lab (3.0) | |
| or | CMGT 281R | Internship | 3 |
| | CMGT 2010 | Construction Materials and Methods II | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 31 credits.
2. Overall GPA of 2.0 or higher
3. Residency hours -- Minimum of 10 credits required through course attendance at UVU

## Cabinetry and Architectural Woodwork, Certificate of Completion

### *Requirements*

Students may receive a One-Year Certificate, a Diploma, an Associate in Applied Science degree, an Associate in Science degree, or a Bachelor of Science Degree in Technology Management.

**Total Program Credits: 32**

| Discipline Core Requirements: | | | 32 Credits |
|---|---|---|---|
| | ACC 1150 | Fundamentals of Business Math | 3 |
| | CAW 1130 | Residential Cabinetry | 4 |
| | CAW 1140 | Millworking and Safety Shop I | 5 |
| | CAW 1150 | Design Drafting and Billing | 3 |
| | CAW 1170 | Finish Technology | 2 |
| | CAW 1210 | Cabinetmaking Materials and Hardware | 1 |
| | CAW 1240 | Millworking Shop II | 5 |
| | CAW 1250 | Drafting and Computer Applications for Cabinetmakers | 4 |
| | CAW 2310 | Cabinetry Math | 2 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 32 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 10 credit hours through course attendance at UVU.
4. Complete all courses with a minimum grade of "C-" or better.

## Cabinetry and Architectural Woodwork, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Cabinetry and Architectural Woodwork is available for all UVU students with a particular focus for high school students who desire to obtain a stackable certificate of proficiency with an emphasis in career and technical education while still enrolled in high school. This certificate will also be available from the University for college students/adults looking for basic entry-level skills leading to further academic advancement and learn more about the Cabinetry career field

**Total Program Credits: 17**

| | | | |
|---|---|---|---|
| Discipline Core Requirements | | | 17 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | MAT 1010 | Intermediate Algebra | 4 |
| | CAW 140R | Millwork Technology | 4 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | FIN 1060 | Personal Finance | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 17 credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 4 credit hours through course attendance at UVU.

## Construction Management, Certificate of Completion

### *Requirements*

A Certificate of Completion for students seeking an applied education in construction. The courses can lead the students who desire to further their education towards the AAS and/or BS degree in Construction Management.

**Total Program Credits: 30**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 27 Credits |
| | CMGT 1010 | Introduction to Construction Management | 3 |
| | CMGT 1020 | Construction Materials and Methods I | 3 |
| | CMGT 1150 | Construction Safety | 2 |
| | CMGT 1190 | Concrete and Framing Lab | 3 |
| or | CMGT 281R | Internship (For maximum of 3 credits toward graduation) (1.0) | |
| | CMGT 1220 | Finishing Lab | 3 |
| or | CMGT 281R | Internship (For maximum of 3 credits toward graduation) (1.0) | |
| | CMGT 2010 | Construction Materials and Methods II | 3 |
| | CMGT 2035 | Construction Computer Applications | 3 |
| | CMGT 289R | Construction Industry Seminar (Must be taken twice for a total of one credit.) | 1 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| Complete one of the following: | | | 3 |
| | EGDT 1600 | Technical Math--Algebra (3.0) | |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Elective Requirements: | | | 3 Credits |
| | BIT 1010 | Building Codes (Recommended for students interested in commercial construction) (3.0) | 3 |
| or | BIT 1020 | Residential Codes (Recommended for students interested in residential construction) (3.0) | |
| or | EGDT 2400 | Surveying Applications and Field Techniques II (Recommended for students interested in heavy civil/ highway construction) (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 30 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. No grade lower than a C-.
4. Residency hours -- minimum of 10 credit hours through course attendance at UVU.

## Construction Management, Certificate of Proficiency

### *Requirements*

This certificate is available to all UVU students with a particular focus designed to provide high school students an opportunity to obtain a certificate of proficiency in a Career and Technical Education (CTE) field while still enrolled in high school and stack into certificate, associate and bachelor degrees at UVU. This certificate will also be available from the University for college students/adults looking for entry-level skills leading to further academic advancement and learn more about the construction field.

**Total Program Credits: 15**

| | | | |
|---|---|---|---|
| Discipline Core Requirements | | | 15 Credits |
| | CMGT 1190 | Concrete and Framing Lab | 3 |
| | CMGT 1220 | Finishing Lab | 3 |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | MAT 1030 | Quantitative Reasoning | 3 |
| | IM 2010 | Business Computer Proficiency | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 15 credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 4 credit hours through course attendance at UVU.

## Woodworking Education, Certificate of Proficiency

### *Requirements*

The CP in Woodworking Education is a package of existing courses that provides licensed, secondary education teachers in Utah with a pathway for adding the Associate level Woods endorsement to their professional portfolio. In addition, it establishes a means for individuals who wish to enter the teaching profession and are seeking a teaching credential with a means to demonstrate the content knowledge required for the Associate level Woods endorsement. It supports the endorsement portion of the licensing process only. It is not a full-fledged teacher preparation program and does not result in a recommendation for licensure.

**Total Program Credits: 19**

| Discipline Core Requirements: | | | 19 Credits |
|---|---|---|---|
| | CAW 1130 | Residential Cabinetry | 4 |
| | CAW 1150 | Design Drafting and Billing | 3 |
| | CAW 1170 | Finish Technology | 2 |
| | CAW 140R | Millwork Technology (1) | 4 |
| | CAW 2250 | Computer Aided Manufacturing for Woodworking | 4 |
| | CAW 2450 | Machine Maintenance and Upkeep | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 19 credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours--minimum of 4 credit hours through course attendance at UVU.

## Cabinetry and Architectural Woodwork, Diploma

### *Requirements*

Students may receive a One-Year Certificate, a Diploma, an Associate in Applied Science degree, an Associate in Science degree, or a Bachelor of Science Degree in Technology Management.

**Total Program Credits: 49**

| Discipline Core Requirements: | | | 49 Credits |
|---|---|---|---|
| | CAW 1130 | Residential Cabinetry | 4 |
| | CAW 140R | Millwork Technology (1)[!] | 4 |
| | CAW 140R | Millwork Technology (1)[!] | 4 |
| | CAW 140R | Millwork Technology (1)[!] | 4 |
| | CAW 140R | Millwork Technology (1)[!] | 4 |
| | CAW 1150 | Design Drafting and Billing | 3 |
| | CAW 1170 | Finish Technology | 2 |
| | CAW 1210 | Cabinetmaking Materials and Hardware | 1 |
| | CAW 1250 | Drafting and Computer Applications for Cabinetmakers | 4 |
| | CAW 2250 | Computer Aided Manufacturing for Woodworking | 4 |
| | CAW 2300 | Counter-top Technology | 3 |
| | CAW 2310 | Cabinetry Math | 2 |
| | CAW 2430 | Commercial Cabinetry Technology | 4 |
| | CAW 2450 | Machine Maintenance and Upkeep | 2 |
| | CAW 299R | Skills USA (1.0) | 1 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 49 or more semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Complete all Technical Specialty courses with a minimum grade of "C-" or better.

| Footnote: |
|---|
| [1] Required 4 times |

## Construction Management, B.S.

### *Requirements*

Students may earn an Associate in Applied Science degree.
The Clyde Institute of Construction Management Program has been designed to provide students a strong foundation in Construction Management that prepares them for jobs in construction site supervision and/or for advancement on to a BS degree in Construction Management. The program provides courses in building construction, construction management and construction science that apply to all segments of the construction industry with an emphasis on heavy civil and commercial construction. Students will learn about construction materials and methods through the use of readings, 3-D models, hands-on laboratory exercises, and site visits. Construction management courses in estimating and scheduling are also provided along with a strong background in mathematics, computer technology, business and other general education subjects. A supervisory course is also required so students can learn to manage workers at construction sites.

**Total Program Credits: 120**

| General Education Requirements: | | | 35 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |

| | | | |
|---|---|---|---|
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses | | | |
| | Biology Distribution[1] | | 3 |
| | Humanities Distribution[2] | | 3 |
| | Social Science Distribution[3] | | 3 |
| | Physical Science Distribution[4] | | 3 |
| | Science (3rd) Distribution[5] | | 3 |
| | Fine Arts Distribution[6] | | |
| | | | 76 Credits |
| | CMGT 1010 | Introduction to Construction Management | 3 |
| | CMGT 1150 | Construction Safety | 2 |
| | CMGT 1190 | Concrete and Framing Lab | 3 |
| or | CMGT 1220 | Finishing Lab (3) | |
| or | CMGT 281R | Internship (1) (3 credits maximum towards graduation) | |
| | CMGT 1020 | Construction Materials and Methods I | 3 |
| | CMGT 2010 | Construction Materials and Methods II | 3 |
| | CMGT 2035 | Construction Computer Applications | 3 |
| or | IM 2010 | Business Computer Proficiency (3) | |
| | CMGT 2060 | Construction Job Site Management | 3 |
| | CMGT 2080 | Principles of Construction Scheduling | 3 |
| | CMGT 289R | Construction Industry Seminar (Must be taken twice for a total of one credit.) | 1 |
| | CMGT 3010 | Construction Materials Testing | 3 |
| | CMGT 3030 | Principles of Construction Estimating | 3 |
| | CMGT 3060 | Applied Statics and Strength of Materials | 3 |
| or | EGDT 2600 | Applied Structures I - Statics (3) | |
| and | EGDT 2610 | Applied Structures II - Strength of Materials (3) | |
| | CMGT 3080 | Construction Financial Management | 3 |
| | CMGT 4500 | Senior Capstone | 3 |
| | CMGT 481R | Internship (1) (1 credit required for graduation. Maximum of 4 credits may count towards graduation. Students with sufficient management experience may choose an upper division elective in CMGT, EGDT, SURV or Woodbury School of Business with department approval) | 1 |
| | LEGL 3000 | Business Law | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | EGDT 1600 | Technical Math--Algebra | 3 |
| | EGDT 1610 | Technical Math--Geometry Trig | 3 |
| | ACC 3000 | Financial Managerial and Cost Accounting Concepts (Highly recommended) | 3 |
| or | ACC 2010 | Financial Accounting (3) | |
| and | ACC 2020 | Managerial Accounting (3) | |
| Complete 21 credits from one of the following two specializations (A minimum of 5 credits must be upper division): | | | 21 |
| Heavy/Civil | | | |
| | CMGT 3050 | Construction Equipment/Planning and Logistics (3) | |
| | CMGT 3090 | Principles of Hydrology in Construction Management (3) | |
| or | SURV 3230 | Construction and Route Surveys (3) | |
| | CMGT 4010 | Construction Contracts (3) | |
| | CMGT 405G | Global Sustainability and the Built Environment (3) | |
| or | SURV 455G | Global Professional Ethics and Liabilities (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3) | |
| | EGDT 2400 | Surveying Applications and Field Techniques II (3) | |
| | EGDT 3500 | Advanced Civil Drafting and Design (3) | |
| Commercial/Residential | | | |
| | BIT 1010 | Building Codes (3) | |
| or | BIT 1020 | Residential Codes (3) | |
| | CMGT 3020 | Building Envelopes and Mechanical Systems (3) | |
| | CMGT 3160 | Building Information Modeling (3) | |
| | CMGT 4010 | Construction Contracts (3) | |
| or | LEGL 3140 | Real Estate Law (3) | |
| | CMGT 405G | Global Sustainability and the Built Environment (3) | |
| | EGDT 1020 | 3D Architectural Modeling (3) | |
| | CMGT 4020 | Construction Project Management (3) (High Recommended) | |
| or | TECH 3400 | Project Management WE (3) | |
| Elective Requirements: | | | 9 Credits |
| Choose 9 credits from the following: | | | 9 |
| | Upper division Woodbury School of Business courses | | |
| | Upper division Technology Management courses | | |
| | Other upper division Technical Specialty courses as approved by Department Chair | | |
| | Any upper division CMGT or EGDT courses not already completed. | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester hours

2. A minimum of 40 credits must be upper-division (numbered 3000 or above).
3. Overall grade point average of 2.0 (C) or above
4. No grade lower than a C- in any Discipline Core or Elective course
5. Completion of GE and specified departmental requirements
6. Residency hours - Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours
7. Successful completion of at least one Global/Intercultural course.

| Footnote |
| --- |
| [1]See catalog for approved listings |
| [2]Highly Recommended: COMM 1020 and COMM 1025 |
| [3]Recommended: MGMT 2110 or COMM 2110 or FIN 1060. See catalog for approved listings |
| [4]Recommended: PHYS 1010 or PHSC 1000. See catalog for approved listings |
| [5]Recommended: GEO 1010 or ENVT 1110. See catalog for approved listings |
| [6]Highly Recommended: EGDT 1720. See catalog for approved listings |

# Criminal Justice/Law Enforcement

## Criminal Justice/Law Enforcement

The Criminal Justice/Law Enforcement department is in the College of Health and Public Service. To find the most up-to-date information from the Criminal Justice/Law Enforcement department, visit their website.

Criminal Justice/Law Enforcement department

**DEPARTMENT CHAIR**

**KASSEL, Bobbi** *Associate Professor*

**FACULTY**

**DUFFIN, Matthew** *Associate Professor*
**HARSTON, Stott P.** *Associate Professor*
**HEHNLY, Marcy** *Associate Professor*
**HOUGHTON, Amie Balle** *Assistant Professor*
**KASSEL, Bobbi** *Associate Professor*
**LOS, Richard** *Professional In Residence*
**NAISBITT, Gary** *Associate Professor*
**NOYES, Melissa** *Assistant Professor*
**RUDD, Jonathan L.** *Assistant Professor*
**SMIDT, Michael L.** *Assistant Professor*
**VOGEL, Ryan J.** *Associate Professor*
**WADDINGTON, Dan** *Assistant Professor*

# Course Descriptions

Criminal Justice..... 532
Forensic Science..... 646
Intelligence Studies.....678
National Security Studies..... 723

# Degrees & Programs

## Criminal Justice, A.A.

### *Requirements*

Students in Criminal Justice may receive a Certificate of Proficiency in Law Enforcement Academy, an Associate in Science Degree in Criminal Justice, a Bachelor of Science Degree in Criminal Justice, or a Bachelor of Science Degree in Forensic Science.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| | CJ 1010 | Introduction to Criminal Justice | 3 |
| | CJ 1340 | Criminal Investigations | 3 |
| | CJ 1350 | Introduction to Forensic Science | 3 |
| | CJ 1330 | Criminal Law | 3 |
| | CJ 2350 | Laws of Evidence | 3 |
| Elective Requirements: | | | 10 Credits |
| | Foreign Language | | 8 |
| | Electives may consist of any Criminal Justice (CJ) course that is not part of the core requirements,Forensic Science (FSCI) or National Security Studies (NSS) courses. | | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours: Minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one language.
6. Must have a grade of C- or higher in all discipline core and criminal justice elective requirements.

## Criminal Justice, A.S.

### *Requirements*

Students in Criminal Justice may receive a Certificate of Proficiency in Law Enforcement Academy, an Associate in Science Degree in Criminal

Justice, a Bachelor of Science Degree in Criminal Justice, or a Bachelor of Science Degree in Forensic Science.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| | CJ 1010 | Introduction to Criminal Justice | 3 |
| | CJ 1340 | Criminal Investigations | 3 |
| | CJ 1350 | Introduction to Forensic Science | 3 |
| | CJ 1330 | Criminal Law | 3 |
| | CJ 2350 | Laws of Evidence | 3 |
| Elective Requirements: | | | 10 Credits |
| | Electives may consist of any Criminal Justice (CJ) course that is not part of the core requirements,Forensic Science (FSCI) or National Security Studies (NSS) courses. | | 10 |

**Graduation Requirements:**

1. Completion of a minimum of 60 or more semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours: Minimum of 20 credit hours through course attendance at UVU
4. Completion of GE and specified departmental requirements.
5. Must have a grade of C- or higher in all discipline core and criminal justice elective requirements.

## Intelligence Studies, A.S.

### *Requirements*

The Associate of Science in Intelligence Studies exposes students to the wide range of theoretical and functional issues related to the field of military intelligence. Students are prepared for employment in the intelligence field. This degree is limited to students participating in the Utah National Guard's (UNG) military intelligence education program at Camp Williams in Bluffdale, Utah.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Students in the AS program must be admitted to the Utah National Guard's Military Intelligence Education program and admitted to UVU. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | MAT 103H | Quantitative Reasoning (3.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra QL (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |

| | | |
|---|---|---|
| | Fine Arts | 3 |
| | Social/Behavioral Science | 3 |
| Discipline Core Requirements: | | 15 Credits |
| Any 15 credits from the Intelligence Studies course offerings. | | 15 |
| Elective Requirements: | | 10 Credits |
| Elective credits, including any additional courses from the Intelligence Studies course offerings. | | 10 |

**Graduation Requirements:**

1. Students will be required to earn 60 credits in order to graduate with the AS in Intelligence Studies.
2. 15 of those credits must be from Intelligence Studies (INST) classes.
3. Students must also complete 35 credits of general education courses as described below and ten credits of elective courses.
4. Students must have an overall grade point average of 2.0 (C) or above and a grade of C- or higher in all core and elective requirements.
5. A minimum of 20 credit hours must be earned through course attendance at UVU.

## Criminal Justice, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Criminal Justice is available for all UVU students with a particular focus designed to provide high school students an opportunity to obtain a certificate of proficiency with a focus on a Career and Technical Education (CTE) field while still enrolled in high school that will stack into certificates and associate degrees at UVU. This certificate will be available from the University for college students/adults looking for entry-level skills leading to further academic advancement and learn more about the criminal justice field.

**Total Program Credits: 15**

| Discipline Core Requirements: | | | 15 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistic (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| | CJ 1010 | Introduction to Criminal Justice | 3 |
| | CJ 1330 | Criminal Law | 3 |
| | CJ 1340 | Criminal Investigations | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 15 credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 4 credit hours through course attendance at UVU.

## Law Enforcement, Certificate of Proficiency

### *Requirements*

Utah Valley University is a sanctioned provider of the Utah Law Enforcement Academy, the basic training program for certification of law enforcement officers. The academy is divided into two modules. The first, or core, provides training required for certification of special function officers and is foundational for law enforcement and correctional officers. The second module is required for certification as a reserve or law enforcement officer.

**Total Program Credits: 18**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. By permission only class. Individual must complete the State POST application.<br>2. Individual must attend an application meeting/interview to have their application accepted by the director of the academy.<br>3. Individual must pass the State POST Entrance Exam (NPOST). The NPOST exam is a required as part of the application. | | | |
| Discipline Core Requirements: | | | 18 Credits |
| | CJ 1800 | POST Module I | 7 |
| | CJ 1810 | POST Module II | 11 |

**Graduation Requirements:**

1. Individual must pass State POST written certification test at 80% or above to become State POST certified.
2. Individual must pass State POST physical certification test at the determined State requirements.
3. Completion of a minimum of 18 credits.
4. Overall grade point average of 3.0 or above.
5. Residency hours -- Minimum of 5 credits required through course attendance at UVU.

## National Security Studies, Certificate of Proficiency

### *Requirements*

The NSS certificate of proficiency is aimed at students with a baccalaureate degree who are looking to re-tool or specialize in national security in order to enter or advance in a national security career. The certificate will provide an interdisciplinary program that prepares students for and allows existing professionals to advance in public and private sector national security careers through acquisition of subject matter expertise and analytical skills. This certificate will expose students to the wide variety of critically important security challenges and issues faced in the twenty-first century, such as terrorism and cyber security, nuclear proliferation and weapons of mass destruction, piracy and global pandemics, sovereignty and the use of force, and civil liberties and the rule of law. Students will also acquire skills such as critical thinking, writing, briefing, and analysis techniques specifically tailored for the national security field, but applicable in many others. Whether students are interested in counterterrorism, homeland security, intelligence gathering and analysis, foreign relations, law and politics, diplomacy, or international development, the NSS certificate of proficiency will provide insight and skills needed to succeed in these professions.

**Total Program Credits: 18**

| Matriculation Requirements: | | | |
|---|---|---|---|
| Students must have University Advanced Standing or have completed a baccalaureate degree | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | NSS 2010 | Introduction to National Security | 3 |
| | NSS 301R | National Security Area Studies | 3 |
| | NSS 4600 | National Security Law | 3 |
| | POLS 4500 | International Conflict and Security | 3 |
| Elective Requirements: | | | 6 Credits |
| Complete 6 credits from the following: | | | 6 |
| | NSS 4210 | Law of War (3.0) | |
| | NSS 475R | Current Topics in National Security (3.0) | |
| | CJ 3340 | Terrorism and the Criminal Justice System (3.0) | |
| | IT 2700 | Information Security Fundamentals (3.0) | |
| | POLS 3100 | Survey of International Terrorism (3.0) | |
| | POLS 3400 | American Foreign Policy (3.0) | |
| | POLS 4610 | International Law and Relations (3.0) | |
| or | Other course approved by department advisor or director. | | |

**Graduation Requirements:**

1. Completion of a minimum of 18 credits.
2. Overall grade point average (GPA) of 2.0
3. Completion of discipline core and electives with a C- grade or higher.
4. Residency hours -- Minimum of 5 credits required through course attendance at UVU.

## Criminal Justice, Minor

### *Requirements*

Students in Criminal Justice may receive a Certificate of Proficiency in Law Enforcement Academy, an Associate in Science Degree in Criminal Justice, a Bachelor of Science Degree in Criminal Justice, or a Bachelor of Science Degree in Forensic Science.

**Total Program Credits: 24**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | CJ 1010 | Introduction to Criminal Justice | 3 |
| | CJ 1340 | Criminal Investigations | 3 |
| | CJ 1330 | Criminal Law | 3 |
| | CJ 2350 | Laws of Evidence | 3 |
| Elective Requirements: | | | 12 Credits |
| | Complete 12 credits from any CJ upper-division courses | | 12 |

**Graduation Requirements:**

1. Overall grade point average of 2.5 (C) or above, with completion of each Criminal Justice class with a "C-" or higher.

## Forensic Science, Minor

### *Requirements*

Students in Criminal Justice may receive a Certificate of Proficiency in Law Enforcement Academy; an Associate in Science Degree in Criminal Justice; a Bachelor of Science Degree in Criminal Justice or a Bachelor of Science Degree in Forensic Science.

**Total Program Credits: 24**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Admitted to a bachelor degree program at UVU | | | |
| Discipline Core Requirements: | | | 18 Credits |
| | CJ 1350 | Introduction to Forensic Science | 3 |
| | FSCI 3300 | Forensic Photography | 3 |
| | FSCI 3400 | Criminalistics | 3 |
| | FSCI 3720 | Fingerprint Examination | 3 |
| | FSCI 3820 | Crime Scene Investigation Techniques I WE | 3 |
| | FSCI 3860 | Forensic Microscopy | 3 |
| Elective Requirements: | | | 6 Credits |
| | Complete 6 credits from any upper-division Forensic Science courses or other approved electives | | 6 |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above.
2. Must have a grade of C+ or higher in FSCI 3400 Criminalistics; and a C- or higher in all other core and elective requirements.

## National Security Studies, Minor

### *Requirements*

The Minor in National Security Studies provides an interdisciplinary program that prepares students for public and private sector national security careers through acquisition of subject matter expertise and analytical skills. The minor exposes students to the wide variety of critically important security challenges and issues faced in the twenty-first century, such as terrorism and cyber security, nuclear proliferation and weapons of mass destruction, piracy and global pandemics, sovereignty and the use of force, and civil liberties and the rule of law. Students will also acquire skills such as critical thinking, writing, briefing, and analysis techniques specifically tailored for the national security field, but applicable in many others. Whether students are interested in counterterrorism, homeland security, intelligence gathering and analysis, foreign relations, law and politics, diplomacy, or international development, the Minor in National Security Studies provides the insight and skills needed to succeed in these professions.

**Total Program Credits: 24**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Admitted to bachelor degree program at UVU<br>2. Students must take either CJ 1010 or POLS 1100 for matriculation | | | |
| Discipline Core Requirements: | | | 15 Credits |
| Matriculation Courses: | | | |
| | CJ 1010 | Introduction to Criminal Justice (3.0) | 3 |
| or | POLS 1100 | American National Government (3.0) | |
| Core Courses | | | |

| | | | |
|---|---|---|---|
| | NSS 2010 | Introduction to National Security | 3 |
| | NSS 301R | National Security Area Studies | 3 |
| | NSS 4600 | National Security Law | 3 |
| | NSS 475R | Current Topics in National Security (3.0) | 3 |
| Elective Requirements: | | | 9 Credits |
| Complete 9 credits from the following: | | | 9 |
| | CNST 4795 | Civil Rights and Civil Liberties (3.0) | |
| | NSS 4210 | Law of War (3.0) | |
| | CJ 3340 | Terrorism and the Criminal Justice System (3.0) | |
| | CJ 4160 | Constitutional Criminal Rights (3.0) | |
| | ESMG 310G | Introduction to Homeland Security (3.0) | |
| | HIST 3440 | The History of World War I (3.0) | |
| | HIST 345G | The History of World War Ii (3.0) | |
| | HIST 4140 | Genocide in the Twentieth Century (3.0) | |
| | HIST 430G | Violence and Social Conflict in Latin America (3.0) | |
| | IT 2700 | Information Security Fundamentals (3.0) | |
| | MILS 259R | Current Topics in Military Science (3.0) | |
| | MILS 4200 | The Profession of Arms I (3.0) | |
| | MILS 4210 | The Profession of Arms II (3.0) | |
| | PJST 3020 | The Ethics of War and Peace (3.0) | |
| | PJST 3100 | Introduction to Human Security (3.0) | |
| | PJST 3400 | Conflict Transformation: Resolution and Sustainable Peace (3.0) | |
| | POLS 1440 | Introduction to Middle East Politics (3.0) | |
| | POLS 2100 | Introduction to International Relations (3.0) | |
| | POLS 3100 | Survey of International Terrorism (3.0) | |
| | POLS 3210 | World Diplomacy (3.0) | |
| | POLS 3400 | American Foreign Policy (3.0) | |
| | POLS 3500 | International Relations of the Middle East (3.0) | |
| | POLS 3600 | International Relations of East Asia (3.0) | |
| | POLS 3610 | International Organization (3.0) | |
| | POLS 4500 | International Conflict and Security (3.0) | |
| | POLS 4610 | International Law and Relations (3.0) | |
| or | Other course approved by department advisor or director. | | |

**Graduation Requirements**

Completion of discipline core and electives with a C- grade or higher.

# Criminal Justice, B.S.

## *Requirements*

Students in Criminal Justice may receive a Certificate of Proficiency in Law Enforcement Academy, an Associate in Science Degree in Criminal Justice, a Bachelor of Science Degree in Criminal Justice, or a Bachelor of Science Degree in Forensic Science.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 74 Credits |
| | CJ 1010 | Introduction to Criminal Justice | 3 |
| | CJ 1300 | Introduction to Corrections Process | 3 |
| | CJ 1330 | Criminal Law | 3 |
| | CJ 1340 | Criminal Investigations | 3 |
| | CJ 1350 | Introduction to Forensic Science | 3 |

| | | | |
|---|---|---|---|
| | CJ 1390 | Introduction to Policing | 3 |
| | CJ 2200 | Writing for Criminal Justice Professionals WE | 3 |
| | CJ 2330 | Juvenile Justice | 3 |
| | CJ 2350 | Laws of Evidence | 3 |
| | CJ 3270 | Criminology | 3 |
| | CJ 3300 | Victimology | 3 |
| | CJ 3400 | Drugs and Crime | 3 |
| | CJ 4060 | Special Problems in Criminal Justice WE | 3 |
| | CJ 4160 | Constitutional Criminal Rights | 3 |
| | CJ 4200 | Ethical Issues in Criminal Justice | 3 |
| | CJ 4250 | Criminal Justice Career Strategies | 2 |
| | CJ 470G | Comparative Criminal Justice Systems | 3 |
| | CJ 481R | Internship | 3 |
| | CJ 4880 | Qualitative Research Methods in Criminal Justice | 3 |
| | CJ 4990 | Criminal Justice Capstone Seminar | 3 |
| Complete 18 credits from the following (12 must be upper-division): | | | 18 |
| | Any Criminal Justice (CJ courses that are not part of the core requirements), Forensic Science(FSCI), National Security Studies (NSS) or Intelligence Studies (INTS) courses. | | |
| | Other Advisor Approved Electives | | |
| Elective Requirements: | | | 11 Credits |
| | Complete any 1000 course or higher | | 11 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits with 40 semester credits from 3000- and 4000-level courses.
2. Overall grade point average of 2.0 (C) or above. Must have a grade of C- or higher in all discipline core andcriminal justice elective requirements.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

## Forensic Science - Forensic Investigation Emphasis, B.S.

### *Requirements*

The Forensic Investigation Emphasis within the BS in Forensic Science will provide an interdisciplinary program that prepares students for public, state, and federal careers with needed forensic investigation subject matter expertise and analytical skills. This emphasis will expose students to the wide variety of critically important forensic investigation techniques, which are currently practiced within various forensic service providers and law enforcement agencies today. Students will be exposed to various techniques such as the identification and proper collection of evidence found at crime scenes, accurate crime scene documentation skills, forensic photography, death investigations, fingerprint processing/examinations, impression evidence/examination, bloodstain pattern analysis, crime scene reconstruction, firearms and tool mark evidence/examination. Students will also acquire skills such as critical thinking, writing, expert testimony, and analysis techniques specifically tailored for forensic investigation fieldwork. This emphasis will provide students with the overall professional skills, work ethic, and demeanor required of forensic investigators.

**Total Program Credits: 126**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 4 |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | COMM 1020 | Public Speaking (recommended for Humanities Distribution) | 2 |
| and | COMM 1025 | Public Speaking Lab (recommended for Humanities Distribution) | 1 |
| | ART 1050 | Photography I (recommended for Fine Arts Distribution) | 3 |
| | CJ 1010 | Introduction to Criminal Justice | 3 |
| Discipline Core Requirements: | | | 40 Credits |
| Forensic Science Foundational Courses: | | | |
| | CJ 1330 | Criminal Law | 3 |
| | CJ 1340 | Criminal Investigations | 3 |
| | CJ 1350 | Introduction to Forensic Science | 3 |
| | CJ 2350 | Laws of Evidence | 3 |
| | FSCI 3400 | Criminalistics | 3 |
| | FSCI 3880 | Expert Witness Professional Practices | 3 |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |

| | | | |
|---|---|---|---|
| | PHYS 2010 | College Physics I | 4 |
| | PHYS 2015 | College Physics I Lab | 1 |
| | PHYS 2020 | College Physics II | 4 |
| | PHYS 2025 | College Physics II Lab | 1 |
| | FSCI 3700 | Fingerprint Processing | 3 |
| | FSCI 3820 | Crime Scene Investigation Techniques I WE | 3 |
| | FSCI 3860 | Forensic Microscopy | 3 |
| Emphasis Requirements: | | | 24 Credits |
| Complete one of the Following: | | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology (3.0) | |
| | ZOOL 2320 | Human Anatomy (3.0) | |
| and | ZOOL 2325 | Human Anatomy Laboratory (1.0) | |
| Complete the Following: | | | |
| | FSCI 3300 | Forensic Photography | 3 |
| | FSCI 3500 | Footwear and Tire Mark Evidence and Examination | 3 |
| | FSCI 3780 | Bloodstain Pattern Analysis | 3 |
| | FSCI 3830 | Crime Scene Investigation Techniques II WE | 3 |
| | FSCI 4100 | Forensic Pathology | 3 |
| | FSCI 4200 | Medicolegal Death Investigations | 3 |
| | FSCI 4990 | Forensic Investigation Capstone | 3 |
| Emphasis Electives: | | | 23 Credits |
| Complete 23 Credits from the Following (two course must be upper division): | | | 23 |
| | FSCI 3540 | Forensic Trace Analysis I (3.0) | |
| | FSCI 3550 | Forensic Trace Analysis II (3.0) | |
| | FSCI 3600 | Forensic Anthropology I (3.0) | |
| | FSCI 3720 | Fingerprint Examination (3.0) | |
| | FSCI 3850 | Marijuana Identification Certificate (3.0) | |
| | FSCI 4000 | Firearms Examination (3.0) | |
| | FSCI 443R | Directed Research in Forensic Science (2.0) | |
| | FSCI 475R | Current Topics in Forensic Science (3.0) | |
| | FSCI 481R | Forensic Science Internship (1.0) | |
| | FSCI 491R | Directed Reading and Special Projects (1.0) | |
| | IT 2800 | Computer Forensic Fundamentals (3.0) | |
| | CHEM 2310 | Organic Chemistry I (4.0) | |
| | CHEM 2315 | Organic Chemistry I Laboratory (1.0) | |
| | CHEM 2320 | Organic Chemistry II (4.0) | |
| | CHEM 2325 | Organic Chemistry II Laboratory (1.0) | |
| | CHEM 3000 | Analytical Chemistry (2.0) | |
| | CHEM 3005 | Analytical Chemistry Laboratory (2.0) | |
| | CHEM 3600 | Biological Chemistry (3.0) | |
| | CHEM 3605 | Biological Chemistry Lab (1.0) | |
| | CHEM 4000 | Instrumental Analysis WE (2.0) | |
| | CHEM 4005 | Instrumental Analysis Laboratory (2.0) | |
| | ENGL 3300 | Collaborative Communication for Technology Professions (3.0) | |
| | CJ 470G | Comparative Criminal Justice Systems (3.0) | |
| | Any Upper Division CJ Course | | |

**Graduation Requirements:**

1. Completion of a minimum of 126 or more semester credits 40 credits of which must be upper division.
2. Overall grade point average of 2.0 (C) or above.
3. Must have a grade of C+ or higher in CJ 1350 and FSCI 3400; must have a C- or higher in all other core and elective courses.
4. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of GE and specified departmental requirements.
6. Successful completion of at least one Global/Intercultural course.

## Forensic Science - Forensic Laboratory Emphasis, B.S.

### *Requirements*

The Forensic Laboratory Emphasis within the BS in Forensic Science will provide students with a comprehensive science-based undergraduate education, which enables students to enter into a forensic science career. This emphasis will provide the necessary technical and theoretical knowledge, skills, and abilities of modern forensic techniques. Students will employ the theoretical and practical principles of chemistry, biology, physics, and mathematics in order to perform forensic science work commonly conducted within a crime laboratory. Science-based study and application of these principles will expose students to a stimulating academic environment conducive to scholarly inquiry. Students will gain the knowledge and ability for research-based projects and for potential improvement of the forensic community. Throughout this program, students will utilize effective written and oral communication skills required of forensic experts, as well as demonstrate work ethic, professional demeanor, reliability, and proper interpersonal skills.

**Total Program Credits: 126**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 4 |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |

| | | | |
|---|---|---|---|
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | COMM 1020 | Public Speaking (recommended for Humanities Distribution) | 2 |
| and | COMM 1020 | Public Speaking Lab (recommended for Humanities Distribution) | 1 |
| | ART 1050 | Photography I (recommended for Fine Arts Distribution) | 3 |
| | CJ 1010 | Introduction to Criminal Justice | 3 |
| Discipline Core Requirements: | | | 40 Credits |
| Forensic Science Foundational Courses: | | | |
| | CJ 1330 | Criminal Law | 3 |
| | CJ 1340 | Criminal Investigations | 3 |
| | CJ 1350 | Introduction to Forensic Science | 3 |
| | CJ 2350 | Laws of Evidence | 3 |
| | FSCI 3400 | Criminalistics | 3 |
| | FSCI 3880 | Expert Witness Professional Practices | 3 |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | PHYS 2010 | College Physics I | 4 |
| | PHYS 2015 | College Physics I Lab | 1 |
| | PHYS 2020 | College Physics II | 4 |
| | PHYS 2025 | College Physics II Lab | 1 |
| | FSCI 3700 | Fingerprint Processing | 3 |
| | FSCI 3820 | Crime Scene Investigation Techniques I WE | 3 |
| | FSCI 3860 | Forensic Microscopy | 3 |
| Emphasis Requirements: | | | 33 Credits |
| | MATH 1060 | Trigonometry | 3 |
| | MATH 1210 | Calculus I | 5 |
| | STAT 2040 | Principles of Statistics | 4 |
| | CHEM 2310 | Organic Chemistry I | 4 |
| | CHEM 2315 | Organic Chemistry I Laboratory | 1 |
| | CHEM 2320 | Organic Chemistry II | 4 |
| | CHEM 2325 | Organic Chemistry II Laboratory | 1 |
| | CHEM 3000 | Analytical Chemistry | 2 |
| | CHEM 3005 | Analytical Chemistry Laboratory | 2 |
| | CHEM 4000 | Instrumental Analysis WE | 2 |
| | CHEM 4005 | Instrumental Analysis Laboratory | 2 |
| | FSCI 3540 | Forensic Trace Analysis I | 3 |
| Emphasis Electives: | | | 14 Credits |
| Complete 14 credits from the following | | | 14 |
| | FSCI 3300 | Forensic Photography (3.0) | |
| | FSCI 3500 | Footwear and Tire Mark Evidence and Examination (3.0) | |
| | FSCI 3550 | Forensic Trace Analysis II(3.0) | |
| | FSCI 3600 | Forensic Anthropology I (3.0) | |
| | FSCI 3720 | Fingerprint Examination (3.0) | |
| | FSCI 3780 | Bloodstain Pattern Analysis (3.0) | |
| | FSCI 3830 | Crime Scene Investigation Techniques II We (3.0) | |
| | FSCI 3850 | Marijuana Identification Certificate (3.0) | |
| | FSCI 4000 | Firearms Examination (3.0) | |
| | FSCI 4100 | Forensic Pathology (3.0) | |
| | FSCI 4200 | Medicolegal Death Investigations (3.0) | |
| | FSCI 443R | Directed Research in Forensic Science (2.0) | |
| | FSCI 475R | Current Topics in Forensic Science (3.0) | |
| | FSCI 481R | Forensic Science Internship (1.0) | |
| | FSCI 491R | Directed Reading and Special Projects (1.0) | |
| | CJ 470G | Comparative Criminal Justice Systems (3.0) | |
| | ENGL 3300 | Collaborative Communication for Technology Professions (3.0) | |
| | CHEM 3600 | Biological Chemistry (3.0) | |
| | CHEM 3605 | Biological Chemistry Lab (1.0) | |
| | Any Upper Division CJ Course | | |

**Graduation Requirements:**

1. Completion of a minimum of 126 or more semester credits, 40 credits of which must be upper division.
2. Overall grade point average of 2.0 (C) or above.
3. Must have a grade of C+ or higher in CJ 1350 and FSCI 3400; must have a C- or higher in all other core and elective courses.
4. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of GE and specified departmental requirements.
6. Successful completion of at least one Global/Intercultural course.

## National Security Studies, B.A.

### *Requirements*

The BA/BS in National Security Studies (NSS) will provide an interdisciplinary program that prepares students for public and private sector national security careers through acquisition of subject matter expertise and analytical skills. This baccalaureate degree program will expose students to the wide variety of critically important security challenges and issues faced in the twenty-first century such as: terrorism and cyber security, nuclear proliferation and weapons of mass destruction, piracy and global pandemics, sovereignty and the use of

force, and civil liberties and the rule of law. Students will also acquire skills such as critical thinking, writing, briefing, and analysis techniques specifically tailored for the national security field, but applicable in many others. Whether students are interested in counterterrorism, homeland security, intelligence gathering and analysis, foreign relations, law and politics, diplomacy, or international development, the NSS BA/BS will provide insight and skills needed to succeed in these professions.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education,Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (any foreign language 202G/2020 course) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 42 Credits |
| | POLS 1100 | American National Government | 3 |
| | NSS 2010 | Introduction to National Security | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | NSS 3050 | US Intelligence Community | 3 |
| | NSS 301R | National Security Area Studies | 3 |
| | NSS 4210 | Law of War | 3 |
| | NSS 4600 | National Security Law | 3 |
| | NSS 475R | Current Topics in National Security | 3 |
| | POLS 3100 | Survey of International Terrorism | 3 |
| | POLS 3400 | American Foreign Policy | 3 |
| | POLS 3680 | International Political Economy | 3 |
| | POLS 4500 | International Conflict and Security | 3 |
| | POLS 4610 | International Law | 3 |
| | NSS 4990 | National Security Capstone Seminar | 3 |
| Elective Requirements: | | | 42 Credits |
| | Complete 21 credits from the following: | | 21 |
| | NSS 4250 | National Security Career Strategies (3) | |
| | NSS 4800 | Intelligence Analysis and Tradecraft (3) | |
| | NSS 481R | National Security Internship (1) | |
| | NSS 491R | Directed Readings and Special Projects in National Security (1) | |
| | CNST 4795 | Civil Rights and Civil Liberties (3) | |
| | CJ 3340 | Terrorism and the Criminal Justice System (3) | |
| | CJ 4160 | Constitutional Criminal Rights (3) | |
| | HIST 3440 | The History of World War I (3) | |
| | HIST 345G | The History of World War II (3) | |
| | HIST 4140 | Genocide in the Twentieth Century (3) | |
| | HIST 430G | Violence and Social Conflict in Latin America (3) | |
| | ESMG 310G | Introduction to Homeland Security (3) | |
| | IT 2700 | Information Security Fundamentals (3) | |
| | MILS 259R | Current Topics in Military Science (3) | |
| | MILS 4200 | The Profession of Arms I (3) | |
| | MILS 4210 | The Profession of Arms II (3) | |
| | PJST 3020 | The Ethics of War and Peace (3) | |
| | PJST 3100 | Introduction to Human Security (3) | |
| | PJST 3400 | Conflict Transformation Resolution and Sustainable Peace (3) | |
| | POLS 3150 | US Presidency (3) | |
| | POLS 3210 | World Diplomacy (3) | |
| | POLS 3500 | International Relations of the Middle East (3) | |
| | POLS 3600 | International Relations of East Asia (3) | |
| | POLS 3610 | International Organization (3) | |
| | Any other course approved by the NSS Director or Academic Advisor | | |
| One Foreign Language | | | 12 |
| All other non-discipline electives | | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.

2. Overall grade point average of 2.0 (C) or above, with no required course grade below C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.
6. Completion of 12 credit hours of course work from one language, to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalent.

## National Security Studies, B.S.

### *Requirements*

The BA/BS in National Security Studies (NSS) will provide an interdisciplinary program that prepares students for public and private sector national security careers through acquisition of subject matter expertise and analytical skills. This baccalaureate degree program will expose students to the wide variety of critically important security challenges and issues faced in the twenty-first century such as: terrorism and cyber security, nuclear proliferation and weapons of mass destruction, piracy and global pandemics, sovereignty and the use of force, and civil liberties and the rule of law. Students will also acquire skills such as critical thinking, writing, briefing, and analysis techniques specifically tailored for the national security field, but applicable in many others. Whether students are interested in counterterrorism, homeland security, intelligence gathering and analysis, foreign relations, law and politics, diplomacy, or international development, the NSS BA/BS will provide insight and skills needed to succeed in these professions.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education,Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 42 Credits |
| | POLS 1100 | American National Government | 3 |
| | NSS 2010 | Introduction to National Security | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | NSS 3050 | US Intelligence Community | 3 |
| | NSS 301R | National Security Area Studies | 3 |
| | NSS 4210 | Law of War | 3 |
| | NSS 4600 | National Security Law | 3 |
| | NSS 475R | Current Topics in National Security | 3 |
| | POLS 3100 | Survey of International Terrorism | 3 |
| | POLS 3400 | American Foreign Policy | 3 |
| | POLS 3680 | International Political Economy | 3 |
| | POLS 4500 | International Conflict and Security | 3 |
| | POLS 4610 | International Law | 3 |
| | NSS 4990 | National Security Capstone Seminar | 3 |
| Elective Requirements: | | | 43 Credits |
| | Complete 28 credits from the following: | | 28 |
| | NSS 4250 | National Security Career Strategies (3) | |
| | NSS 4800 | Intelligence Analysis and Tradecraft (3) | |
| | NSS 481R | National Security Internship (1) | |
| | NSS 491R | Directed Readings and Special Projects in National Security (1) | |
| | CNST 4795 | Civil Rights and Civil Liberties (3) | |
| | CJ 3340 | Terrorism and the Criminal Justice System (3) | |
| | CJ 4160 | Constitutional Criminal Rights (3) | |
| | HIST 3440 | The History of World War I (3) | |
| | HIST 345G | The History of World War II (3) | |
| | HIST 4140 | Genocide in the Twentieth Century (3) | |
| | HIST 430G | Violence and Social Conflict in Latin America (3) | |
| | ESMG 310G | Introduction to Homeland Security (3) | |
| | IT 2700 | Information Security Fundamentals (3) | |
| | MILS 259R | Current Topics in Military Science (3) | |
| | MILS 4200 | The Profession of Arms I (3) | |
| | MILS 4210 | The Profession of Arms II (3) | |
| | PJST 3020 | The Ethics of War and Peace (3) | |
| | PJST 3100 | Introduction to Human Security (3) | |

| | | | |
|---|---|---|---|
| | PJST 3400 | Conflict Transformation Resolution and Sustainable Peace (3) | |
| | POLS 3150 | US Presidency (3) | |
| | POLS 3210 | World Diplomacy (3) | |
| | POLS 3500 | International Relations of the Middle East (3) | |
| | POLS 3600 | International Relations of East Asia (3) | |
| | POLS 3610 | International Organization (3) | |
| | Any other course approved by the NSS Director or Academic Advisor | | |
| All other non-discipline electives | | | 15 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no required course grade below C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

# Culinary Arts Institute

## Culinary Arts Institute

The Culinary Arts Institute is in the College of Engineering & Technology. To find the most up-to-date information from the Culinary Arts Institute, visit their website.

Culinary Arts Institute

**DEPARTMENT CHAIR**

**WILSON, Troy** *Associate Professor*

**FACULTY**

**FALLIS, Diana** *Associate Professor*
**FRANCOM, Kenneth** *Assistant Professor*
**LEONARD, Todd** *Associate Professor*
**MCRAE, Joseph** *Assistant Professor*
**RODDY, Meghan** *Associate Professor*
**SPROUL, Peter** *Associate Professor*
**WILSON, Troy** *Associate Professor*

# Course Descriptions

Culinary Arts..... 520

# Degrees & Programs

## Culinary Arts, A.A.S.

### *Requirements*

The Culinary Arts Institute (CAI) at UVU provides premier training for students interested in a career in professional cooking or baking. The program offers small, hands-on classes, focusing on individualized attention and development. The Culinary Arts Institute provides experience, through “engage” industry based learning.

The Culinary Arts Institutes comprehensive course of study covers several service areas; including not only learning how to cook and bake, but key requirement to success such as; customer service, business and finance management, marketing and advertising. CAI students learn how to apply these skills to a variety of food service establishments and operations. The practical and theoretical instruction covers such areas as food service safety and sanitation, professional dining room service, menu planning, nutrition and purchasing-storeroom management procedures.

While studying Culinary Arts at UVU, students gain a solid understanding of the food and beverage industry and learn the newest techniques in food and baking production using state-of-the-art equipment in our kitchen labs. The CAI also applies real world training as students run, full service, fine dining operations at Restaurant Forte, located in the UCCU Center and the Canyon Park Café located the Culinary Arts Institute in North Orem. These industry based learning models allow students to work with a wide range of foods while directly interacting with the public. In order to get the full breadth of running their own food service establishment, students work in a variety of functions including waiting tables, purchasing, preparing food, hosting, and supervising as the head chef.

**Total Program Credits: 63**

| Matriculation Requirements: | |
|---|---|
| 1. Completion of the following courses with a grade of C- or better. CA 1160; CA 1490 (including current ServSafe certification); MAT 0990; ENGH 1005.or ENGL 1010.<br>2. Acceptance into the Culinary Arts Institute by completion of application process (see Advisor for specific details).<br>3. Overall GPA: 2.0 or better. | |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 10 Credits |
| ENGLISH | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| MATHEMATICS | | | |
| | FIN 1060 | Personal Finance | 3 |
| SOCIAL AND BEHAVIORAL SCIENCE | | | 3 |
| PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT | | | 1 |
| Discipline Core Requirements: | | | 53 Credits |
| | CA 1120 | Cooking Skills Development | 5 |
| | CA 1140 | Professional Dining Room Services | 1 |
| | CA 1150 | Nutrition and Food Service | 3 |
| | CA 1160 | Culinary Math | 1 |
| | CA 1170 | Pastry and Baking Skills | 5 |
| | CA 1180 | Professional Kitchen Garde Manger | 5 |
| | CA 1230 | Professional Kitchen I--Cooking | 5 |
| | CA 1310 | Purchasing and Storeroom Management | 3 |
| | CA 1320 | Culinary Management | 3 |
| | CA 1490 | Food Service Sanitation | 1 |
| | CA 2120 | Professional Kitchen II Restaurant | 5 |
| | CA 2130 | Advanced Pastry Baking | 5 |
| | CA 2450 | Menu Design | 2 |
| | CA 282R | Culinary Arts Internship | 6 |
| | HM 1010 | Introduction to Hospitality Industry | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade below a "C-" in culinary arts or other discipline core courses.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.

Note: Students are responsible for completing all prerequisite courses.

# Cybersecurity Graduate Programs

## Cybersecurity Graduate Programs

The Cybersecurity Graduate Programs are in the College of Engineering and Technology. To find the most up-to-date information on the Cybersecurity Graduate Programs, visit their website.

Cybersecurity Graduate Programs

**FACULTY**

**HAMDAN, Basil** *Associate Professor*

## Course Descriptions

Information Technology.....682

## Degrees & Programs

### Cybersecurity, Graduate Certificate

#### *Requirements*

The Graduate Certificate in Cybersecurity at Utah Valley University is a post-baccalaureate program for students who wish to complete advanced studies in the field of cybersecurity. This program is designed to provide students with advanced technical and managerial knowledge of cybersecurity, preparing them for senior technical and leadership roles in the field. Coursework includes a balanced approach, combining critical analysis of cybersecurity theory with hands-on education for essential applied cybersecurity techniques and tools.
The program takes two semesters to complete the 18 credits of graduate level courses. Courses include cybersecurity operations, advanced network defense, cybersecurity management, case studies, secure coding, ethical hacking, and the legal and privacy implications of cybersecurity.

To be successful, students should have a strong background in technology. Students should have completed undergraduate work in a related field or have applicable work experience. For those who do not meet this requirement, select undergraduate courses are available to provide the foundational knowledge needed. Please contact the academic advisor for more information.

**Total Program Credits: 18**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Application for admission to the program.<br>2. Bachelor's degree required, preferably in Information Systems, Information Security, Information Technology, or Computer Science.<br>3. 2 years of IT or IT security industry experience (if Bachelor's degree in non-related field).<br>4. Completion of undergraduate courses in data communication, programming, and servers. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | IT 6300 | Principles of Cybersecurity | 3 |
| | IT 6330 | Cybersecurity Operations | 3 |
| | IT 6350 | Law, Ethics, and Privacy in Cybersecurity | 3 |
| | IT 6370 | Penetration Testing and Vulnerability Assessment | 3 |
| Elective Requirements: | | | 6 Credits |
| Choose 6 credits from the following: | | | 6 |
| | IT 6660 | Advanced Network Forensics (3.0) | |
| | IT 6740 | Advanced Network Defense and Countermeasures (3.0) | |
| | IT 6760 | Case Studies in Cybersecurity (3.0) | |
| | IT 6770 | Cybersecurity Management (3.0) | |
| | IT 6780 | Secure Coding (3.0) | |
| | or other departmental approved electives | | |

**Graduation Requirements:**

1. Completion of a minimum of 18 credits.
2. Overall grade point average of 3.0 (B) or above.
3. Residency hours -- minimum of 5 credit hours through course attendance at UVU.
4. Courses and project requirements must be finished within a five-year period. No courses will apply toward graduation which are older than five years.

### Cybersecurity, M.S.

#### *Requirements*

The Master of Science in Cybersecurity is intended for individuals who desire to acquire additional cybersecurity knowledge, skills, and abilities in order to pursue new or advance existing careers in cybersecurity. The program is also designed for individuals who plan to pursue doctorate degrees in cybersecurity or related fields. The program focuses on the managerial and technical perspectives of cybersecurity through extensive use of case-studies and hands-on lab exercises.

**Total Program Credits: 30**

| Matriculation Requirements: |
|---|
| 1. Bachelor's degree with a GPA of at least 3.2 on a 4.0 scale from an accredited institution in one of the following fields: (Applicants who have bachelor's degrees in other fields may be admitted to the program if they have at least two years of technology or cybersecurity industry experience and have completed undergraduate courses in data communication, programming, and server administration with a grade of C+ or better. Students may also take a comprehensive exam on these topics to satisfy this admission requirement. These applications will be handled on a case-by-case basis.) 1. Information Systems; 2. Information Security; 3. Information Technology; 4. Computer Science<br>2. Admissions essay.<br>3. Completed application for admission.<br>4. Official transcripts from all attended institutions of higher education.<br>5. Two letters of recommendation |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 21 Credits |
| | IT 6300 | Principles of Cybersecurity | 3 |
| | IT 6330 | Cybersecurity Operations | 3 |
| | IT 6350 | Law/Ethics/ Privacy in Cybersecurity | 3 |
| | IT 6370 | Penetration Testing and Vulnerability Assessment | 3 |
| | IT 6740 | Advanced Network Defense and Countermeasures | 3 |
| | IT 6770 | Cybersecurity Management | 3 |
| | IT 6900 | Cybersecurity Capstone | 3 |
| Elective Requirements: | | | 9 Credits |
| Choose 9 credits from the following: | | | 9 |
| | IT 6660 | Advanced Network Forensics (3.0) | |
| | IT 6750 | Reverse Engineering and Malware Analysis (3.0) | |
| | IT 6780 | Secure Coding (3.0) | |
| | INFO 6420 | Web and Mobile Application Security (3.0) | |
| | or other departmental approved electives | | |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Courses must be finished within a five-year period. No courses will apply toward graduation that are older than five years.

# Dance

## Dance

The Dance department is in the School of the Arts. To find the most up-to-date information from the Dance department, visit their website.

Dance department

**FACULTY**

**BANCHERO-KELLEHER, Angela** *Professor*
**BOYD, Tara** *Lecturer*
**BROWN, Erin** *Lecturer*
**CAMPBELL, Monica** *Associate Professor*
**COLLEDGE, Jacqueline** *Lecturer*
**DONOHUE, Sarah** *Assistant Professor*
**GERKE, Brian** *Assistant Professor*
**JOHNSON, Jamie** *Assistant Professor*
**MARKGRAF-JACOBSON, Amy** *Professor*
**ORTEGA, Nichole** *Associate Professor*
**POTTS, Kaitlyn** *Lecturer*
**ST. JOHN, Christa** *Assistant Professor*
**WITT, Christopher** *Associate Professor*
**ZUBAL, Stefan** *Associate Professor*

## Course Descriptions

Dance.....556

## Degrees & Programs

### Dance, A.S.

#### *Requirements*

Students interested in pursuing a degree in dance can choose from the following degree paths: AS Pre-Major in Dance, BFA in Dance with an emphasis in Ballet or Modern Dance, BS in Dance with an emphasis in Ballroom Dance, and BS in Dance Education. In addition to career training, the Department of Dance provides opportunities for all interested students to explore the many forms of dance as elective and/or general education credit. The study of dance offers personal and cultural enrichment for majors and non-majors alike and allows students to augment their physical and theoretical skill as they study dance in relationship to the self, society, and other arts and disciplines.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology (BIOL 1010 recommended) | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science (ZOOL 1090 recommended) | | 3 |
| | Humanities Distribution | | 3 |
| | DANC 2110 | Orientation to Dance | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 19 Credits |
| | DANC 127R | Ballet Technique I (2 semesters) | 6 |
| | DANC 143R | Modern/Contemporary Dance Technique and Theory I/Semester I | 3 |
| | DANC 144R | Modern/Contemporary Dance Technique and Theory I/Semester II | 3 |
| | DANC 1510 | Intermediate Jazz Dance | 1 |
| | DANC 1610 | Dance Conditioning | 1 |
| | DANC 2330 | Improvisation | 1 |
| | DANC 2340 | Composition | 2 |
| | DANC 265R | Fundamentals of Movement | 2 |
| or | DANC 2670 | Introduction to Laban Studies (2) | |
| Elective Requirements: | | | 6 Credits |
| Complete 3 credits from the following: | | | 3 |
| | DANC 1560 | African Dance I (1) | |
| | DANC 1580 | Tap Dance I (1) | |
| | DANC 1590 | Hip Hop Dance I (1) | |
| | DANC 1600 | Hip Hop II (1) | |
| | DANC 1620 | Polynesian Dance I (1) | |
| | DANC 1700 | American Social Dance I (1) | |
| | DANC 1710 | International Ballroom Dance I (1) | |
| | DANC 1720 | Latin Ballroom Dance I (1) | |
| | DANC 2100 | Teaching Dance for Children (3) | |
| | DANC 221R | Pointe II (1) | |

| | | | |
|---|---|---|---|
| | DANC 222R | Ballet Technique and Theory II for Men (1) | |
| | DANC 2250 | Character Dance I (1) | |
| | DANC 2260 | Character Dance II (1) | |
| | DANC 227R | Ballet Technique II (3) | |
| | DANC 2350 | Dance and Technology (2) | |
| | DANC 243R | Modern/Contemporary Dance Technique and Theory Level II / Semester I (3) | |
| | DANC 244R | Modern/Contemporary Dance Technique and Theory Level II/ Semester II (3) | |
| | DANC 247R | Repertory (1) | |
| | DANC 248R | Special Topics In Dance (2) | |
| | DANC 250R | Advanced Jazz Dance (2) | |
| | DANC 2560 | African Dance II (1) | |
| | DANC 270R | American Social Dance II (1) | |
| | DANC 271R | International Ballroom Dance II (1) | |
| | DANC 272R | Latin Ballroom Dance II (1) | |
| | DANC 276R | Ballroom Dance Company Back-Up Team (1) | |
| | DANC 281R | Internship in Dance I (1) | |
| Complete 3 credits from any 1000 level or 2000 level course(s) | | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Dance - Ballet Emphasis, B.F.A.

### *Requirements*

Students interested in pursuing a degree in dance can choose from the following degree paths: AS Pre-Major in Dance, BFA in Dance with an emphasis in Ballet or Modern Dance, BS in Dance with an emphasis in Ballroom Dance, and BS in Dance Education. In addition to career training, the Department of Dance provides opportunities for all interested students to explore the many forms of dance as elective and/or general education credit. The study of dance offers personal and cultural enrichment for majors and non-majors alike and allows students to augment their physical and theoretical skill as they study dance in relationship to the self, society, and other arts and disciplines.

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| 1. Completion DANC 2110, and DANC 2330 with B- or higher.<br>2. Ballet emphasis: Completion of DANC 227R (2 semesters), with a grade of B- or higher.<br>3. Modern emphasis: Completion of DANC 143R and DANC 144R with a B- or higher.<br>4. Pass audition, interview, and portfolio review with faculty members.<br>5. Cumulative GPA of 2.75 or higher. |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Choose one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 1740 | US Economic History (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology BB (required prerequisite for ZOOL 1090) | 3 |
| | DANC 2110 | Orientation to Dance (Fulfills Fine Arts) | 3 |
| | Humanities Distribution | | 3 |
| | Physical Science | | 3 |
| | Social/Behavioral Science | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology (Fulfills additional Biology or Physical Science) | 3 |
| Discipline Core Requirements: | | | 39 Credits |
| | DANC 127R | Ballet Technique I | 6 |
| or | DANC 227R | Ballet Technique II (3) | |
| | DANC 143R | Modern/Contemporary Dance Technique and Theory I/Semester I | 3 |
| | DANC 144R | Modern/Contemporary Dance Technique and Theory I/Semester I | 3 |
| | DANC 1610 | Dance Conditioning | 1 |
| | DANC 2330 | Improvisation | 1 |
| | DANC 2340 | Composition | 2 |
| | DANC 265R | Fundamentals of Movement | 2 |
| | DANC 2670 | Introduction to Laban Studies | 2 |
| | DANC 3140 | Dance Production and Lighting | 2 |
| | DANC 356G | Dance and Culture | 3 |
| | DANC 3630 | Dance History WE | 3 |
| | DANC 3680 | Dance Kinesiology | 4 |
| | DANC 4350 | Senior Capstone I | 2 |
| | DANC 4360 | Senior Capstone II | 2 |
| | DANC 4880 | Current Issues in Dance | 3 |

| Emphasis Requirements: | | | 39 Credits |
|---|---|---|---|
| | DANC 221R | Pointe II (2 semesters required) (1) | 2 |
| or | DANC 222R | Ballet Technique and Theory II for Men (2 semesters required) (1) | |
| | DANC 2250 | Character Dance I (1) | 1 |
| | DANC 321R | Pointe III (2 semesters required) (1) | 2 |
| or | DANC 322R | Ballet Technique and Theory III for Men (2 semesters required) (1) | |
| | DANC 327R | Ballet Technique III (4 semesters required) (3) | 12 |
| | DANC 421R | Pointe IV (4 semesters required) (1) | 4 |
| or | DANC 423R | Pointe V (4 semesters required) (1) | |
| or | DANC 422R | Ballet Technique and Theory IV for Men (4 semesters required) (1) | |
| | DANC 424R | Pas de deux (2 semesters required) (1) | 1 |
| | DANC 425R | Repertory Ballet Ensemble (2 semesters required total) (3) | 6 |
| or | DANC 429R | Utah Metropolitan Ballet Repertory (2 semesters required total) (3) | |
| | DANC 3340 | Ballet Choreography (2) | 2 |
| | DANC 427R | Ballet Technique IV (2 semesters required total) (3) | 6 |
| or | DANC 428R | Ballet Technique V (2 semesters required total) (3) | |
| | DANC 4260 | Ballet Pedagogy | 3 |
| Emphasis Elective Requirements: | | | 4 Credits |
| Choose 4 credits from the following: | | | 4 |
| | DANC 1510 | Intermediate Jazz Dance (1) | |
| or | DANC 250R | Advanced Jazz Dance (2) | |
| | DANC 1700 | American Social Dance I (1) | |
| | DANC 1710 | International Ballroom Dance I (1) | |
| | DANC 2260 | Character Dance II (1) | |
| | DANC 3610 | Intermediate Dance Conditioning and Injury Prevention (2) | |
| | DANC 365R | Advanced Fundamentals of Movement (2) | |
| | DANC 3670 | Movement Analysis (3) | |
| | DANC 425R | Repertory Ballet Ensemble (3) | |
| | DANC 429R | Utah Metropolitan Ballet Repertory (repeatable for 9 semesters) (3) | |
| | THEA 1033 | Acting I (3) | |
| | Any DANC course not previously taken. | | |
| Complete 3 credits from any course(s) 1000 level or higher (Students must have 40 upper division credits hours to graduate.) | | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits; a minimum of 40 credits must be upper division.
2. Overall GPA of 2.0 (C) or above.
3. Overall GPA of 2.5 or above in all DANC courses.
4. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of GE and specified departmental requirements.
6. Successful completion of at least one Global/Intercultural course.

## Dance - Ballroom Dance Emphasis, B.S.

### *Requirements*

Students interested in pursuing a degree in dance can choose from the following degree paths: AS Pre-Major in Dance, BFA in Dance with an emphasis in Ballet or Modern Dance, BS in Dance with an emphasis in Ballroom Dance, and BS in Dance Education. In addition to career training, the Department of Dance provides opportunities for all interested students to explore the many forms of dance as elective and/or general education credit. The study of dance offers personal and cultural enrichment for majors and non-majors alike and allows students to augment their physical and theoretical skill as they study dance in relationship to the self, society, and other arts and disciplines.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Completion of DANC 270R, DANC 271R, DANC 272R, DANC 2110, and DANC 2330 with a grade of B- or better.<br>2. Pass audition, interview, and portfolio review with faculty members.<br>3. Cumulative G.P.A. of 2.75 or higher. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Choose one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology (strongly recommended for Biology) | 3 |
| | DANC 2110 | Orientation to Dance (Fine Arts) | 3 |
| | Humanities Distribution | | 3 |
| | Physical Science | | 3 |

| | | | |
|---|---|---|---|
| | Social/Behavioral Science | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology (Fulfills additional Biology or Physical Science) | 3 |
| Discipline Core Requirements: | | | 39 Credits |
| | DANC 127R | Ballet Technique I | 6 |
| or | DANC 227R | Ballet Technique II (3) | |
| | DANC 143R | Modern/Contemporary Dance Technique and Theory I/Semester I | 3 |
| | DANC 144R | Modern/Contemporary Dance Technique and Theory I/Semester II | 3 |
| | DANC 1610 | Dance Conditioning | 1 |
| | DANC 2330 | Improvisation | 1 |
| | DANC 2340 | Composition | 2 |
| | DANC 265R | Fundamentals of Movement | 2 |
| | DANC 2670 | Introduction to Laban Studies | 2 |
| | DANC 3140 | Dance Production and Lighting | 2 |
| | DANC 356G | Dance and Culture | 3 |
| | DANC 3630 | Dance History WE | 3 |
| | DANC 3680 | Dance Kinesiology | 4 |
| | DANC 4350 | Senior Capstone I | 2 |
| | DANC 4360 | Senior Capstone II | 2 |
| | DANC 4880 | Current Issues in Dance | 3 |
| Emphasis Requirements: | | | 33 Credits |
| | DANC 1510 | Intermediate Jazz Dance | 1 |
| or | DANC 250R | Advanced Jazz Dance (2) | |
| | DANC 270R | American Social Dance II | 1 |
| | DANC 370R | American Social Dance III (1) | 1 |
| | DANC 271R | International Ballroom Dance II | 1 |
| | DANC 371R | International Ballroom Dance III (2 semesters required) (1) | 2 |
| | DANC 471R | International Ballroom Dance IV (2 semesters required) (2) | 4 |
| | DANC 272R | Latin Ballroom Dance II | 1 |
| | DANC 372R | Latin Ballroom Dance III (2 semesters required) (1) | 2 |
| | DANC 472R | Latin Ballroom Dance IV (2 semesters required) (2) | 4 |
| | DANC 3730 | American Social Dance Teaching Methods | 2 |
| | DANC 4740 | International Ballroom and Latin Theory | 3 |
| | DANC 376R | Ballroom Dance Company Back-up Tour Team (2) | 4 |
| or | DANC 476R | Ballroom Dance Company Tour Team (3) | |
| | MGMT 1010 | Introduction to Business | 3 |
| | DANC 3740 | Ballroom Dance Choreography | 2 |
| | DANC 3750 | Studies in Ballroom Dance Styles | 2 |
| Emphasis Elective Requirements: | | | 13 Credits |
| Choose 7 hours from the following: | | | 7 |
| | DANC 1560 | African Dance I (1) | |
| | DANC 1590 | Tap Dance I (1) | |
| | DANC 1600 | Hip Hop II (1) | |
| | DANC 1620 | Polynesian Dance I (1) | |
| | DANC 2100 | Teaching Dance for Children (3) | |
| | DANC 222R | Ballet Technique and Theory II for Men (1) | |
| | DANC 227R | Ballet Technique II (3) | |
| | DANC 2350 | Dance and Technology (2) | |
| | DANC 376R | Ballroom Dance Company Back-up Tour Team (2) | |
| | DANC 248R | Special Topics In Dance (2) | |
| | DANC 2560 | African Dance II (1) | |
| | DANC 276R | Ballroom Dance Company Back Up Team (1) | |
| | DANC 281R | Internship in Dance I (1) | |
| | DANC 3400 | Dance in the Elementary School (2) | |
| | DANC 346R | Synergy Dance Company (3) | |
| | DANC 3610 | Intermediate Dance Conditioning and Injury Prevention (2) | |
| | DANC 365R | Advanced Fundamentals of Movement (2) | |
| | DANC 376R | Ballroom Dance Company Back-up Tour Team (2) | |
| or | DANC 476R | Ballroom Dance Company Tour Team (3) | |
| | DANC 4920 | Dance as Cultural Practice (3) | |
| | EXSC 3700 | Exercise Physiology (3) | |
| and | EXSC 3705 | Exercise Physiology Laboratory (1) | |
| | PES 1010 | Aerobics I (1) | |
| | PES 1055 | Pilates I CoreMax Training (1) | |
| | PES 1057 | Pilates I CoreMax Training (1) | |
| | PES 1085 | Weight Training I (1) | |
| | PES 2400 | Sports Injuries (2) | |
| | THEA 3541 | Costume Design I (3) | |
| | THEA 3545 | Costume Design I Lab (1) | |
| | Any DANC course not previously taken | | |
| Complete 6 credits from any courses 1000 level or higher (Students must have 40 upper division credit hours tograduate.) | | | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits; a minimum of 40 credits must be upper division.
2. Overall GPA of 2.0 (C) or above.
3. Overall GPA of 2.5 or above in all DANC courses.

4. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of GE and specified departmental requirements.
6. Successful completion of at least one Global/Intercultural course.

## Dance - Modern Dance Emphasis, B.F.A.

### *Requirements*

Students interested in pursuing a degree in dance can choose from the following degree paths: AS Pre-Major in Dance, BFA in Dance with an emphasis in Ballet or Modern Dance, BS in Dance with an emphasis in Ballroom Dance, and BS in Dance Education. In addition to career training, the Department of Dance provides opportunities for all interested students to explore the many forms of dance as elective and/or general education credit. The study of dance offers personal and cultural enrichment for majors and non-majors alike and allows students to augment their physical and theoretical skill as they study dance in relationship to the self, society, and other arts and disciplines.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion DANC 2110, and DANC 2330 with B- or higher.<br>2. Ballet emphasis: Completion of DANC 227R (2 semesters), with a grade of B- or higher.<br>3. Modern emphasis: Completion of DANC 143R and DANC 144R with a B- or higher.<br>4. Pass audition, interview, and portfolio review with faculty members.<br>5. Cumulative GPA of 2.75 or higher. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Choose one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 1740 | US Economic History (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology (required prerequisite for ZOOL 1090) | 3 |
| | DANC 2110 | Orientation to Dance (Fulfills Fine Arts) | 3 |
| | Humanities Distribution | | 3 |
| | Physical Science | | 3 |
| | Social/Behavioral Science | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology (Fulfills additional Biology or Physical Science) | 3 |
| Discipline Core Requirements: | | | 39 Credits |
| | DANC 127R | Ballet Technique I (3) | 6 |
| or | DANC 227R | Ballet Technique II (3) | |
| | DANC 143R | Modern/Contemporary Dance Technique and Theory I/Semester I | 3 |
| | DANC 144R | Modern/Contemporary Dance Technique and Theory I/Semester I | 3 |
| | DANC 1610 | Dance Conditioning | 1 |
| | DANC 2330 | Improvisation | 1 |
| | DANC 2340 | Composition | 2 |
| | DANC 265R | Fundamentals of Movement | 2 |
| | DANC 2670 | Introduction to Laban Studies | 2 |
| | DANC 3140 | Dance Production and Lighting | 2 |
| | DANC 356G | Dance and Culture | 3 |
| | DANC 3630 | Dance History WE | 3 |
| | DANC 3680 | Dance Kinesiology | 4 |
| | DANC 4350 | Senior Capstone I | 2 |
| | DANC 4360 | Senior Capstone II | 2 |
| | DANC 4880 | Current Issues in Dance | 3 |
| Emphasis Requirements: | | | 38 Credits |
| | DANC 1510 | Intermediate Jazz Dance | 1 |
| or | DANC 250R | Advanced Jazz Dance (2.0) | |
| | DANC 243R | Modern/Contemporary Dance Technique and Theory Level II / Semester I | 3 |
| | DANC 244R | Modern/Contemporary Dance Technique and Theory Level II/ Semester II | 3 |
| | DANC 3160 | Dance Accompaniment | 2 |
| | DANC 3330 | Modern Dance Workshop | 2 |
| | DANC 3350 | Choreography | 2 |
| | DANC 3400 | Dance in the Elementary School | 2 |
| | DANC 341R | Modern/Contemporary Dance Technique and Theory Level III/ Semester I | 3 |
| | DANC 342R | Modern/Contemporary Dance Technique and Theory Level III/ Semester II | 3 |
| | DANC 3450 | Modern/Contemporary Dance Teaching Methods | 3 |
| | DANC 346R | Synergy Dance Company (Both courses may be taken or one of them repeated for 6 credits) | 6 |
| or | DANC 446R | Contemporary Dance Ensemble (3) | |

| | | | |
|---|---|---|---|
| | DANC 365R | Advanced Fundamentals of Movement | 2 |
| or | DANC 3670 | Movement Analysis (3) | |
| | DANC 441R | Modern/Contemporary Dance Technique and Theory Level IV/ Semester I | 3 |
| | DANC 442R | Modern/Contemporary Dance Technique and Theory Level IV/ Semester II | 3 |
| Emphasis Elective Requirements: | | | 5 Credits |
| Choose 5 credits from the following list: | | | 5 |
| | DANC 1580 | Tap Dance I (1) | |
| | DANC 1600 | Hip-Hop II (1) | |
| | DANC 1700 | American Social Dance I (1) | |
| | DANC 1710 | International Ballroom Dance I (1) | |
| | DANC 1720 | Latin Ballroom Dance I (1) | |
| | DANC 2560 | African Dance II (1) | |
| | DANC 327R | Ballet Technique III (3) | |
| | DANC 3610 | Intermediate Dance Conditioning and Injury Prevention (2) | |
| | DANC 365R | Advanced Fundamentals of Movement (2) | |
| | DANC 3670 | Movement Analysis (3) | |
| | DANC 442R | Modern/Contemporary Dance Technique and Theory Level IV/ Semester II (3) | |
| | DANC 446R | Contemporary Dance Ensemble (3) | |
| | Any DANC course not previously taken | | |
| Complete 3 credits from any Department (Students must have 40 upper division credit hours to graduate.) | | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits; a minimum of 40 credits must be upper division.
2. Overall GPA of 2.0 (C) or above.
3. Overall GPA of 2.5 or above in all DANC courses.
4. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of GE and specified departmental requirements.
6. Successful completion of at least one Global/Intercultural course.

## Dance Education, B.S.

### *Requirements*

Students interested in pursuing a degree in dance can choose from the following degree paths: AS Pre-Major in Dance, BFA in Dance with an emphasis in Ballet or Modern Dance, BS in Dance with an emphasis in Ballroom Dance, and BS in Dance Education. In addition to career training, the Department of Dance provides opportunities for all interested students to explore the many forms of dance as elective and/or general education credit. The study of dance offers personal and cultural enrichment for majors and non-majors alike and allows students to augment their physical and theoretical skill as they study dance in relationship to the self, society, and other arts and disciplines.

**Total Program Credits: 125**

| Matriculation Requirements: |
|---|
| 1. Completion of DANC 143R, DANC 144R, DANC 1610, DANC 2110, and DANC 2330 with B- or higher.<br>2. Pass audition, interview, and portfolio review with faculty members.<br><br>Education Department matriculation requirements:<br><br>1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check. |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology | 3 |
| | DANC 2110 | Orientation to Dance | 3 |
| | Humanities | | 3 |
| | Physical Science | | 3 |
| | Social/Behavioral Science | | 3 |

| | | | |
|---|---|---|---|
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology (Strongly recommended for additional Biology or Physical Science) | 3 |
| Discipline Core Requirements: | | | 90 Credits |
| | DANC 127R | Ballet Technique I (3) | |
| or | DANC 227R | Ballet Technique II | 3 |
| | DANC 143R | Modern/Contemporary Dance Technique and Theory I/Semester I | 3 |
| | DANC 144R | Modern/Contemporary Dance Technique and Theory I/Semester II | 3 |
| | DANC 1610 | Dance Conditioning | 1 |
| | DANC 2330 | Improvisation | 1 |
| | DANC 2340 | Composition | 2 |
| | DANC 243R | Modern/Contemporary Dance Technique and Theory Level II / Semester I | 3 |
| | DANC 244R | Modern/Contemporary Dance Technique and Theory Level II/ Semester II | 3 |
| | DANC 2670 | Introduction to Laban Studies | 2 |
| | DANC 270R | American Social Dance II | 1 |
| | DANC 3140 | Dance Production and Lighting | 2 |
| | DANC 3160 | Dance Accompaniment | 2 |
| | DANC 3330 | Modern Dance Workshop | 2 |
| | DANC 3350 | Choreography | 2 |
| | DANC 3400 | Dance in the Elementary School | 2 |
| | DANC 341R | Modern/Contemporary Dance Technique and Theory Level III/ Semester I | 3 |
| | DANC 342R | Modern/Contemporary Dance Technique and Theory Level III/ Semester II | 3 |
| | DANC 3450 | Modern/Contemporary Dance Teaching Methods | 3 |
| | DANC 346R | Synergy Dance Company | 3 |
| | DANC 356G | Dance and Culture | 3 |
| | DANC 3630 | Dance History WE | 3 |
| | DANC 3680 | Dance Kinesiology | 4 |
| | DANC 4360 | Senior Capstone II | 2 |
| | DANC 4430 | Dance Teaching Practicum (Dance Education majors take DANC 4430 in place of EDSC 4200.) | 3 |
| Complete 1 credit from the following: | | | 1 |
| | DANC 1590 | Tap Dance I (1) | 1 |
| | DANC 1600 | Hip Hop II (1) | 1 |
| | DANC 1700 | American Social Dance I (1) | 1 |
| | DANC 1710 | International Ballroom Dance I (1) | 1 |
| | DANC 1720 | Latin Ballroom Dance I (1) | 1 |
| Education Courses: Must be completed with a grade of B- or higher. | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 125 semester credits.
2. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

# Developmental Mathematics

## Developmental Mathematics

The Developmental Mathematics department is in the Univeristy College. To find the most up-to-date information from the Developmental Mathematics department, visit their website.

Developmental Mathematics department

**DEPARTMENT CHAIR**

**PORTER, Evelyn** *Associate Professor*

**FACULTY**

**AESCHBACHER, Max** *Associate Professor*
**ANDERSON, Jonathan** *Associate Professor*
**BACKUS, Ellen** *Associate Professor*
**BRINKERHOFF, Mary** *Associate Professor*
**BROWN, Clayton** *Associate Professor*
**CHANG, Kuo-Liang** *Associate Professor*
**DEAN, David** *Associate Professor*
**GERBER, Lindsey** *Associate Professor*
**IOANE, Ofa** *Associate Professor*
**JARVIS, John D.** *Associate Professor*
**JOUNG, Eunmi** *Assistant Professor*
**LEHET, Ellen** *Assistant Professor*
**LOFTUS, Jane** *Associate Professor*
**MCKENNA, Hazel J.** *Professor*
**MGONJA, Thomas** *Associate Professor*
**MOULTON, Benjamin** *Professor*
**PORTER, Evelyn** *Associate Professor*
**SONG, Jae** *Associate Professor*
**WARD, Debra D.** *Assistant Professor*
**WHITE, Keith Alan** *Professor*
**WIBERG, Darren** *Associate Professor*

## Course Descriptions

Mathematics Developmental..... 696

# Digital Media

## Digital Media

The Digital Media department is in the College of Engineering & Technology. To find the most up-to-date information from the Digital Media department, visit their website.

Digital Media department

**DEPARTMENT CHAIR**

**BROWN, Kim** *Associate Professor*

**DEPARTMENT CO-CHAIR**

**HARPER, Michael F.** *Associate Professor*

**FACULTY**

**ANDERSEN, Duane** *Associate Professor*
**ANDERSON, Thor** *Associate Professor*
**BROWN, Kim** *Associate Professor*
**CARD, Arlen** *Associate Professor*
**CHENEY, Paul** *Associate Professor*
**CHRISTENSEN, Seth** *Assistant Professor*
**CLAYTON, Marty J.** *Associate Professor*
**ESMAY, Rodayne** *Professor*
**HARPER, Michael F.** *Associate Professor*
**HATCH, Daniel** *Assistant Professor*
**HEDRICK, Emily** *Assistant Professor*
**LANTZ, Clayton** *Assistant Professor*
**MACKENZIE, Jenny** *Assistant Professor*
**NIBLEY, Alex** *Professional In Residence*
**OTTO, Bill** *Assistant Professor*
**PETERSON, Owen** *Assistant Professor*
**ROMRELL, Anthony** *Associate Professor*
**WISLAND, Michael G.** *Associate Professor*

# Course Descriptions

Digital Media..... 567

# Degrees & Programs

## Digital Audio, A.A.S.

### *Requirements*

The UVU AAS in Digital Audio is a powerful gateway into the fascinating world of album recording and mixing, location and post-production sound for film and video, audio restoration and forensics, live sound, radio production, gaming, and audio hardware and software design. Students will use industry-leading equipment including SSL, Audient, AVID ProTools, Universal Audio, Neumann, Waves, Tube Tech, AKG, and many others. By graduation, each student will have produced and engineered numerous music, ADR, Foley, and sound effects sessions, including professional-level mixes; will have their choice of many other areas of audio expertise; and will be professional employment-ready.

**Total Program Credits: 64**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 28 Credits |
| | DGM 1110 | Digital Media Essentials I | 4 |
| | MUSC 1100 | Fundamentals of Music | 3 |
| | PHYS 1700 | Descriptive Acoustics | 3 |
| | DGM 2130 | Digital Audio Essentials | 3 |
| | DGM 2410 | Core Recording Principles | 3 |
| | DGM 2430 | Core Mixing Principles | 3 |
| | DGM 2440 | Sound for Film and Television | 3 |
| | DGM 2460 | Radio Production | 3 |
| | DGM 2481 | Digital Audio Restoration | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 64 semester credits.
2. Residency hours--minimum of 20 credit hours through course attendance at UVU..
3. Students must have a minimum AGGREGATE GPA of 2.0 (C letter grade) or higher (including core, electives, and GE)
4. Students must have an individual GPA in EACH CORE COURSE in the Audio AAS program of 2.5 (B minus) or higher.

## Digital Cinema Production, A.A.S.

### *Requirements*

Digital cinema is the design, development, and delivery of digital cinema content through the process of pre-production, production, and post-production. The curriculum integrates digital cinema mediums to entertain, educate, and communicate ideas and information. This program provides motivated and dedicated students the opportunity to work with professionally active faculty members committed to the future of digital disciplines. The Associate of Applied Science in Digital Cinema

will provide students with employable skills and a pathway to further education.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 24 Credits |
| ENGLISH | | | 6 |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research (3) | |
| | ENGL 1010 | Introduction to Academic Writing (3) | |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | PHIL 2050 | Ethics and Values (3) | |
| Distribution Courses | | | |
| HUMANITIES/FINE ARTS | | | |
| | Any approved Humanities/Fine Arts Distribution[1] | | 3 |
| SOCIAL/BEHAVIORAL SCIENCE | | | |
| | Any approved Social/Behavioral Science Distribution[2] | | 3 |
| BIOLOGY/PHYSICAL SCIENCE | | | |
| | Any approved Biology/Physical Science Distribution | | 3 |
| Discipline Core Requirements: | | | 37 Credits |
| | DGM 1061 | Digital Cinema Editing I | 3 |
| | DGM 1500 | Intro to Digital Cinema | 1 |
| | DGM 1510 | Film Production Analysis | 3 |
| | DGM 1520 | Digital Cinema Production I | 3 |
| | DGM 2110 | Digital Cinema Production II | 3 |
| | DGM 2130 | Digital Audio Essentials | 3 |
| | CINE 2312 | Film History II | 3 |
| | DGM 2320 | Digital Photography and Compositing I | 3 |
| | DGM 2440 | Sound for Film and Television | 3 |
| | DGM 2540 | Cinematography I | 3 |
| | DGM 2570 | Storytelling for Digital Media I | 3 |
| or | THEA 2742 | Scriptwriting for the Screen WE (3) | |
| | DGM 2661 | Visualization for Digital Cinema-Pre-Directing | 3 |
| Complete one of the following | | | 3 |
| | DGM 2340 | Output and Color for Digital Cinema I (3) | |
| | DGM 2490 | Digital Audio Workstation Training I (3) | |
| | DGM 2510 | Visual Effects for Digital Cinema I (3) | |
| | DGM 2545 | Virtual Reality for Digital Cinema Storytelling (3) | |
| | THEA 1033 | Acting I (3) | |
| Elective Requirements: | | | 5 Credits |
| | Complete 5 credits of department or advisor approved lower division coursework | | 5 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Residency hours--minimum of 20 credit hours through course attendance at UVU.
3. Completion of GE and specified departmental requirements.

| Footnote: |
|---|
| 1- THEA 2311 recommemded |
| 2 - MGMT 1010 recommended |

## Digital Communication Technology, A.A.S.

### *Requirements*

Digital Media (DGM) fuses both fundamental theory and practical application in the production of electronically-generated content to be delivered via internet, radio and television, digital cinema, computer games, animation and cinematic visual effects, as well as for emerging technologies such as mobile computing (hand-held computing devices). The curriculum integrates these digital mediums to entertain, educate, and communicate ideas through meaningful human interaction. DGM provides motivated and dedicated students the opportunity to work closely with professionally active faculty members committed to the future of the digital disciplines. Students in Digital Media may earn either a Certificate of Proficiency in Digital Cinema, Associate in Applied Science Degree, or a Bachelor of Science Degree. Areas of emphasis include: Digital Communication Technology, Audio Production, Digital Motion Picture Production, Gaming and Animation, Internet Technologies.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 17 Credits |
| ENGLISH | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| MATHEMATICS | | | |
| | MAT 1010 | Intermediate Algebra | 4 |
| HUMANITIES/FINE ARTS/FOREIGN LANGUAGE | | | |
| Choose one of the following: | | | 3 |
| | PHIL 2050 | Ethics and Values (3) | |

| | | | |
|---|---|---|---|
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | |
| SOCIAL AND BEHAVIORAL SCIENCE | | | |
| | Any approved Behavioral Science, Social or Political Science Distribution Course | | 3 |
| BIOLOGY OR PHYSICAL SCIENCE | | | |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT | | | |
| Choose one of the following: | | | 1 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| | Any approved PE, Safety or Health Distribution Course | | |
| Discipline Core Requirements: | | | 16 Credits |
| Complete the following: | | | |
| | DGM 1110 | Digital Media Essentials I | 4 |
| | DGM 1520 | Digital Cinema Production I | 3 |
| | DGM 1660 | Introduction to 3D Modeling and Surfacing | 3 |
| | DGM 2120 | Web Essentials | 3 |
| | DGM 2130 | Digital Audio Essentials | 3 |
| Elective Requirements: | | | 30 Credits |
| | Complete 30 credits from approved DGM electives (see advisor) | | 30 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Web Design and Development, A.A.S.

### *Requirements*

Web design and development fuses together the design, development, and delivery of rich media content through the medium of the internet to hand held mobile devices as well as desktop computers. The curriculum integrates these digital mediums to entertain, educate, and communicate ideas and information through meaningful human interaction. This program provides motivated and dedicated students the opportunity to work with professionally active faculty members committed to the future of digital disciplines. The Associate of Applied Science in Web Design and Development will provide students with employable skills and a pathway to further education.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements | | | 17 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Biology or Physical Science (See Wolverine Track for options) | | | 3 |
| Humanities or Fine Arts (See Wolverine Track for Options) | | | 3 |
| Social/Behavioral Science (See Wolverine Track for options) | | | 3 |
| Discipline Core Requirements | | | 46 Credits |
| | DGM 1220 | Digital Design Essentials | 3 |
| | DGM 1230 | Interaction Design Essentials | 3 |
| | DGM 1240 | Communicating Digital Design WE | 3 |
| | DGM 1600 | Scripting for Internet Technologies | 3 |
| | DGM 2120 | Web Essentials | 3 |
| | DGM 2240 | Interaction Design | 3 |
| | DGM 2250 | Principles of Digital Design | 3 |
| | DGM 2341 | Media Formats and Outputs | 3 |
| | DGM 221R | Interaction Design Practicum | 1 |
| | Complete 21 credits of DGM Electives | | 21 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Residency hours--minimum of 20 credit hours through course attendance at UVU.
3. Overall grade point average of 2.0 (C) or above.
4. Completion of GE and specified departmental requirements.

## Digital Cinema, Certificate of Proficiency

### *Requirements*

Digital Media (DGM) fuses both fundamental theory and practical application in the production of electronically-generated content to be delivered via internet, radio and television, digital cinema, computer games, animation and cinematic visual effects, as well as for emerging technologies such as mobile computing (hand-held computing devices). The curriculum integrates these digital mediums to entertain, educate, and communicate ideas through meaningful human interaction. DGM provides motivated and dedicated students the opportunity to work closely with professionally active faculty members committed to the future of the digital disciplines. Students in Digital Media may earn either a Certificate of Proficiency in Digital Cinema, Associate in Applied Science Degree, or a Bachelor of Science Degree. Areas of emphasis include: Digital Communication Technology, Audio Production, Digital Motion Picture Production, Gaming and Animation, Internet Technologies.

**Total Program Credits: 15**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 15 Credits |
| | DGM 1061 | Digital Cinema Editing I | 3 |
| | DGM 1510 | Film Production Analysis | 3 |
| | DGM 1520 | Digital Cinema Production I | 3 |
| | DGM 2540 | Cinematography I | 3 |
| | DGM 2661 | Visualization for Digital Cinema-Pre-Directing | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 15 credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 4 credit hours through course attendance at UVU.

## Digital Media, Certificate of Proficiency

### *Requirements*

This certificate is designed to provide high school students an opportunity to obtain a certificate of proficiency while still enrolled in high school, which not only gives initial employability skills, but also stacks into associate degrees at UVU.

**Total Program Credits: 16**

| | | | |
|---|---|---|---|
| General Education Requirements | | | 6 Credits |
| | ENGL 1010 | Introduction to Academic Writing (Course must be completed with grade 'C' or higher. ) | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| Complete one of the following: (Course must be completed with grade 'C' or higher. ) | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Discipline Core Requirements: | | | 10 Credits |
| | DGM 1110 | Digital Media Essentials I | 4 |
| Choose one set of two courses from the following: | | | 6 |
| Animation and Games | | | |
| | DGM 1610 | Scripting for Animation and Games I (3) | |
| | DGM 1620 | Survey of Animation (3.0) | |
| Digital Cinema | | | |
| | DGM 1061 | Digital Cinema Editing I (3.0) | |
| | DGM 1520 | Digital Cinema Production I (3) | |
| Digital Audio | | | |
| | DGM 2130 | Digital Audio Essentials (3.0) | |
| | DGM 2460 | Radio Production (3.0) | |
| Web Development | | | |
| | DGM 1600 | Scripting for Internet Technologies (3.0) | |
| | DGM 2120 | Web Essentials (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 16 semester credits.
2. Overall grade point average of 2.5 or above.
3. All DGM courses must be completed with grade 'C' or higher.
4. Residency hours-- minimum of 5 credit hours through course attendance at UVU.

## Digital Media, Minor

### *Requirements*

Digital Media (DGM) fuses both fundamental theory and practical application in the production of electronically-generated content to be delivered via internet, radio and television, digital cinema, computer games, animation and cinematic visual effects, as well as for emerging technologies such as mobile computing (hand-held computing devices). The curriculum integrates these digital mediums to entertain, educate, and communicate ideas through meaningful human interaction. DGM provides motivated and dedicated students the opportunity to work closely with professionally active faculty members committed to the future of the digital disciplines. Students in Digital Media may earn either a Certificate of Proficiency in Digital Cinema, Associate in Applied Science Degree, or a Bachelor of Science Degree. Areas of emphasis include: Digital Communication Technology, Audio Production, Digital Motion Picture Production, Gaming and Animation, Internet Technologies.

**Total Program Credits: 22**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 7 Credits |
| | DGM 1110 | Digital Media Essentials I | 4 |
| Complete one course from the following: | | | 3 |
| | DGM 1520 | Digital Cinema Production I (3) | |
| | DGM 2120 | Web Essentials (3.0) | |
| | DGM 2130 | Digital Audio Essentials (3.0) | |
| | DGM 2210 | 3D Modeling and Animation Essentials (4) | |
| Elective Requirements: | | | 15 Credits |
| | Complete 15 credits from 1000 and 2000 level DGM courses. | | 15 |

**Graduation Requirements:**

1. Overall grade point average of 2.5 GPA in all discipline core and elective courses with no grade lower than a C-.
2. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

# Animation and Game Development, B.S.

## *Requirements*

The BS in Animation and Game Development focuses on contemporary, industry-standard, and technology oriented processes and procedures.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution[1] | | 3 |
| | Fine Arts Distribution[2] | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 78 Credits |
| | DGM 1110 | Digital Media Essentials I | 4 |
| | DGM 1610 | Scripting for Animation and Games I | 3 |
| | DGM 1620 | Survey of Animation | 3 |
| | DGM 1660 | Introduction to 3D Modeling and Surfacing | 3 |
| | DGM 2210 | 3D Modeling and Animation Essentials | 4 |
| | DGM 2211 | Rigging and Animation Essentials | 3 |
| | DGM 2221 | Game Essentials | 3 |
| | DGM 2610 | Game Design I | 3 |
| | DGM 2620 | Principles of Animation I | 3 |
| | DGM 2640 | Character Development | 3 |
| | DGM 2660 | Digital Storyboarding for Animation | 3 |
| | DGM 2670 | Scripting for Animation and Games II | 3 |
| | DGM 301R | Digital Lecture Series | 1 |
| | DGM 3110 | Corporate Issues in Digital Media WE | 3 |
| | DGM 312G | Digital Media for Intercultural Communication | 3 |
| | DGM 3220 | Digital Media Project Management | 3 |
| | DGM 3571 | Animation Story Development Workshop | 3 |
| | DGM 3620 | Technical Direction and Design for Animated Applications | 3 |
| | DGM 3650 | Animation and Game Project I | 3 |
| | DGM 3660 | Advanced Rigging and Character Effects | 3 |
| | DGM 3670 | Scripting for Animation and Games III | 3 |
| | DGM 3680 | Animation and Game Project II | 3 |
| | DGM 4310 | Senior Capstone I | 3 |
| | DGM 4410 | Senior Capstone II | 3 |
| | DGM 4630 | Technical Direction for Animation and Game Development I | 3 |
| | DGM 4640 | Technical Direction for Animation and Game Development II | 3 |
| Elective Requirements: | | | 7 Credits |
| Take 7 credits from the following: | | | 7 |
| | ART 1210 | Spatial Drawing (3) | |
| | ART 2250 | Gestural Drawing (3) | |
| | CS 1410 | Object-Oriented Programming (3) | |
| | DGM 2600 | The Animated Image (3) | |
| | DGM 281R | Internship (1) | |
| | DGM 3610 | Game Design II (3) | |
| | DGM 3641 | Game Level Design (3) | |
| | DGM 4621 | Performance Animation (3) | |
| | DGM 481R | Internship (1) | |
| | THEA 1033 | Acting I (3) | |
| | Or advisor approved electives | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. A minimum of 2.5 GPA in all discipline core courses with no grade lower than a C- required for graduation. To qualify for the portfolio review, DGM courses must be completed with a grade of B- or higher.

3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements, which includes a portfolio review and acceptance into the degree.
5. Successful completion of at least one Global/Intercultural course.

| Footnotes: |
|---|
| 1-ENGL 220G Introduction to Literature or ENGL 2130 Science Fiction recommended |
| 2-THEA 1023 Introduction to Film recommended |

## Digital Audio, B.S.

### *Requirements*

The BS in Digital Audio allows students to study, without distraction, the physics and mathematics of audio engineering, basic audio-related electronics, recording tools and techniques, mixing tools and techniques, mastering tools and techniques, radio production, room acoustics and design, production sound for film and television, post-production sound, audio restoration (archival, historical, and forensic), and the business and marketing practices of the audio industry.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts [1] | | 3 |
| | Social/Behavioral Science[2] | | 3 |
| Discipline Core Requirements: | | | 71 Credits |
| | DGM 1110 | Digital Media Essentials I | 4 |
| | MUSC 1100 | Fundamentals of Music | 3 |
| | PHYS 1700 | Descriptive Acoustics | 3 |
| | DGM 2130 | Digital Audio Essentials | 3 |
| | DGM 2140 | Electronics for Media | 3 |
| | DGM 2440 | Sound for Film and Television | 3 |
| | DGM 2460 | Radio Production | 3 |
| | DGM 2481 | Digital Audio Restoration | 3 |
| | DGM 2410 | Core Recording Principles | 3 |
| | DGM 2430 | Core Mixing Principles | 3 |
| | DGM 2490 | Digital Audio Workstation Training I | 3 |
| | DGM 2491 | Digital Audio Workstation Training II | 3 |
| | DGM 3110 | Corporate Issues in Digital Media WE | 3 |
| | DGM 312G | Digital Media for Intercultural Communication | 3 |
| | COMP 301R | Digital Lecture Series | 1 |
| | DGM 3220 | Digital Media Project Management | 3 |
| | DGM 3410 | Audio Engineering for the Studio I | 3 |
| | DGM 3460 | Live Sound Reinforcement | 3 |
| | DGM 3420 | Studio Recording II | 3 |
| | DGM 3440 | Sound for Games | 3 |
| | DGM 4000 | Writing for Digital Media | 3 |
| | DGM 4310 | Senior Capstone I | 3 |
| | DGM 4410 | Senior Capstone II | 3 |
| | DGM 4430 | Audio Mastering | 3 |
| Elective Requirements: | | | 13 Credits |
| Take 13 credits from the following including 6 upper division credits. | | | 13 |
| | MUSC 1010 | Introduction to Music (3.0) | |
| | MUSC 1110 | Music Theory I (3.0) | |
| | MUSC 1120 | Music Theory II (3.0) | |
| | DGM 2120 | Web Essentials (3.0) | |
| | DGM 2210 | 3D Modeling and Animation Essentials (4.0) | |
| | DGM 2240 | Interaction Design (3.0) | |
| | DGM 240R | Special Topics in Digital Audio (1.0) | |
| | DGM 281R | Internship (1) | |
| | DGM 340R | Advanced Topics in Digital Audio (1.0) | |
| | DGM 3430 | Recording Studio Design Principles and Practices (3.0) | |
| | DGM 3481 | Advanced Audio Restoration and Forensics (3.0) | |
| | DGM 3490 | Digital Audio Workstation Training III (3) | |
| | DGM 3491 | Digital Audio Workstation Training IV (3) | |
| | DGM 350R | Advanced Topics in Digital Motion Picture Production (1.0) | |
| | DGM 481R | Internship (1) | |
| | Or other advisor approved electives | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. A minimum of 2.5 GPA in all discipline core courses with no grade lower than a C- required for graduation. To qualify for the portfolio review, DGM courses must be completed with a grade of B- or higher.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements, which includes a portfolio review and acceptance into the degree.
5. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| 1 MUSC 1010 Introduction to Music recommended. |
| 2 MGMT 1010 Introduction to Business recommended |

## Digital Cinema Production, B.S.

### *Requirements*

The BS degrees in Digital Cinema Production trains students in the development, production, and post-production process of filmed media content for a variety of platforms. Using a hands-on, practical approach, students learn the tools, equipment, technologies, software, and protocols that are used on sets and post-production facilities, large and small, throughout the world. The curriculum focuses on creating character driven stories and how to use emerging digital technologies to enhance storytelling. Advanced students can choose to focus their study on different skill-sets within the digital cinema production process including, but not limited to, directing for digital cinema, writing for digital cinema, cinematography, production, post-production, documentary, and sports broadcasting.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution [1] | | 3 |
| | Social/Behavioral Science [2] | | 3 |
| Discipline Core Requirements: | | | 80 Credits |
| | DGM 1061 | Digital Cinema Editing I | 3 |
| | DGM 1500 | Intro to Digital Cinema | 1 |
| | DGM 1510 | Film Production Analysis | 3 |
| | DGM 1520 | Digital Cinema Production I | 3 |
| | CINE 217G | Race Class and Gender in U S Cinema | 3 |
| or | DGM 312G | Digital Media for Intercultural Communication (3) | |
| or | RUS 367G | History of Russian Film (3) | |
| or | RUS 416G | Post Soviet Russian Media and Film (3) | |
| | DGM 2110 | Digital Cinema Production II | 3 |
| | DGM 2130 | Digital Audio Essentials | 3 |
| | CINE 2312 | Film History II | 3 |
| | DGM 2320 | Digital Photography and Compositing I | 3 |
| | DGM 2440 | Sound for Film and Television | 3 |
| | DGM 2540 | Cinematography I | 3 |
| | DGM 2570 | Storytelling for Digital Media I | 3 |
| or | THEA 2742 | Scriptwriting for the Screen (3) | |
| | DGM 2661 | Visualization for Digital Cinema-Pre-Directing | 3 |
| | DGM 302R | Digital Cinema Production Lecture Series-CineSkype | 1 |
| | DGM 3530 | Digital Cinema Production Management | 3 |
| | DGM 3540 | Cinematography II | 3 |
| | DGM 3550 | Producing I | 3 |
| | DGM 3560 | Digital Cinema Editing II | 3 |
| | DGM 3570 | Storytelling for Digital Media II | 3 |
| | DGM 3580 | Digital Cinema Directing Workshop I | 3 |
| | DGM 4310 | Senior Capstone I | 3 |
| | DGM 4410 | Senior Capstone II | 3 |
| Complete at least 18 upper-division credits from the following Recommended Tracks. | | | 18 |
| Recommended Tracks | | | |
| POST-PRODUCTION | | | |

| | | | |
|---|---|---|---|
| | Following this track students must complete three additional upper-division elective credits. | | |
| | DGM 2340 | Output and Color for Digital Cinema I (3) | |
| | DGM 2510 | Visual Effects for Digital Cinema I (3) | |
| or | DGM 2545 | Virtual Reality for Digital Cinema Storytelling (3) | |
| or | DGM 2490 | Digital Audio Workstation Training I (3) | |
| | DGM 3061 | Professional NLE Certification (3) | |
| | DGM 4510 | Visual Effects for Digital Cinema II (3) | |
| or | DGM 3545 | Advanced Editing for Mixed Reality Content (3) | |
| or | DGM 2491 | Digital Audio Workstation Training II (3) | |
| | DGM 456R | Digital Cinema Editing III (3) | |
| | DGM 4560 | Output and Color for Digital Cinema II (3) | |
| PRODUCTION | | | |
| | ACC 3000 | Financial Managerial and Cost Accounting Concepts (3) | |
| | DGM 3520 | Digital Cinema Production III (3) | |
| | DGM 450R | Story Editing for Digital Media (3) | |
| | DGM 4550 | Producing II (3) | |
| or | THEA 3625 | Development and Fundraising for the Arts (3) | |
| | FIN 3100 | Principles of Finance (3) | |
| PRODUCTION (Pre-MBA Track) | | | |
| Complete an additional 5 credits from the above Recommended Tracks or from the list below. | | | |
| | ACC 3000 | Financial Managerial and Cost Accounting Concepts (3) | |
| | DGM 3520 | Digital Cinema Production III (3) | |
| | DGM 450R | Story Editing for Digital Media (3) | |
| | DGM 4550 | Producing II (3) | |
| | FIN 3100 | Principles of Finance (3) | |
| | IM 2010 | Business Computer Proficiency (3) | |
| or | IM 2600 | Spreadsheet Applications (3) | |
| | MGMT 2340 | Business Statistics I (3) | |
| CINEMATOGRAPHY | | | |
| Following this track students must complete three additional upper-division elective credits. | | | |
| | DGM 2340 | Output and Color for Digital Cinema I (3) | |
| | DGM 2545 | Virtual Reality for Digital Cinema Storytelling (3) | |
| or | ART 1790 | Dark Room Techniques (3) | |
| | DGM 3320 | Digital Photography and Compositing II (3) | |
| | DGM 4530 | Special Topics-Cinematography Masterworks (3) | |
| | DGM 454R | Cinematography III (3) | |
| | DGM 4560 | Output and Color for Digital Cinema II (3) | |
| DIRECTING FOR DIGITAL CINEMA | | | |
| | DGM 3520 | Digital Cinema Production III (3) | |
| | DGM 450R | Story Editing for Digital Media (3) | |
| | DGM 4511 | Film Production Analysis II (3) | |
| | DGM 458R | Digital Cinema Directing Workshop II (3) | |
| | THEA 3113 | Acting for Film (3) | |
| | THEA 3614 | Directing Actors for the Screen (3) | |
| WRITING FOR DIGITAL CINEMA | | | |
| | DGM 3520 | Digital Cinema Production III (3) | |
| | DGM 450R | Story Editing for Digital Media (3) | |
| | DGM 4511 | Film Production Analysis II (3) | |
| | DGM 457R | Storytelling for Digital Media III (3) | |
| | THEA 3741 | Script Writing II (3) | |
| | THEA 4741 | Scriptwriting III (3) | |
| or | THEA 3241 | Storytelling (3) | |
| SPORTS BROADCASTING PRODUCTION | | | |
| | DGM 2340 | Output and Color for Digital Cinema I (3) | |
| | DGM 351R | Digital Broadcasting (3) (Take for up to three semesters, equalling nine credits) | |
| | DGM 4560 | Output and Color for Digital Cinema II (3) | |
| | DGM 454R | Cinematography III (3) | |
| or | DGM 3590 | Documentary I (3) | |
| DOCUMENTARY | | | |
| | DGM 2545 | Virtual Reality for Digital Cinema Storytelling (3) | |
| | DGM 3590 | Documentary I (3) | |
| | CINE 418R | Sundance Documentary Film (3) | |
| or | THEA 3110 | Non Fiction Cinema History (3) | |
| | DGM 450R | Story Editing for Digital Media (3) | |
| | DGM 456R | Digital Cinema Editing III (3) | |
| or | DGM 454R | Cinematography III (3) | |
| | DGM 459R | Documentary II (3) | |
| Elective Requirements: | | | 5 |
| Complete an additional 5 credits from the above Recommended Tracks or from the list below. | | | |
| | ACC 2010 | Managerial Accounting (3) | |
| | ACC 2020 | Managerial Accounting (3) | |
| | ART 1050 | Photography I (3) | |
| | ART 1790 | Dark Room Techniques (3) | |
| | ART 1820 | Interior Space Design (3) | |
| | ART 1830 | Residential Interior Design (3) | |
| | ART 2700 | Photography II (3) | |
| | ART 2720 | Color Photography (3) | |

| | | | |
|---|---|---|---|
| | ART 3740 | Fine Art Photography WE (3) | |
| | ARTH 2710 | History of Art to the Renaissance (3) | |
| or | ARTH 271H | History of Art to the Renaissance (3) | |
| | ARTH 2720 | History of Art from the Renaissance (3) | |
| or | ARTH 272H | History of Art from the Renaissance (3) | |
| | ARTH 3200 | The History of Photography (3) | |
| | CINE 2150 | Critical Introduction to Cinema Studies (3) | |
| | CINE 312R | National Cinema History (3) | |
| | DGM 1110 | Digital Media Essentials I (4) | |
| | DGM 281R | Internship (1) | |
| | DGM 3110 | Corporate Issues in Digital Media WE (3) | |
| | DGM 3260 | Immersive Experiences II (3) | |
| | DGM 3261 | Mixed Reality Experiences II (3) | |
| | DGM 340R | Advanced Topics in Digital Audio (1) | |
| | DGM 3490 | Digital Audio Workstation Training III (3) | |
| | DGM 3491 | Digital Audio Workstation Training IV (3) | |
| | DGM 4261 | Mixed Reality Studio (3) | |
| | DGM 481R | Internship (1) | |
| | THEA 1033 | Acting I (3) | |
| | THEA 1223 | Makeup I (3) | |
| | THEA 1513 | Stagecraft I (2) | |
| | THEA 1514 | Stagecraft I Lab (1) | |
| | THEA 2203 | Costume Construction I (3) | |
| | THEA 2204 | Costume Construction I Lab (1) | |
| | THEA 2513 | Introduction to Design for Stage and Screen (3) | |
| | THEA 2514 | Introduction to Design for Stage and Screen Lab (1) | |
| | THEA 2517 | Visual Concepts in Theatre (3) | |
| | THEA 2541 | Costume History (3) | |
| | THEA 2574 | Drafting for Theatre Design (3) | |
| | THEA 314G | Global Cinema History GI (3) | |
| | THEA 3223 | Makeup II (3) | |
| | THEA 3241 | Storytelling (3) | |
| | THEA 3516 | Art Direction for Film (3) | |
| | THEA 3541 | Costume Design I (3) | |
| | THEA 3543 | Costume Design II (3 | |
| | THEA 3571 | Scenic Design I (3) | |
| | THEA 3572 | Scenic Design II (3) | |
| | THEA 3573 | Scenic Painting (3) | |
| | THEA 3612 | Directing Actors for the Stage (3) | |
| | THEA 3625 | Development and Fundraising for the Arts (3) | |
| | THEA 374R | New Script Workshop (3) | |
| | THEA 416R | Special Topics in Film Studies (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. A minimum of 2.5 GPA in all discipline core courses with no grade lower than a C- required for graduation. To qualify for the portfolio review, DGM courses must be completed with a grade of B- or higher.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements, which includes a portfolio review and acceptance into the degree.
5. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| 1-THEA 2311 recommemded |
| 2 - MGMT 1010 recommended |

## Web Design and Development - Interaction and Design Emphasis, B.S.

### *Requirements*

The BS in Web Design and Development allows students to study app development for mobile devices, web design, and development for mobile friendly websites, digital magazine publishing, and user experience design. In order to be successful in these areas, students need skills in design and content creation.

**Total Program Credits: 120**

| General Education Requirements: | | | 35 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |

| | | | |
|---|---|---|---|
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 44 Credits |
| | DGM 1220 | Digital Design Essentials | 3 |
| | DGM 1230 | Interaction Design Essentials | 3 |
| | DGM 1240 | Communicating Digital Design WE | 3 |
| | DGM 1600 | Scripting for Internet Technologies | 3 |
| | DGM 2120 | Web Essentials | 3 |
| | DGM 221R | Interaction Design Practicum | 1 |
| | DGM 2240 | Interaction Design | 3 |
| | DGM 2250 | Principles of Digital Design | 3 |
| | DGM 2341 | Media Formats and Outputs | 3 |
| | DGM 301R | Digital Lecture Series | 1 |
| | DGM 312G | Digital Media for Intercultural Communication | 3 |
| | DGM 3110 | Corporate Issues in Digital Media WE | 3 |
| | DGM 3220 | Digital Media Project Management | 3 |
| | DGM 3750 | Media Analytics | 3 |
| | DGM 490R | Senior Capstone | 3 |
| Emphasis Requirements: | | | 6 Credits |
| Interaction and Design Requirements | | | |
| | DGM 3240 | Interaction Design Colloquium | 3 |
| | DGM 3260 | Immersive Experiences II | 3 |
| | DGM 3271 | Digital Product Design Studio | 3 |
| | DGM 481R | Internship | 1 |
| Emphasis Elective Requirements: | | | 31 Credits |
| Complete 31 credits from one of the following two tracks | | | 31 |
| Interaction and Design Requirements | | | |
| | ART 1410 | Typography I (3) | |
| | DGM 221R | Interaction Design Practicum (1) | |
| | DGM 2260 | Immersive Experiences I (3) | |
| | DGM 2270 | Digital Product Experiences I (3) | |
| | DGM 2280 | Interactive Media Production (3) | |
| | DGM 2320 | Digital Photography and Compositing I (3) | |
| | DGM 281R | Internship (1) | |
| | DGM 320R | Advanced Topics in Digital Media Design (1) | |
| | DGM 321R | Advanced Interaction Design Practicum (1) | |
| | DGM 3270 | Digital Product Experiences II (3) | |
| | DGM 3280 | Adaptive Media Experiences (3) | |
| | DGM 3320 | Digital Photography and Compositing II (3) | |
| | DGM 4280 | Interactive Media Strategies (3) | |
| | DGM 4290 | Designing Voice Experiences (3) | |
| | DGM 4620 | Producing Technology-based Training (3) | |
| Mixed Reality Track Recommended Electives | | | |
| | DGM 1110 | Digital Media Essentials I (4) | |
| | DGM 1645 | Mixed Reality Essentials (3) | |
| | DGM 2245 | Mixed Reality Experiences I (3) | |
| | DGM 2545 | Virtual Reality for Digital Cinema Storytelling (3) | |
| | DGM 2760 | Web Languages I (3) | |
| | DGM 3261 | Mixed Reality Experiences II (3) | |
| | DGM 4261 | Mixed Reality Studio (3) | |
| | DGM 3545 | Advanced Editing for Mixed Reality Content (3) | |
| | DGM 3320 | Digital Photography and Compositing II (3) (This has a prerequisite of DGM 2320) | |
| | DGM 3270 | Digital Product Experiences II (3) | |
| | DGM 3280 | Adaptive Media Experiences (3) | |
| | DGM 320R | Advanced Topics in Digital Media Design (1) | |
| | DGM 321R | Advanced Interaction Design Practicum (1) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. A minimum of 2.5 GPA in all discipline core courses with no grade lower than a C- required for graduation. To qualify for the portfolio review, DGM courses must be completed with a grade of B- or higher.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements, which includes a portfolio review and acceptance into the degree.
5. Successful completion of at least one Global/Intercultural course.

## Web Design and Development - Web and App Development Emphasis, B.S.

### *Requirements*

The BS in Web Design and Development allows students to study app development for mobile devices, web design, and development for mobile friendly websites, digital magazine publishing, and user experience design. In order to be successful in these areas, students need skills in design and content creation.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |

| | | | |
|---|---|---|---|
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 44 Credits |
| | DGM 1220 | Digital Design Essentials | 3 |
| | DGM 1230 | Interaction Design Essentials | 3 |
| | DGM 1240 | Communicating Digital Design WE | 3 |
| | DGM 1600 | Scripting for Internet Technologies | 3 |
| | DGM 2120 | Web Essentials | 3 |
| | DGM 221R | Interaction Design Practicum | 1 |
| | DGM 2240 | Interaction Design | 3 |
| | DGM 2250 | Principles of Digital Design | 3 |
| | DGM 2341 | Media Formats and Outputs | 3 |
| | DGM 301R | Digital Lecture Series | 1 |
| | DGM 312G | Digital Media for Intercultural Communication | 3 |
| | DGM 3110 | Corporate Issues in Digital Media WE | 3 |
| | DGM 3220 | Digital Media Project Management | 3 |
| | DGM 3750 | Media Analytics | 3 |
| | DGM 490R | Senior Capstone | 6 |
| Emphasis Requirements: | | | 41 Credits |
| | DGM 2740 | Principles of Web Languages | 3 |
| | DGM 2760 | Web Languages I | 3 |
| | DGM 2780 | Web Tools and Frameworks I | 3 |
| | DGM 3740 | Web Content Management | 3 |
| | DGM 3760 | Web Languages II | 3 |
| | DGM 3780 | Web Tools and Frameworks II | 3 |
| | DGM 3790 | Rich Internet Application Development I | 3 |
| | DGM 4790 | Rich Internet Application Development II | 3 |
| | DGM 481R | Internship (1.0) | 1 |
| Emphasis Elective Requirements: | | | 16 Credits |
| Complete 16 credits from the following: | | | 16 |
| | DGM 2260 | Immersive Experiences I (3) | |
| | DGM 2270 | Digital Product Experiences I (3) | |
| | CS 1400 | Fundamentals of Programming (3) | |
| or | INFO 1200 | Computer Programming I for IS/IT (3) | |
| | CS 1410 | Object-Oriented Programming (3) | |
| or | INFO 2200 | Computer Programming II for IS/IT (3) | |
| | CS 2420 | Introduction to Algorithms and Data Structures (3) | |
| | DGM 281R | Internship (1.0) | |
| | DGM 3261 | Mixed Reality Experiences II (3) | |
| | DGM 3280 | Adaptive Media Experiences (3) | |
| | DGM 4280 | Interactive Media Strategies(3) | |
| | DGM 4290 | Designing Voice Experiences (3) | |
| | DGM 481R | Internship (1.0) | |
| | Or other advisor approved electives | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. A minimum of 2.5 GPA in all discipline core courses with no grade lower than a C- required for graduation. To qualify for the portfolio review, DGM courses must be completed with a grade of B- or higher.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements, which includes a portfolio review and acceptance into the degree.
5. Successful completion of at least one Global/Intercultural course.

# Earth Science

## Earth Science

The Earth Science department is in the College of Science. To find the most up-to-date information from the Earth Science department, visit their website.

Earth Science

**DEPARTMENT CHAIR**

**TOKE, Nathan** *Associate Professor*

**FACULTY**

**BRADFORD, Joel A.** *Associate Professor*
**BUNDS, Michael P.** *Professor*
**CADET, Eddy L.** *Associate Professor*
**CALLISON, James** *Associate Professor*
**CZAJKA, Charles Doug** *Assistant Professor*
**HUNGERFORD, Hilary B.** *Assistant Professor*
**NELSON, Daren T.** *Assistant Professor*
**STEARNS, Michael** *Assistant Professor*
**STEPHEN, Daniel A.** *Associate Professor*
**TOKE, Nathan** *Associate Professor*
**WANG, Weihong** *Associate Professor*
**ZANAZZI, Alessandro** *Associate Professor*

## Course Descriptions


Environmental Management....619
Geology....651
Geography....648
Meteorology....702


## Degrees & Programs

### Physical Science, A.S.

#### *Requirements*

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 37 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values (3.0) | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses | | | |
| Biology | | | 3 |
| Physical Science: Complete one of the following pair of courses | | | 7 |
| | PHYS 2210 | Physics for Scientists and Engineers I (4.0) | |
| | PHYS 2220 | Physics for Scientists and Engineers II (4.0) | |
| or | CHEM 1210 | Principles of Chemistry I (4.0) | |
| | CHEM 1220 | Principles of Chemistry II (4.0) | |
| or | GEO 1010 | Introduction to Geology (3.0) | |
| | CHEM 1210 | Principles of Chemistry I (4.0) | |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 11 Credits |
| Complete one of the following | | | 11 |
| Recommended for students most interested in physics: | | | |
| | MATH 1210 | Calculus I (5.0) | |
| | MATH 1220 | Calculus II (5.0) | |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab (1.0) | |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab (1.0) | |
| Recommended for students most interested in chemistry: | | | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (1.0) | |
| | CHEM 1225 | Principles of Chemistry II Laboratory (1.0) | |
| | CHEM 2310 | Organic Chemistry I (4.0) | |
| | CHEM 2315 | Organic Chemistry I Laboratory (1.0) | |
| | CHEM 2320 | Organic Chemistry II (4.0) | |
| | CHEM 2325 | Organic Chemistry II Laboratory (1.0) | |
| Recommended for students most interested in earth science: | | | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (1.0) | |
| | CHEM 1220 | Principles of Chemistry II (4.0) | |
| | CHEM 1225 | Principles of Chemistry II Laboratory (1.0) | |
| | GEO 1015 | Introduction to Geology Laboratory (1.0) | |
| | GEO 1220 | Historical Geology (3.0) | |
| | GEO 1225 | Historical Geology Laboratory (1.0) | |
| Elective Requirements: | | | 12 Credits |
| Complete 12 credits from the following (not to include any course being used to fill one of the requirements above). | | | 12 |

| | | | |
|---|---|---|---|
| Consult with an advisor to determine which courses best match your long-term educational and career goals. | | | |
| | CHEM 1210 | Principles of Chemistry I (4.0) | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (1.0) | |
| | CHEM 1220 | Principles of Chemistry II (4.0) | |
| | CHEM 1225 | Principles of Chemistry II Laboratory (1.0) | |
| | CHEM 2310 | Organic Chemistry I (4.0) | |
| | CHEM 2315 | Organic Chemistry I Laboratory (1.0) | |
| | CHEM 2320 | Organic Chemistry II (4.0) | |
| | CHEM 2325 | Organic Chemistry II Laboratory (1.0) | |
| | GEO 1010 | Introduction to Geology (3.0) | |
| | GEO 1080 | Introduction to Oceanography (3.0) | |
| | GEO 1220 | Historical Geology (3.0) | |
| | GEO 1225 | Historical Geology Laboratory (1.0) | |
| | GEOG 1000 | Introduction to Physical Geography (3.0) | |
| | MATH 1060 | Trigonometry (3.0) | |
| | MATH 1210 | Calculus I (5.0) (MATH 1060 is a prerequisite for this course.) | |
| | MATH 1220 | Calculus II (5.0) | |
| | MATH 2210 | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra (3.0) | |
| | MATH 2280 | Ordinary Differential Equations (3.0) | |
| | METO 1010 | Introduction to Meteorology (3.0) | |
| | PHYS 2210 | Physics for Scientists and Engineers I (4.0) | |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab (1.0) | |
| | PHYS 2220 | Physics for Scientists and Engineers II (4.0) | |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab (1.0) | |
| | STAT 1040 | Principles of Statistics (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above (departments may require a higher GPA).
3. Residency hours: minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Geographic Information Systems, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Geographic Information Systems (GIS) provides students with a focused program of study in the fundamentals required to succeed in a wide range of careers in geospatial science. GIS includes the hardware, software, and data required to capture, store, display, and analyze geographically referenced information. Students in the certificate program learn the theory and methodology of geospatial data collection, storage and management, interpretation, and visualization through courses in cartography, remote sensing, GIS theory and applications, and geospatial field methods. In directed class projects students apply geospatial data techniques to real-world problems while gaining firsthand experience in project design and management.

**Total Program Credits: 19**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 19 Credits |
| | GEOG 3400 | Environmental Remote Sensing* | 3 |
| or | SURV 1220 | Remote Sensing and Photogrammetry (3.0) | |
| | GEOG 3600 | Introduction to Geographic Information Systems | 4 |
| or | GIS 3600 | Introduction to Geographic Information Systems (4.0) | |
| | GIS 3620 | Advanced Geographic Information Systems | 3 |
| or | GEOG 3650 | Advanced Geographic Information Systems (4.0) | |
| | GEOG 4100 | Geospatial Field Methods | 3 |
| or | EGDT 2400 | Surveying Applications and Field Techniques II (3.0) | |
| Complete 6 credits from the following courses: | | | 6 |
| | CS 1400 | Fundamentals of Programming (3.0) | |
| | GEOG 482R | GIS Internship (1.0) | |
| | GEOG 489R | Student Research in Geography (1.0) | |
| | GIS 3630 | Geographic Information Systems Application Development (3.0) | |
| | SURV 1340 | Fundamentals of Boundary Law (3.0) | |
| | SURV 2030 | Geodesy (3.0) | |
| | SURV 3210 | Advanced Photogrammetry (3.0) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3.0) | |
| | Or any courses with the following prefix: GEOG, SURV, GIS, EGDT subject to department approval | | |

**Graduation Requirements:**

1. Grade of C- or higher in all courses used to satisfy requirements of the certificate.

| Footnotes: |
|---|
| *Earth Science majors are encouraged to take GEOG 3400 |

## Water and Wastewater Operations, Certificate of Completion

### *Requirements*

**Total Program Credits: 31**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 22 Credits |
| | ENVT 1200 | Environmental Worker Safety | 3 |
| | ENVT 1210 | Introduction to Water Reclamation (3) | |
| or | ENVT 1360 | Introduction to Water Treatment | 3 |

| | | | |
|---|---|---|---|
| | ENVT 1300 | Environmental Lab and Sampling | 3 |
| | ENVT 3280 | Environmental Law | 3 |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | IM 2010 | Business Computer Proficiency | 3 |
| or | Business Computer Proficiency Exam | | |
| | MAT 1010 | Intermediate Algebra | 4 |
| Elective Requirements: | | | 9 Credits |
| Must take three of the following courses | | | 9 |
| | ENVT 1270 | Environmental Microbiology (3) | |
| | ENVT 1510 | Hazardous Materials Emergency Response (3) | |
| | ENVT 3320 | Hydraulics of Water (3) | |
| | ENVT 3330 | Water Resources Management (3) | |
| | ENVT 3630 | Introduction to Geographic Information Systems (4) | |
| | ENVT 3790 | Hydrology I WE (4) | |

**Graduation Requirements:**

1. Completion of a minimum of 31 credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- Minimum of 10 credits required through course attendance at UVU.

## Earth Science, Minor

### *Requirements*

**Total Program Credits: 22**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 22 Credits |
| | GEO 1010 | Introduction to Geology | 3 |
| and | GEO 1015 | Introduction to Geology Laboratory | 1 |
| and | GEO 3080 | Earth Materials WE | 3 |
| Complete two from: | | | 7 |
| | GEO 1020 | Prehistoric Life (3.0) | |
| | GEO 1080 | Introduction to Oceanography (3.0) | |
| and | GEO 1085 | Introduction to Oceanography Laboratory (1.0) | |
| | METO 1010 | Introduction to Meteorology (3.0) | |
| and | METO 1020 | Introduction to Meteorology Laboratory (1.0) | |
| Complete two from: | | | 8 |
| | GEO 3200 | Geologic Hazards (4.0) | |
| | GEO 3700 | Structure and Tectonics (4.0) | |
| | GEO 4500 | Sedimentary Geology (4.0) | |
| | GEO 4510 | Paleontology (4.0) | |
| | ENVT 3790 | Hydrology I (4.0) | |
| | GEOG 3600 | Introduction to Geographic Information Systems (4.0) | |

## Geography, Minor

### *Requirements*

The Minor in Geography allows students to focus on either of the major sub-disciplines of geography, namely physical geography or human geography, or to follow a broad curriculum in geography. The minor will also overlap with the coursework required of students seeking a Utah state teaching endorsement in geography.

**Total Program Credits: 20**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 10 Credits |
| Required Courses; Complete the following: | | | |
| | GEOG 1000 | Introduction to Physical Geography | 3 |
| | GEOG 130G | Survey of World Geography | 3 |
| | GEOG 3600 | Introduction to Geographic Information Systems | 4 |
| Elective Requirements: | | | 10 Credits |
| Complete at least 10 credits from the following list, at least six of which much be 3000-level or higher: | | | 10 |
| | ENVT 3800 | Energy Use on Earth (3) | |
| | GEOG 1005 | Introduction to Physical Geography Lab (1) | |
| | GEOG 140G | Introduction to Human Geography (3) | |
| | GEOG 2000 | Sustainability and Environment (3) | |
| | GEOG 2100 | Geography of the United States (3) | |
| | GEOG 2500 | Geography of Latin America and the Caribbean (3) | |
| | GEOG 3110 | Urban Geography WE (3) | |
| | GEOG 3200 | Geography of Utah (3) | |
| | GEOG 3300 | Biogeography (4) | |
| | GEOG 3350 | Geography of Africa (3) | |
| | GEOG 3400 | Environmental Remote Sensing (3) | |
| | GEOG 3500 | Geomorphology WE (4) | |
| or | GEO 3200 | Geologic Hazards (4) | |
| | GEOG 3650 | Advanced Geographic Information Systems (4) | |
| | GEOG 3700 | Wetland Studies (3) | |
| | GEOG 3705 | Wetland Studies Laboratory (1) | |
| | GEOG 4100 | Geospatial Field Methods (3) | |
| At most one of the following courses may be used towards elective requirements: | | | |
| | ANTH 2030 | Archeological Method and Theory (3) | |
| | ANTH 3150 | Culture Ecology and Health (3) | |
| | ANTH 3850 | Ethnographic Methods WE (3) | |
| | BIOL 3700 | General Ecology (3) | |
| | BIOL 3800 | Conservation Biology (3) | |
| | BOT 4050 | Plant Ecology (3) | |
| | ENGL 373R | Literature of Cultures and Places (3) | |

| | | | |
|---|---|---|---|
| | ENST 3000 | Introduction to Environmental Studies (3) | |
| | ENVT 3330 | Water Resources Management (3) | |
| | ENVT 3850 | Environmental Policy (3) | |
| | PHIL 3530 | Environmental Ethics (3) | |
| | SOC 4020 | Survey Research Design (3) | |
| | Or other advisor-approved electives | | |

**Graduation Requirements:**

1. Grade of C- or higher in all courses used to satisfy requirements of the minor.

## Earth Science Education, B.S.

### *Requirements*

Earth Science is the study of the Earth, including its water and atmosphere, and their relationship to humans and other living things. Earth Science applies chemistry, physics, mathematics and biology to scientific problems of the Earth. The Earth Science Education program prepares students to receive a Utah State teaching credential with an endorsement in Earth Science. Through careful choice of courses, students may also earn endorsements in the other physical sciences.

**Total Program Credits: 121**

Matriculation Requirements:

1. Complete the following courses: GEO 1010, GEO 1015, MATH 1050 or MATH 1055, MATH 1060, BIOL 1610 with a grade of "C" or higher in each.
2. Complete a minimum of 30 semester hours of college credit.
3. Apply to the department of Earth Science for admission.

Secondary Education Requirements:

1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.
2. GPA of 3.0 or higher with no grade lower than a C in content area courses.
3. Completion of all General Education requirements and the majority of content area courses.
4. Pass LiveScan Criminal Background Check.

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 30 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| | Distribution Courses | | |
| | BIOL 1010 | General Biology | 3 |
| | Physical Science* | | |
| | Additional Biology or Physical Science* | | |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 88 Credits |
| | ASTR 1040 | Elementary Astronomy | 3 |
| | GEOG 3700 | Wetland Studies | 3 |
| or | BIOL 2500 | Environmental Biology (3) | |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | GEO 1010 | Introduction to Geology | 3 |
| | GEO 1015 | Introduction to Geology Laboratory | 1 |
| | GEO 1220 | Historical Geology | 3 |
| | GEO 1225 | Historical Geology Laboratory | 1 |
| | GEO 3700 | Structure and Tectonics | 4 |
| | GEO 3080 | Earth Materials WE | 3 |
| and | GEO 3085 | Earth Materials Laboratory | 1 |
| | GEO 4200 | Teaching Methods in Science | 3 |
| | GEO 4500 | Sedimentary Geology | 4 |
| | GEO 480R | Earth Science Seminar (.5) (must be taken twice) | 1 |
| | METO 1010 | Introduction to Meteorology | 3 |
| | METO 3100 | Climate and the Earth System | 3 |
| | PHYS 2010 | College Physics I | 4 |
| | PHYS 2015 | College Physics I Lab | 1 |
| | PHYS 2020 | College Physics II | 4 |
| | PHYS 2025 | College Physics II Lab | 1 |
| Education Courses | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |

| | | | |
|---|---|---|---|
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| Elective Requirements: | | | 3 Credits |
| Any 3 credit hours from the following list | | | 3 |
| | GEO 1080 | Introduction to Oceanography (3) | |
| | GEO 1085 | Introduction to Oceanography Laboratory (1) | |
| | GEO 202R | Science Excursion (1) | |
| | GEO 204R | Natural History Excursion (3) | |
| | GEO 3000 | Environmental Geochemistry (3) | |
| | GEO 3100 | Isotope Geochemistry (3) | |
| | GEO 3200 | Geologic Hazards (3) | |
| | GEO 3500 | Geomorphology WE (4) | |
| | GEO 4510 | Paleontology (4) | |
| | METO 1020 | Introduction to Meteorology Laboratory (1) | |
| | Other advisor-approved electives | | |

**Graduation Requirements:**

1. Completion of a minimum of 121 semester credits.
2. Overall GPA of 3.0 (B) or above with no grade lower than a C in major required content courses and no grade lower than a B- in Licensure and Methods courses. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. Grade of C or higher in all GEO, BIOL, and METO courses.
6. Successful completion of at least one Global/Intercultural course.

Note: *This requirement is fulfilled with the core requirements.

## Environmental Science and Management, B.S.

### *Requirements*

Environmental Science is the study of the Earth's surface, including its water and atmosphere, with a particular focus on their relationship to humans and other living things. Environmental Science applies chemistry, physics, mathematics and biology to answer questions about the Earth and its interrelationships with living things. Environmental Management focuses on the maintenance of environmental resources, for example water resources. Environmental scientists may conduct studies in the field, in the laboratory using advanced analytical equipment, and in the office using specialized computer software. The program is preparation for a variety of career paths, including water monitoring, treatment, and pollution control with local, state or federal agencies; environmental consulting with private industry; and other careers that draw on a background in the natural sciences, including law, public policy, and public health.

**Total Program Credits: 120**

| General Education Requirements: | | | 37 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values (3) | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | BIOL 1010 | General Biology (fulfills Biology Distribution) | 3 |
| | ENVT 1110 | Introduction to Environmental Management (fulfills Physical Science Distribution) | 3 |
| | GEO 1010 | Introduction to Geology (fulfills additional Physical Science Distribution) | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science: GEOG 130G (recommended) | | 3 |
| Discipline Core Requirements: | | | 56 Credits |
| | GEO 1015 | Introduction to Geology Laboratory | 1 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | ENVT 1200 | Environmental Worker Safety | 3 |
| | ENVT 1270 | Environmental Microbiology | 3 |
| | ENVT 1300 | Environmental Lab and Sampling | 3 |
| | ENVT 1510 | Hazardous Materials Emergency Response | 3 |
| | ENVT 2560 | Environmental Health | 3 |
| | ENVT 2710 | Environmental Careers | 1 |
| | ENVT 2730 | Introduction to Soils | 4 |
| | ENVT 3280 | Environmental Law | 3 |
| | ENVT 3530 | Environmental Management Systems | 3 |
| | ENVT 3790 | Hydrology I WE | 4 |
| | ENVT 3850 | Environmental Policy | 3 |
| | GEOG 3600 | Introduction to Geographic Information Systems | 4 |
| | MATH 1060 | Trigonometry | 3 |
| | STAT 2040 | Principles of Statistics | 4 |
| | GEO 480R | Earth Science Seminar (Must be taken twice) | 1 |

| Elective Requirements: | | | 27 Credits |
|---|---|---|---|
| Choose 27 credit hours from the following list (at least 22 credits must be Upper Division): | | | 27 |
| | CHEM 2310 | Organic Chemistry I (4) | |
| | CHEM 2315 | Organic Chemistry I Laboratory (1) | |
| | CHEM 2320 | Organic Chemistry II (4) | |
| | CHEM 2325 | Organic Chemistry II Laboratory (1) | |
| | ENVT 1210 | Introduction to Water Reclamation (3) | |
| | ENVT 1360 | Introduction to Water Treatment (3) | |
| | ENVT 3010 | Environmental Toxicology (3) | |
| | ENVT 3320 | Hydraulics of Water (3) | |
| | ENVT 3330 | Water Resources Management (3) | |
| | ENVT 3550 | Site Investigation (3) | |
| | ENVT 3700 | Current Topics in Environmental Management (3) | |
| | ENVT 3750 | Land Use Planning (3) | |
| | ENVT 3770 | Natural Resources Management (3) | |
| | ENVT 3800 | Energy Use on Earth (3) | |
| | ENVT 4790 | Hydrology II (4) | |
| | ENVT 482R | Geologic/Environmental Internship (1) | |
| | ENVT 495R | Special Projects in Environmental Management (1) | |
| | GEO 3000 | Environmental Geochemistry (3) | |
| | GEO 3080 | Earth Materials WE (3) | |
| and | GEO 3085 | Earth Materials Laboratory (1) | |
| | GEO 3100 | Isotope Geochemistry (3) | |
| | GEO 3105 | Isotope Geochemistry Laboratory (1) | |
| | GEO 3200 | Geologic Hazards (3) | |
| and | GEO 3205 | Geologic Hazards Laboratory (1) | |
| or | GEO 3500 | Geomorphology WE (4) | |
| | GEO 4500 | Sedimentary Geology (4) | |
| | GEOG 3400 | Environmental Remote Sensing (3) | |
| | GEOG 3650 | Advanced Geographic Information Systems (4) | |
| | GEOG 3700 | Wetland Studies (3) | |
| | GEOG 4100 | Geospatial Field Methods (3) | |
| | Or other GEO, GEOG, or ENVT advisor-approved electives | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Grade of C- or better in all ENVT, GEO, and GEOG courses.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of GE and specified departmental requirements.
6. Successful completion of at least one Global/Intercultural course.

# Geography, B.S.

## *Requirements*

Geography is the study of the earth's places, peoples, environments and their interrelationships from both the physical and social science perspectives. Geographers use many different scientific tools to study the relationships between earth's systems including geospatial technology and are employed in public agencies, local governments, federal offices, technology sectors, business planning, and careers related to spatial planning. The Bachelor of Science in Geography provides students with a program of study in the fundamentals of geography and prepares them to succeed as geographers as well as in many other careers related to geography. Students learn theories and methods of analysis related to land use and land cover change, urbanization, sustainability, human-environment interactions, and Geographic Information Systems (GIS) technology through the core courses of the program. Through elective courses, students can choose to further focus their studies on physical sciences, social sciences, and/or geospatial techniques to meet their career goals.

**Total Program Credits: 120**

| General Education Requirements: | | | 36 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | METO 1010 | Introduction to Meteorology | 3 |
| or | GEO 1010 | Introduction to Geology (3) | |
| | GEOG 1000 | Introduction to Physical Geography | 3 |
| | GEOG 130G | Survey of World Geography | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Biology | | 3 |
| Discipline Core Requirements: | | | 84 Credits |
| | GEOG 140G | Introduction to Human Geography | 3 |
| | GEOG 2000 | Sustainability and Environment | 3 |
| | GEOG 3110 | Urban Geography WE | 3 |
| | GEOG 3200 | Geography of Utah | 3 |
| | GEOG 3500 | Geomorphology WE | 4 |
| or | GEOG 3300 | Biogeography (4) | |
| | GEOG 3600 | Introduction to Geographic Information Systems | 4 |

| | | | |
|---|---|---|---|
| | GEOG 3650 | Advanced Geographic Information Systems | 4 |
| | GEO 480R | Earth Science Seminar (taken twice) | 1 |
| | STAT 2040 | Principles of Statistics | 4 |
| Select 12 credits from the following physical and life science courses[1] | | | 12 |
| | GEOG 1005 | Introduction to Physical Geography Lab (1) | |
| | GEOG 3300 | Biogeography (4) | |
| or | GEOG 3500 | Geomorphology WE (4) | |
| | GEOG 3400 | Environmental Remote Sensing (3) | |
| | GEOG 3700 | Wetland Studies (3) | |
| and | GEOG 3705 | Wetland Studies Laboratory (1) | |
| | BIOL 3700 | General Ecology (3) | |
| | ENVT 2730 | Introduction to Soils (4) | |
| | ENVT 3790 | Hydrology I WE (4) | |
| | ENVT 3800 | Energy Use on Earth (3) | |
| | ENVT 4790 | Hydrology II (4) | |
| | GEO 1010 | Introduction to Geology (3) | |
| and | GEO 1015 | Introduction to Geology Lab (1) | |
| | GEO 3080 | Earth Materials WE (3) | |
| and | GEO 3085 | Earth Materials Laboratory (1) | |
| | GEO 3200 | Geologic Hazards (3) | |
| | GEOG 4100 | Geospatial Field Methods (3) | |
| | METO 3100 | Climate and the Earth System (3) | |
| Select 12 credits from the following social science classes[1] | | | 12 |
| | GEOG 2100 | Geography of the United States (3) | |
| | GEOG 2500 | Geography of Latin America and the Caribbean (3) | |
| | GEOG 3010 | Economic Geography (3) | |
| | GEOG 3250 | Cultural Geography (3) | |
| | GEOG 3350 | Geography of Africa (3) | |
| | GEOG 3430 | Political Geography (3) | |
| | GEOG 3800 | Environmental History of the United States (3) | |
| | SOC 3520 | Environmental Sociology (3) | |
| or | ENST 3520 | Environmental Sociology (3) | |
| | SOC 4020 | Survey Research Design (3) | |
| or | ANTH 3850 | Ethnographic Methods WE (3) | |
| | ENST 3000 | Introduction to Environmental Studies (3) | |
| | ENVT 3750 | Land Use Planning (3) | |
| | ENVT 3770 | Natural Resources Management (3) | |
| | ENVT 3850 | Environmental Policy (3) | |
| Elective Requirements: | | | 31 Credits |
| Choose any classes from the following list or any classes from the following prefixes: GEOG, GEO, ENVT, ENST, AIST, ANTH, SOC,BIOL, CHEM, PHYS, NSS, HIST, GIS, MATH, STAT, CS. | | | |

| | | | |
|---|---|---|---|
| | AIST 327G | Indians of Utah (3) | |
| | AIST 384G | Indians of the Southwest (3) | |
| | GEOG 482R | GIS Internship (1) | |
| | GEOG 489R | Student Research in Geography (1) | |
| | ANTH 3150 | Culture Ecology and Health (3) | |
| | ANTH 3300 | Culture Development and International Aid (3) | |
| | ANTH 3660 | Globalized Society (3) | |
| | BIOL 2500 | Environmental Biology (3) | |
| | CHEM 1210 | Principles of Chemistry I (4) | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (1) | |
| | CHEM 1220 | Principles of Chemistry II (4) | |
| | CHEM 1225 | Principles of Chemistry II Laboratory (1) | |
| | ENGL 373R | Literature of Cultures and Places (3) | |
| | ENVT 1110 | Introduction to Environmental Management (3) | |
| | ENVT 2560 | Environmental Health (3) | |
| | ENVT 3600 | Appropriate Technology and Sustainable Development for the Developing World (3) | |
| | GEO 1220 | Historical Geology (3) | |
| | GEO 2070 | Desert Natural History (3) | |
| | GEO 3000 | Environmental Geochemistry (3) | |
| | GEO 3100 | Isotope Geochemistry (3) | |
| | GEO 3700 | Structure and Tectonics (4) | |
| | GEO 4500 | Sedimentary Geology (4) | |
| | MATH 1060 | Trigonometry (3) | |
| | MATH 1210 | Calculus I (5) | |
| | PHIL 3530 | Environmental Ethics (3) | |
| | PHYS 2010 | College Physics I (4) | |
| or | PHYS 2210 | Physics for Scientists and Engineers I (4) | |
| | PHYS 2020 | College Physics II (4) | |
| or | PHYS 2220 | Physics for Scientists and Engineers II (4) | |
| | SOC 2370 | Sociology of Gender (3) | |
| | SOC 3030 | Social Research Methods (3) | |
| | SOC 320G | Race and Minority Relations (3) | |
| | SOC 3690 | Internet and Society (3) | |
| | SOC 3850 | Rural Life--Global and Local (3) | |
| | STAT 2050 | Introduction to Statistical Methods (4) | |
| | STAT 2060 | Introduction to Statistical Computing (1) | |
| | STAT 3040 | Probability and Statistics for Engineering and the Sciences (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, including 40 hours of upper-division credit.
2. Overall grade point average of 2.0 (C) or above.
3. Grade of C- or better in every ENVT, GEO, GEOG, METO, and core curriculum course.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1]You need at least 40 hours of upper division credit to graduate. Work with your advisor to make sure you are meeting the 40 credits ofupper division requirement. |

## Geology, B.S.

### *Requirements*

Geology is the study of the Earth, including its water and atmosphere, and its relationship to humans and other living things. Geology applies chemistry, physics, mathematics and biology to answer questions about the Earth. Geologists conduct studies in the field, in the laboratory using advanced analytical equipment, and in the office using specialized computer software. Geology is particularly focused on the Earth's history, resources, hazards and resources including groundwater. Sub-disciplines of geology include economic geology, geochemistry, geologic hazards, geomorphology, hydrogeology, petrology, and tectonics. A B.S. in geology is preparation for a variety of career paths, including hazard assessment with government or private companies, ground and surface water monitoring and development, oil and gas, mining, and many other careers that draw on a background in the natural earth, including law, public policy, and public health; the program is also excellent preparation for graduate school.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 37 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 205G | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses | | | |
| | BIOL 1010 | General Biology | 3 |
| | GEO 1010 | Introduction to Geology | 3 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 83 Credits |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| | ENVT 3790 | Hydrology I WE | 4 |
| | GEOG 3600 | Introduction to Geographic Information Systems | 4 |
| | GEO 1015 | Introduction to Geology Laboratory | 1 |
| | GEO 1220 | Historical Geology | 3 |
| | GEO 1225 | Historical Geology Laboratory | 1 |
| | GEO 3080 | Earth Materials WE | 3 |
| | GEO 3085 | Earth Materials Laboratory | 1 |
| | GEO 3200 | Geologic Hazards | 3 |
| | GEO 3205 | Geologic Hazards Geologic Hazards Laboratory | 1 |
| | GEO 3700 | Structure and Tectonics | 4 |
| | GEO 4500 | Sedimentary Geology | 4 |
| | GEO 4600 | Field Experience | 6 |
| | MATH 1210 | Calculus I | 5 |
| | MATH 1220 | Calculus II | 5 |
| | STAT 2040 | Principles of Statistics | 4 |
| | GEO 480R | Earth Science Seminar (Must be taken twice) | 1 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| Complete 19 credits from the following list (at least 12 credits must be Upper Division) | | | 19 |
| | BIOL 3800 | Conservation Biology (3) | |
| | ENVT 2730 | Introduction to Soils (4) | |
| | ENVT 3280 | Environmental Law (3) | |
| | ENVT 4790 | Hydrology II (4) | |
| | GEO 202R | Science Excursion (1) | |
| | GEO 3000 | Environmental Geochemistry (3) | |
| | GEO 3100 | Isotope Geochemistry (3) | |
| | GEO 3105 | Isotope Geochemistry Laboratory (1) | |
| | GEO 3500 | Geomorphology WE (4) | |
| | GEO 4080 | Petrology (3) | |
| | GEO 4085 | Petrology Laboratory(1) | |
| | GEO 4510 | Paleontology (4) | |
| | GEO 482R | Geologic/Environmental Internship (1) | |
| | GEO 489R | Student Research (1) | |
| | GEOG 3400 | Environmental Remote Sensing (3) | |
| | GEOG 3650 | Advanced Geographic Information Systems (4) | |

| | | | |
|---|---|---|---|
| | GEOG 3700 | Wetland Studies (3) | |
| | GEOG 4100 | Geospatial Field Methods (3) | |
| | METO 1010 | Introduction to Meteorology (3) | |
| | METO 3100 | Climate and the Earth System (3) | |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab (1) | |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab (1) | |
| | Or other advisor-approved electives | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Grade of C- or better in every ENVT, GEO, GEOG, and METO course.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of GE and specified departmental requirements.
6. Successful completion of at least one Global/Intercultural course.

# Education Graduate Programs

## Education Graduate Programs

The Education Graduate Programs are in the School of Education. To find the most up-to-date information on Education Graduate Programs, visit their website.

Education Graduate Programs

**FACULTY**

**BRANDT, Lorilynn B.** *Associate Professor*
**ESCALANTE, Debora L.** *Associate Professor*
**KANG, Mi Ok** *Associate Professor*
**PATCH, Michael** *Associate Professor*
**PETERSON, Nancy L.** *Professor*
**SELLAND, Makenzie** *Associate Professor*
**TUFT, Elaine** *Professor*
**WAITE, Bryan** *Professor*
**WARBURTON, Trevor** *Assistant Professor*

## Course Descriptions

Education Curr and Instruction.....593

## Degrees & Programs

### Dual Language Immersion, Endorsement

#### *Requirements*

The Dual Language Immersion (DLI) Endorsement program is designed to prepare teachers to be sensitive and responsive to the needs of dual language immersion (DLI) learners and to become advocates for DLI in a variety of educational settings. Coursework is designed to address historical and political foundations of DLI education and methods and materials for engaging DLI students in challenging educational experiences. The UVU endorsement program is intended to provide educators with an opportunity to develop, expand, and integrate their knowledge of content, pedagogy, and cultural perspectives in dual language immersion education. Completed program coursework qualifies students to apply to the Utah State Office of Education for an endorsement to their current Utah Teaching License. USBE Education Endorsements are provided through the school district. UVU will accept up to 12 endorsement credits to apply toward a UVU M.Ed. Emphasis program.

**Total Program Credits: 15**

| Discipline Core Requirements: | | | 15 Credits |
|---|---|---|---|
| | EDUC 5700 | Foundations of Dual Langage Immersion Education | 3 |
| | EDUC 5300 | Content-based Curriculum, Instruction, and Assessment | 3 |
| | EDUC 5380 | Second Language Literacy Development for Practitioners | 3 |
| | EDUC 5340 | Methods of Second Language Acquisition for Practitioners | 3 |
| | EDUC 5710 | Instructional Strategies, Curriculum, and Classroom Management for the Elementary Classroom (For Secondary Teachers) | 3 |
| or | EDUC 5350 | Theories of Second Language Acquisition for Practitioners (For Elementary Teachers)(3.0) | |

### Educational Leadership, Graduate Certificate

#### *Requirements*

The Graduate Certificate for Educational Leadership in UVU's School of Education (SOE) is designed to align with the current Ed Leadership emphasis in the M.Ed. The certificate will meet the needs of candidates who have previously completed a master's degree (M.Ed) and now wish to prepare as potential administrative and instructional school leaders for Utah's schools. Curriculum for this option will be based on the standards for administrative/supervisory endorsement from the Utah State Office of Education (USOE), and the Interstate School Leaders Licensure Consortium (ISLLC). The grad certificate program will be formatted to meet the needs of adult learners, with courses offered in the evenings and in blended and online formats, but will not require them to retake core courses previously completed. The administrative/ supervisory certificate will prepare leaders for 21st century schools in the areas of curriculum, instruction, and human resource administration. Course objectives will emphasize performance of school and classroom leadership functions, functional knowledge of local, state, and national educational agencies and regulations, demonstrated competencies in administrative skills, and applied understandings of current research around effective teaching, theories of learning, and educational policy. Candidates will be required to complete supervised internship work that is required by Utah code.

**Total Program Credits: 21**

| Matriculation Requirements: | | | |
|---|---|---|---|
| Earned M.Ed. | | | |
| Discipline Core Requirements: | | | 21 Credits |
| | EDUC 6120 | Personal Leadership and Organizational Design | 3 |
| | EDUC 6130 | School Operations and Management-Finance/Law/Safety | 3 |
| | EDUC 6140 | Instructional Leadership and Data-based Decision Making | 3 |
| | EDUC 6150 | School Operations and Management-Communication/Planning/HR/Evaluatio | 3 |
| | EDUC 6160 | Leading Professional Learning Communities | 3 |
| | EDUC 6170 | Leading Change/Innovation/ Educational Entrepreneurship | 3 |
| | EDUC 6200 | Masters Project | 3 |

**Graduation Requirements:**

1. Completion of all required coursework, with a grade of B- or better.
2. Successful completion of USBE required competencies or internship hours.
3. Complete 21 credit hours through course attendance at UVU.

### Educational Technology, Endorsement

#### *Requirements*

The Educational Technology endorsement program emphasizes coursework that prepares classroom teachers to incorporate the latest

technological tools into effective instructional practice. Completed program coursework qualifies students to apply to the Utah State Office of Education for an endorsement to their current Utah Teaching License. USBE Education Endorsements are provided through the school district. UVU will accept up to 12 endorsement credits to apply toward a UVU M.Ed. Emphasis program.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | EDUC 5800 | Cognition, Education and Technology for Practitioners (3.0) | |
| or | EDUC 6080 | Cognition, Education and Technology | 3 |
| | EDUC 5810 | Instruction, Curriculum & Educational Leadership in the Digital Age for Practitioners (3.0) | |
| or | EDUC 6081 | Instruction, Curriculum and Educational Leadership in the Digital Age | 3 |
| | EDUC 5820 | Designing and Producing Media for Instruction for Practitioners (3.0) | |
| or | EDUC 6082 | Designing and Producing Media for Instruction | 3 |
| | EDUC 5830 | Digital Models of Instruction for Practitioners (3.0) | |
| or | EDUC 6083 | Digital Models of Instruction | 3 |
| | EDUC 5840 | Universal Design for Learning for Practitioners (3.0) | |
| or | EDUC 6084 | Universal Design for Learning | 3 |
| | EDUC 5850 | Digital Course Design Capstone for Practitioners (3.0) | |
| or | EDUC 6085 | Digital Course Design Capstone | 3 |

## Elementary Mathematics, Endorsement

### *Requirements*

The Elementary Mathematics program emphasizes coursework that better prepares teachers in the elementary classroom in mathematical content and pedagogy, including courses in six key areas of mathematics. Completed program coursework qualifies students to apply to the Utah State Office of Education for an endorsement to their current Utah Teaching License. USBE Education Endorsements are provided through the school district. UVU will accept up to 12 endorsement credits to apply toward a UVU M.Ed. Emphasis program.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | EDUC 5500 | Teaching K-8 Numbers and Operations for Practitioners | 3 |
| or | EDUC 6500 | Teaching K-8 Numbers and Operations (3.0) | |
| | EDUC 5510 | Teaching K-8 Rational Numbers and Proportional Reasoning for Practitioners | 3 |
| or | EDUC 6510 | Teaching K-8 Rational Numbers and Proportional Reasoning (3.0) | |
| | EDUC 5520 | Teaching K-8 Algebraic Reasoning for Practitioners | 3 |
| or | EDUC 6520 | Teaching K-8 Algebraic Reasoning (3.0) | |
| | EDUC 5530 | Teaching K-8 Geometry and Measurement for Practitioners | 3 |
| or | EDUC 6530 | Teaching K-8 Geometry and Measurement (3.0) | |
| | EDUC 5540 | Teaching K-8 Data Analysis and Problem Solving for Practitioners | 3 |
| or | EDUC 6540 | Teaching K-8 Data Analysis and Problem Solving (3.0) | |
| | EDUC 5550 | Teaching K-8 Assessment and Intervention for Practitioners | 3 |
| or | EDUC 6550 | Teaching K-8 Assessment and Intervention (3.0) | |

## Elementary STEM, Endorsement

### *Requirements*

The Utah Valley University endorsement program for Elementary Science, Technology, Engineering, and Mathematics (STEM) is geared to providing professional development and best practices for practicing teachers in grades K-8. The goal of this program is to enhance educators' understandings of key concepts in STEM areas so that they may better serve the needs of their students in the 21st century. USBE Education Endorsements are provided through the school district. UVU will accept up to 12 endorsement credits to apply toward a UVU M.Ed. Emphasis program.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | EDUC 5750 | Energy in STEM for Elementary Teachers | 3 |
| or | EDUC 6750 | Energy in Elementary STEM Education (3.0) | |
| | EDUC 5760 | Force in STEM for Elementary Teachers | 3 |
| or | EDUC 6760 | Force in Elementary STEM Education (3.0) | |
| | EDUC 5770 | Matter in STEM for Elementary Teachers | 3 |
| or | EDUC 6770 | Matter in Elementary STEM Education (3.0) | |
| | EDUC 5780 | Nature of Science and Engineering | 3 |
| or | EDUC 6780 | Science and Engineering in Elementary STEM Education (3.0) | |
| | EDUC 5790 | STEM Practices with a Focus on Technology and Problem-Based Learning | 3 |
| or | EDUC 6790 | Technology and Problem-Based Learning in Elementary STEM Education (3.0) | |
| | EDUC 5540 | Teaching K-8 Data Analysis and Problem Solving for Practitioners (3.0) | 3 |
| or | EDUC 6540 | Teaching K-8 Data Analysis and Problem Solving (3.0) | |

## English as Second Language, Endorsement

### *Requirements*

The English as a Second Language program emphasizes coursework that aids teachers in becoming better skilled at meeting the needs of English language learners in the K-12 classroom, and better prepared to understand the many cultural and community influences that may influence student learning. Completed program coursework qualifies students to apply to the Utah State Office of Education for an endorsement to their current Utah Teaching License. USBE Education Endorsements are provided through the school district. UVU will accept up to 12 endorsement credits to apply toward a UVU M.Ed. Emphasis program.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | EDUC 5340 | Methods of Second Language Acquisition for Practitioners | 3 |
| or | EDUC 6340 | English as a Second Language Methods (3.0) | |
| | EDUC 5350 | Theories of Second Language Acquisition for Practitioners | 3 |
| or | EDUC 6350 | Theories of Second Language Acquisition (3.0) | |
| | EDUC 5360 | Multicultural Education for Practitioners | 3 |
| or | EDUC 6360 | Multicultural Education (3.0) | |
| | EDUC 5370 | Assessment for Second Language Learners for Practitioners | 3 |
| or | EDUC 6370 | Assessment of Second Language Learners (3.0) | |
| | EDUC 5380 | Second Language Literacy Development for Practitioners | 3 |
| or | EDUC 6380 | Literacy and Linguistics in English as a Second Language (3.0) | |
| | EDUC 5390 | Family and Community Involvement for Practitioners | 3 |
| or | EDUC 6390 | Family and Community Involvement (3.0) | |

## Gifted and Talented, Endorsement

### *Requirements*

The Utah Valley University Gifted and Talented endorsement program is designed to prepare teachers to be sensitive and responsive to the needs of gifted and talented (GT) learners and to become advocates for their students in a variety of educational settings, whether they become teachers in Gifted and Talented programs or teachers who work with these learners in the mainstream classroom setting. Coursework is designed to address historical and political foundations of GT education, the social and emotional needs of these learners, and methods and materials for engaging GT students in challenging educational experiences. The UVU endorsement program is intended to provide educators with an opportunity to develop, expand, and integrate their knowledge of content, pedagogy, and cultural perspectives in gifted and talented education. USBE Education Endorsements are provided through the school district. UVU will accept up to 12 endorsement credits to apply toward a UVU M.Ed. Emphasis program.

**Total Program Credits: 19**

| Discipline Core Requirements: | | | 19 Credits |
|---|---|---|---|
| | EDUC 5600 | Learning Development and Individual Learning Differences in Gifted Education | 3 |
| | EDUC 5610 | Social and Emotional Needs of the Gifted | 3 |
| | EDUC 5620 | Assessment in Gifted Education | 3 |
| | EDUC 5630 | Theory into Practice in Gifted and Talented Education | 2 |
| | EDUC 5635 | Methods and Materials in Gifted Education for Practitioners | 2 |
| | EDUC 5640 | Improvement of Curriculum Instruction in the Content Areas | 3 |
| | EDUC 5650 | Leadership in Gifted and Talented Education | 3 |

## Master of Education - Applied Behavioral Analysis Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education.

**Total Program Credits: 35**

Matriculation Requirements:

1. Application for admission.
2. Bachelor degree from an accredited institution.
3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.
4. Interview with School of Education Graduate Committee.
5. Three professional letters of recommendation.

Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.
Preference will be given to practicing teachers who have access to an established classroom.

| Discipline Core Requirements: | | | 12 Credits |
|---|---|---|---|
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 23 Credits |
| | EDUC 6010 | ABA Concepts and Principles | 3 |

| | | | |
|---|---|---|---|
| | EDUC 6020 | Ethics and Professional Competencies in Applied Behavioral Analysis | 3 |
| | EDUC 6030 | Developing and Changing Behaviors | 3 |
| | EDUC 6040 | Measurement in Single Subject Design | 3 |
| | EDUC 6050 | Functional Behavior Assessment and Treatment | 3 |
| | EDUC 6060 | Advanced Topics in Applied Behavior Analysis | 3 |
| | EDUC 6070 | Training Supervision and Performance Monitoring in Applied Behavior Analysis | 3 |
| | EDUC 693R | Project III (1.0) (EDUC 693R is done twice in the emphasis courses, and once as part of the MEd core) | 2 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Educational Leadership Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education.

**Total Program Credits: 36**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Application for admission.<br>2. Bachelor degree from an accredited institution.<br>3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.<br>4. Interview with School of Education Graduate Committee.<br>5. Three professional letters of recommendation.<br><br>Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.<br>Preference will be given to practicing teachers who have access to an established classroom. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 24 Credits |
| | EDUC 6120 | Personal Leadership and Organizational Design | 3 |
| | EDUC 6130 | School Operations and Management-Finance/Law/Safety | 3 |
| | EDUC 6140 | Instructional Leadership and Data-based Decision Making | 3 |
| | EDUC 6150 | School Operations and Management-Communication/Planning/HR/ Evaluation | 3 |
| | EDUC 6160 | Leading Professional Learning Communities | 3 |
| | EDUC 6170 | Leading Change/Innovation/ Educational Entrepreneurship | 3 |
| | EDUC 6320 | 21st Century Instruction and Assessment | 3 |
| | EDUC 6330 | Diversity and Differentiation in the Classroom | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Educational Technology Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education. Students who have completed the appropriate USBE endorsement through a UVU approved district endorsement program will be admitted to this endorsement emphasis. All endorsement courses must have been completed within three years of admission to the M.Ed. Endorsement Emphasis to comply with the five-year limit on acceptable coursework. UVU will accept up to 12 endorsement credits and an additional 24 credits will be earned through UVU.

**Total Program Credits: 30**

| Matriculation Requirements: |
|---|
| 1. Application for admission.<br>2. Bachelor degree from an accredited institution.<br>3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.<br>4. Interview with School of Education Graduate Committee.<br>5. Three professional letters of recommendation.<br><br>Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.<br>Preference will be given to practicing teachers who have access to an established classroom. |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 18 Credits |
| Students may transfer up to 12 credits from 5000 level courses taken in this area of study; however, 24 additional credits of master's level courses would be required. Please contact your advisor for more information. | | | |
| | EDUC 6080 | Cognition, Education, and Technology | 3 |
| | EDUC 6081 | Instruction, Curriculum and Educational Leadership in the Digital Age | 3 |
| | EDUC 6082 | Designing and Producing Media for Instruction | 3 |
| | EDUC 6083 | Digital Models of Instruction | 3 |
| | EDUC 6084 | Universal Design for Learning | 3 |
| | EDUC 6085 | Digital Course Design Capstone | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Elementary Mathematics Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education. Students who have completed the appropriate USBE endorsement through a UVU approved district endorsement program will be admitted to this endorsement emphasis. All endorsement courses must have been completed within three years of admission to the M.Ed. Endorsement Emphasis to comply with the five-year limit on acceptable coursework. UVU will accept up to 12 endorsement credits and an additional 24 credits will be earned through UVU.

**Total Program Credits: 30**

| Matriculation Requirements: |
|---|
| 1. Application for admission.<br>2. Bachelor degree from an accredited institution.<br>3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.<br>4. Interview with School of Education Graduate Committee.<br>5. Three professional letters of recommendation.<br><br>Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.<br>Preference will be given to practicing teachers who have access to an established classroom. |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 18 Credits |
| Students may transfer up to 12 credits from 5000 level courses taken in this area of study; however, 24 additional credits of master's level courses would be required. Please contact your advisor for more information. | | | |
| | EDUC 6500 | Teaching K-8 Numbers and Operations | 3 |
| | EDUC 6510 | Teaching K-8 Rational Numbers and Proportional Reasoning | 3 |
| | EDUC 6520 | Teaching K-8 Algebraic Reasoning | 3 |
| | EDUC 6530 | Teaching K-8 Geometry and Measurement | 3 |
| | EDUC 6540 | Teaching K-8 Data Analysis and Problem Solving | 3 |
| | EDUC 6550 | Teaching K-8 Assessment and Intervention | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.

4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Elementary STEM Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education. Students who have completed the appropriate USBE endorsement through a UVU approved district endorsement program will be admitted to this endorsement emphasis. All endorsement courses must have been completed within three years of admission to the M.Ed. Endorsement Emphasis to comply with the five-year limit on acceptable coursework. UVU will accept up to 12 endorsement credits and an additional 24 credits will be earned through UVU.

**Total Program Credits: 30**

Matriculation Requirements:

1. Application for admission.
2. Bachelor degree from an accredited institution.
3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.
4. Interview with School of Education Graduate Committee.
5. Three professional letters of recommendation.

Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.
Preference will be given to practicing teachers who have access to an established classroom.

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 18 Credits |
| Students may transfer up to 12 credits from 5000 level courses taken in this area of study; however, 24 additional credits of master's level courses would be required. Please contact your advisor for more information. | | | |
| | EDUC 6540 | Teaching K-8 Data Analysis and Problem Solving | 3 |
| | EDUC 6750 | Energy in Elementary STEM Education | 3 |
| | EDUC 6760 | Force in Elementary STEM Education | 3 |
| | EDUC 6770 | Matter in Elementary STEM Education | 3 |
| | EDUC 6780 | Science and Engineering in Elementary STEM Education | 3 |
| | EDUC 6790 | Technology and Problem-Based Learning in Elementary STEM Education | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - English as a Second Language Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education. Students who have completed the appropriate USBE endorsement through a UVU approved district endorsement program will be admitted to this endorsement emphasis. All endorsement courses must have been completed within three years of admission to the M.Ed. Endorsement Emphasis to comply with the five-year limit on acceptable coursework. UVU will accept up to 12 endorsement credits and an additional 24 credits will be earned through UVU.

**Total Program Credits: 30**

Matriculation Requirements:

1. Application for admission.
2. Bachelor degree from an accredited institution.
3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.
4. Interview with School of Education Graduate Committee.
5. Three professional letters of recommendation.

Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.
Preference will be given to practicing teachers who have access to an established classroom.

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|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |

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|---|---|---|---|
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 18 Credits |
| Students may transfer up to 12 credits from 5000 level courses taken in this area of study; however, 24 additional credits of master's level courses would be required. Please contact your advisor for more information. | | | |
| | EDUC 6340 | English as a Second Language Methods | 3 |
| | EDUC 6350 | Theories of Second Language Acquisition | 3 |
| | EDUC 6360 | Multicultural Education | 3 |
| | EDUC 6370 | Assessment of Second Language Learners | 3 |
| | EDUC 6380 | Literacy and Linguistics in English as a Second Langauge | 3 |
| | EDUC 6390 | Family and Community Involvement | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Gifted and Talented Education Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education. Students who have completed the appropriate USBE endorsement through a UVU approved district endorsement program will be admitted to this endorsement emphasis. All endorsement courses must have been completed within three years of admission to the M.Ed. Endorsement Emphasis to comply with the five-year limit on acceptable coursework. UVU will accept up to 12 endorsement credits and an additional 24 credits will be earned through UVU.

**Total Program Credits: 36**

| Matriculation Requirements: |
|---|
| 1. Application for admission.<br>2. Bachelor degree from an accredited institution.<br>3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.<br>4. Interview with School of Education Graduate Committee.<br>5. Three professional letters of recommendation. |
| Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.<br>Preference will be given to practicing teachers who have access to an established classroom. |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 24 Credits |
| | EDUC 6300 | Curriculum Design | 3 |
| | EDUC 6310 | Assessing Educational Practices | 3 |
| | EDUC 6320 | 21st Century Instruction and Assessment | 3 |
| | EDUC 6330 | Diversity and Differentiation in the Classroom | 3 |
| | Students will bring 12 credits from 5000 level courses taken in the Gifted and Talented Endorsement from approved district programs. | | 12 |
| | EDUC 6600 | High Ability Education (3) | |
| | EDUC 6610 | Social and Emotional Needs of High Ability Learners (3) | |
| | EDUC 6620 | Identification/Evaluation of High Ability Learners (3) | |
| | EDUC 6630 | Theory into Practice for High Ability Education (3) | |
| | EDUC 6635 | Methods and Materials for High Ability Learners (3) | |
| | EDUC 6640 | High Ability Curriculum and Instruction in the Content Areas (3) | |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Higher Education Leadership Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve

emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education.

**Total Program Credits: 30**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Application for admission.<br>2. Bachelor degree from an accredited institution.<br>3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.<br>4. Interview with School of Education Graduate Committee.<br>5. Three professional letters of recommendation.<br><br>Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.<br>Preference will be given to practicing teachers who have access to an established classroom. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 18 Credits |
| | EDUC 6470 | Foundations and Contexts of Higher Education | 3 |
| | EDUC 6460 | Student Success and Development | 3 |
| | EDUC 6450 | Planning-Budget-Organizational Effectiveness | 3 |
| | EDUC 6440 | Leadership in Higher Education | 3 |
| | EDUC 6430 | Law-Policy-Ethics in Higher Education | 3 |
| | EDUC 6420 | Diversity in Higher Education | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Reading I Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education. Students who have completed the appropriate USBE endorsement through a UVU approved district endorsement program will be admitted to this endorsement emphasis. All endorsement courses must have been completed within three years of admission to the M.Ed. Endorsement Emphasis to comply with the five-year limit on acceptable coursework. UVU will accept up to 12 endorsement credits and an additional 24 credits will be earned through UVU.

**Total Program Credits: 33**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Application for admission.<br>2. Bachelor degree from an accredited institution.<br>3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.<br>4. Interview with School of Education Graduate Committee.<br>5. Three professional letters of recommendation.<br><br>Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.<br>Preference will be given to practicing teachers who have access to an established classroom. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 21 Credits |
| Students may transfer up to 12 credits from 5000 level courses taken in this area of study; however, 24 additional credits of master's level courses would be required. Please contact your advisor for more information. | | | |
| | EDUC 6660 | Reading Assessments and Instructional Interventions | 3 |
| | EDUC 6661 | Literacy and Cognition of Reading | 3 |
| | EDUC 6662 | Early Literacy Instruction | 3 |
| | EDUC 6663 | Content Area Reading | 3 |
| | EDUC 6664 | Adolescent Literacy | 3 |
| | EDUC 6665 | Reading Comprehension Instruction | 3 |

| | | | |
|---|---|---|---|
| | EDUC 6666 | Effective Writing Instruction | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - School Counseling Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education.

**Total Program Credits: 51**

Matriculation Requirements:

1. Application for admission.
2. Bachelor degree from an accredited institution.
3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.
4. Interview with School of Education Graduate Committee.
5. Three professional letters of recommendation.

Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.
Preference will be given to practicing teachers who have access to an established classroom.

| Discipline Core Requirements: | | | 12 Credits |
|---|---|---|---|
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 39 Credits |
| | CMHC 6010 | Theories of Counseling | 3 |
| | CMHC 6020 | Techniques of Counseling | 3 |
| | CMHC 6070 | Group Counseling | 3 |
| | CMHC 6120 | Addiction Counseling | 3 |
| | CMHC 6140 | Program Evaluation | 3 |
| | CMHC 6160 | Human Development | 3 |
| | EDUC 6010 | ABA Concepts and Principles | 3 |
| | EDUC 6020 | Ethics and Professional Competencies in Applied Behavioral Analysis | 3 |
| | EDUC 6031 | Interventions in Schools | 3 |
| | EDUC 6032 | Career Counseling | 3 |
| | EDUC 6210 | Masters Project School Counseling Internship | 3 |
| | EDUC 6310 | Assessing Educational Practices | 3 |
| | EDUC 6330 | Diversity and Differentiation in the Classroom | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Secondary Teaching Emphasis, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education.

**Total Program Credits: 30**

Matriculation Requirements:

1. Application for admission.
2. Bachelor degree from an accredited institution.
3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.
4. Interview with School of Education Graduate Committee.
5. Three professional letters of recommendation.

Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.
Preference will be given to practicing teachers who have access to an established classroom.

| Discipline Core Requirements: | | | 12 Credits |
|---|---|---|---|
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |

| | | | |
|---|---|---|---|
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 18 Credits |
| | EDUC 6081 | Instruction, Curriculum and Educational Leadership in the Digital Age | 3 |
| | EDUC 6084 | Universal Design for Learning | 3 |
| | EDUC 6310 | Assessing Educational Practices | 3 |
| | EDUC 6320 | 21st Century Instruction and Assessment | 3 |
| | EDUC 6330 | Diversity and Differentiation in the Classroom | 3 |
| | EDUC 6663 | Content Area Reading | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Master of Education - Teacher Leadership, M.Ed.

### *Requirements*

The Master of Education Degree (M.Ed.) at Utah Valley University is an applied master's program aimed at building the instructional skills and professional competency of teachers. Currently there are twelve emphases for participants: Applied Behavioral Analysis; Educational Leadership; Educational Technology; Elementary Mathematics; Elementary STEM, English as a Second Language (ESL), Gifted and Talented Education, Higher Education Leadership, Reading I, School Counseling, Secondary Teaching and Teacher Leadership. The M.Ed. program emphasizes coursework that prepares teachers to become instructional leaders, with classes in advanced pedagogy, subject matter content, curriculum design, and assessment. Core coursework in research methods is required of participants in all options, however, students select a topic for a culminating project according to their interest or area of licensure in K-12 education.

**Total Program Credits: 30**

| Matriculation Requirements: |
|---|
| 1. Application for admission.<br>2. Bachelor degree from an accredited institution.<br>3. Overall grade point average in undergraduate work of 3.0 or higher or have a grade point average of 3.0 or higher for the last 60 semester hours of college or university credit.<br>4. Interview with School of Education Graduate Committee.<br>5. Three professional letters of recommendation.<br><br>Preference will be given to individuals who have at least one year of successful teaching experience in grades K-12. A one-year internship will count as the preferred year of successful teaching.<br>Preference will be given to practicing teachers who have access to an established classroom. |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6110 | Applied Statistics for Education | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| Emphasis Requirements: | | | 18 Credits |
| | EDUC 6300 | Curriculum Design | 3 |
| | EDUC 6310 | Assessing Educational Practices | 3 |
| | EDUC 6320 | 21st Century Instruction and Assessment | 3 |
| | EDUC 6330 | Diversity and Differentiation in the Classroom | 3 |
| | EDUC 6400 | Teachers as Leaders | 3 |
| | EDUC 6410 | Contemporary Issues | 3 |

**Graduation Requirements:**

1. Complete all courses with a grade of B- or better with an overall GPA of 3.0 or higher.
2. Graduate project proposal accepted by School of Education Graduate Committee.
3. Graduate project completed and accepted by the School of Education Graduate Committee.
4. Courses and project requirements must be finished within a five year period. No courses will apply toward graduation that are older than five years.

## Reading I, Endorsement

### *Requirements*

The Reading Endorsement Program (REP) is designed to prepare teachers to be responsive to current scientific-reading research for teaching reading and to become advocates for reading research in the educational setting. Coursework is designed to address historical and political foundations of reading education and methods and materials for engaging students in challenging educational experiences. The UVU endorsement program is intended to provide educators with an opportunity to develop, expand, and integrate their knowledge of cognition, content, pedagogy, and cultural perspectives in their curriculum. Completed program coursework qualifies students to apply to the Utah State Office of Education for an endorsement to their current Utah Teaching License. USBE Education Endorsements are provided through the school district. UVU will accept up to 12 endorsement credits to apply toward a UVU M.Ed. Emphasis program.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 21 Credits |
| | EDUC 5660 | Reading Assessments and Instructional Interventions for Practitioners (3.0) | |
| or | EDUC 6660 | Reading Assessments and Instructional Interventions | 3 |
| | EDUC 5661 | Foundations of Literacy (3.0) | |
| or | EDUC 6661 | Literacy and Cognition of Reading | 3 |
| | EDUC 5662 | Instruction with Literature and Informational Texts for Children and Young Adults (3.0) | |

| | | | |
|---|---|---|---|
| or | EDUC 6662 | Early Literacy Instruction | 3 |
| | EDUC 5663 | Content Area Reading and Writing Instruction for Practitioners (3.0) | |
| or | EDUC 6663 | Content Area Reading | 3 |
| | EDUC 5664 | Instructional Implications of Literacy Development for Practitioners (3.0) | |
| or | EDUC 6664 | Adolescent Literacy | 3 |
| | EDUC 5665 | Reading Comprehension Instruction for Practitioners (3.0) | |
| or | EDUC 6665 | Reading Comprehension Instruction | 3 |
| | EDUC 5666 | Effective Writing Instruction for Practitioners (3.0) | |
| or | EDUC 6666 | Effective Writing Instruction | 3 |

## Secondary Teaching, Graduate Certificate

### *Requirements*

The Graduate Certificate in Secondary Teaching is designed for individuals who have earned a bachelor's degree. They must have completed coursework in one of the teaching major subject areas for secondary education approved by the Utah State Board of Education (USBE) prior to admission into either program. The primary goal of the program will be to ensure that teacher candidates, through support, supervision, and evaluation, can demonstrate and apply the competencies required by the USBE for teacher licensure. Includes the basic coursework and field experiences required of all teacher candidates for an initial teaching license, ensuring that competencies in both subject knowledge and pedagogy are met.

**Total Program Credits: 29**

| Matriculation Requirements: |
|---|
| Requirements for admission to the Graduate Certificate in Secondary Teaching (GCST) program would include the following:<br><br>1. Verification of a bachelor's degree from an accredited university in a recognized content major (or with equivalent coursework) in a discipline taught in Utah secondary schools and for which UVU can recommend a secondary teaching license. Any coursework required by the Utah State Board of Education (USBE) for a content major* must be completed with a grade of C or higher prior to admission into the GCST program.<br>2. A cumulative GPA of 3.0 or a GPA of 3.0 for the last 60 credits of university coursework.<br>3. Passing scores from the Praxis II [subject-area test(s)] as required by the USBE.<br>4. Successful completion of a background check through USBE.<br><br>* Students will have completed a content-specific methods course prior to admission into the program. These courses are not offered in the School of Education, but in the appropriate content areas across the University. The following courses would be examples.<br><br>• ART 3500 Secondary Art Education Methods I WE (1.0)<br>• ART 3510 Secondary Art Education Methods II WE(3.0)<br>• ENGL 4210 Methods in Teaching Literacy I (3.0)<br>• ENGL 4220 Methods in Teaching Literacy II (3.0)<br>• ENGL 4230 Methods in Teaching Literacy III Teaching the Conventions of Writing (3.0)<br>• GEO 4200 Teaching Methods in Science (3.0)<br>• PHYS 4200 Teaching Methods in Science (3.0)<br>• CHEM 4200 Teaching Methods in Science (3.0)<br>• BIOL 4200 Teaching Methods in Science (3.0)<br>• LANG 4200 Methods of Teaching a Foreign Language (3.0) |

| Discipline Core Requirements: | | | 29 Credits |
|---|---|---|---|
| | EDUC 6201 | Teacher Performance Assessment Project | 2 |
| | EDUC 6202 | Classroom Management Practicum | 3 |
| | EDUC 6203 | Student Teaching Graduate Licensure | 6 |
| | EDUC 6320 | 21st Century Instruction and Assessment | 3 |
| | EDUC 6330 | Diversity and Differentiation in the Classroom | 3 |
| | EDUC 6310 | Assessing Educational Practices | 3 |
| | EDUC 6663 | Content Area Reading | 3 |
| | EDUC 6081 | Instruction, Curriculum and Educational Leadership in the Digital Age | 3 |
| | EDUC 6084 | Universal Design for Learning | 3 |

**Graduation Requirements:**

1. Completion of all required coursework, with a grade of B- or better.
2. Completion of the Teacher Performance Assessment, with a score of 42 or better.
3. Successful completion of student teaching or internship hours.
4. Residency hours -- minimum of 20 credit hours through course attendance at UVU.

# Elementary Education

## Elementary Education

The Elementary Education department is in the School of Education. To find the most up-to-date information from the Elementary Education department, visit their website.

Elementary Education department

**DEPARTMENT CHAIR**

**TUFT, Elaine** *Professor*

**FACULTY**

**BRANDT, Lorilynn B.** *Associate Professor*
**BYRD, Elaine H.** *Professor*
**DISNEY, Andria R.** *Assistant Professor*
**ESCALANTE, Debora L.** *Associate Professor*
**GEARING, Nicole** *Assistant Professor*
**GOODMAN, Andrew** *Assistant Professor*
**KANG, Mi Ok** *Associate Professor*
**MEASOM, Keri** *Lecturer*
**PATCH, Michael** *Associate Professor*
**PETERSON, Nancy L.** *Professor*
**RUGGLES, Krista** *Assistant Professor*
**SERMON, Tracy** *Sr. Lecturer*
**SHARP, Ann C.** *Associate Professor*
**TUFT, Elaine** *Professor*
**WATERS, Sandie** *Associate Professor*

# Course Descriptions

Edu Child and Family Studies....584
Edu Early Childhood Education....587
Edu Elementary Education....588

# Degrees & Programs

## Early Childhood Education, A.S.

### *Requirements*

Individuals who earn an Associate Degree In Early Childhood Education are prepared to teach preschool in private and corporate centers, Head Start, and public education tuition preschools, or work as center directors. The Associate Degree in Early Childhood can be planned to fill the majority of the requirements for entry into the Elementary Education Program. The UVU Early Childhood Education program is accredited by the Northwest Commission on Colleges and Universities. The UVU Teacher Education Preschool is accredited by the National Association for the Education of Young Children.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 2000 | Algebraic Reasoning with Modeling (3.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 2900 | Health Education for Elementary Teachers | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | PSY 1100 | Human Development Life Span ("C" grade or higher) | 3 |
| Discipline Core Requirements: | | | 25 Credits |
| | EDEC 1640 | Childrens Music and Movement | 2 |
| | EDEL 2200 | Computer Technology in Education | 2 |
| | EDEC 2300 | Including Young Diverse Learners | 2 |
| | EDEC 2500 | Child Development Birth to Eight Years | 3 |
| | EDEC 2600 | Introduction to Early Childhood Education | 2 |
| | EDEC 2610 | Child Guidance | 3 |
| | EDEC 2620 | Early Childhood Curriculum | 3 |
| | EDEC 2630 | Literacy and Literature for Early Childhood | 3 |
| | EDEC 2700 | Early Childhood Practicum | 3 |
| | EDEC 2720 | Early Childhood Assessment | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. C- grade or higher in all program classes unless otherwise specified.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. First aid/CPR certification, food handler's permit, portfolio review and acceptance by Education Committee

## Pre-Elementary Education, A.S.

### *Requirements*

Prepares students for matriculation into the Bachelor of Science Professional Elementary Education program.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4.0) * | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) * | |
| | MATH 2000 | Algebraic Reasoning with Modeling (3) * | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 2900 | Health Education for Elementary Teachers | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | PSY 1100 | Human Development Life Span (Social/Behavioral Science) | 3 |
| | Fine Arts Distribution: | | 3 |
| | ART 2100 | Teaching Art for Children (3.0) | |
| | DANC 2100 | Teaching Dance for Children (3.0) | |
| | MUSC 2100 | Teaching Music for Children (3.0) | |
| | THEA 2100 | Teaching Theatre For Children (3.0) | |
| Discipline Core Requirements: | | | 15 Credits |
| Complete the following: | | | |
| | EDEL 1010 | Introduction to Education ** | 2 |
| | EDEL 2200 | Computer Technology in Education ** | 2 |
| | EDEL 2330 | Children's Literature ** | 3 |
| | MATH 2010 | Mathematics for Elementary Teachers I * | 3 |
| | MATH 2020 | Mathematics for Elementary Teachers II * | 3 |
| | PETE 2150 | Elementary Physical Education SPARK Method ** | 2 |
| Elective Requirements: | | | 10 Credits |
| Complete 10 credits of course 1000 or higher. The following is a list of recommended courses to choose from: | | | 10 |
| | ART 2100 | Teaching Art for Children (3.0) | |
| | DANC 2100 | Teaching Dance for Children (3.0) | |
| | MUSC 2100 | Teaching Music for Children (3.0) | |
| | THEA 2100 | Teaching Theatre For Children (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

| Footnotes | | |
|---|---|---|
| * Must be completed with a C grade or higher. | | |
| ** Must be completed with a B- grade or higher. | | |

## Early Care and Education, Certificate of Completion

### *Requirements*

This certificate is for students interested in increasing their skills in working with children in child care and preschool programs. Individuals are prepared to work as technicians in public education classrooms and as teacher aides in private centers or Head Start.

**Total Program Credits: 30**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 28 Credits |
| Complete the following courses:* | | | |
| | PSY 1100 | Human Development Life Span (C grade or higher)** | 3 |
| | EDEC 1640 | Childrens Music and Movement | 2 |
| | EDEC 2300 | Including Young Diverse Learners*** | 2 |
| or | EDSP 340G | Exceptional Students (2.0) | |
| | EDEC 2500 | Child Development Birth to Eight Years*** | 3 |
| | EDEC 2600 | Introduction to Early Childhood Education**** | 2 |
| | EDEC 2610 | Child Guidance | 3 |
| | EDEC 2620 | Early Childhood Curriculum | 3 |
| | EDEC 2630 | Literacy and Literature for Early Childhood | 3 |
| | EDEC 2700 | Early Childhood Practicum | 3 |
| | EDEC 2720 | Early Childhood Assessment | 2 |
| | EDEL 2200 | Computer Technology in Education | 2 |

| | | |
|---|---|---|
| Elective Requirements: | | 2 Credits |
| | Advisor Approval | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 30 semester credits.
2. Overall grade point average of 2.0 (C) or above. C- grade or higher in all program courses unless otherwise specified.
3. Residency hours -- minimum of 10 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. First aid/CPR certification, food handler's permit, portfolio review and acceptance by Education Committee.

| footnotes |
|---|
| *ACT 21+ or ENGH 1005 or ENGL 1010 with a C- grade or higher except for PSY 1100, EDEC 1640, and EDEL 2200 |
| **This course must be taken before EDEC 2300 and EDEC 2500 |
| ***PSY 1100 is a prerequisite for these courses |
| ****Must receive a B- grade or higher in this course prior to enrolling in EDEC 2700 and EDEC 2720 |

## Elementary Education, B.S.

### *Requirements*

The Professional Elementary Teacher Education Program at Utah Valley University is designed to prepare quality, entry level candidates for teaching in elementary education programs grades K-6. Students successfully completing the UVU professional teacher education program graduation and licensure requirements receive a baccalaureate degree in Elementary Education and a Level I Utah Professional Teaching License. To continue in the teacher education program, students are expected to maintain all program standards. They must maintain expected levels of competence in all coursework, field work, and student teaching with all course grades at or above a B- and a program GPA of 3.00 or higher. Additionally, teacher candidates are expected to adhere to standards of personal integrity, responsibility, and citizenship commonly expected of professional educators. The UVU teacher education program is accredited by the Association for Advancing Quality in Educator Preparation (AAQEP), the Utah State Office of Education, and the Northwest Commission on Colleges and Universities.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Admissions Requirements:<br>1. Reading-Praxis 5001 passing score for Language Arts: 157; Social Studies: 155; Science: 159<br>2. Writing-English 2010 pass with C or higher<br>3. Mathematics-Praxis 5001 passing score for Mathematics: 157<br>4. GPA of 3.0 or higher<br>5. General Education and Pre-program coursework<br>6. Grade of B- or higher in pre-program courses (Math courses C or higher)<br>7. Pass LiveScan Criminal Background Check | | | |
| General Education Requirements: | | | 35 Credits |
| General Education courses:* | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: *** | | | 3 |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 2000 | Algebraic Reasoning with Modeling (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 2900 | Health Education for Elementary Teachers | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution: | | 3 |
| | ART 2100 | Teaching Art for Children (3.0) | |
| | DANC 2100 | Teaching Dance for Children (3.0) | |
| | MUSC 2100 | Teaching Music for Children (3.0) | |
| | THEA 2100 | Teaching Theatre For Children (3.0) | |
| | PSY 1100 | Human Development Life Span*** | 3 |
| Discipline Core Requirements: | | | 75 Credits |
| Pre-Professional Core Requirements: * | | | |
| | EDEL 1010 | Introduction to Education ** | 2 |
| | EDEL 2200 | Computer Technology in Education ** | 2 |
| | EDEL 2330 | Childrens Literature ** | 3 |
| | MATH 2010 | Mathematics for Elementary Teachers I *** | 3 |
| | MATH 2020 | Mathematics for Elementary Teachers II *** | 3 |
| | PETE 2150 | Elementary Physical Education SPARK Method ** | 2 |
| Professional Education Core Requirements:** | | | |
| | EDEL 3000 | Educational Psychology | 3 |
| | EDEL 3100 | Kindergarten Classroom | 2 |
| | EDEL 3250 | Instructional Media | 2 |
| | EDEL 330G | Multicultural Understanding | 3 |
| | EDSP 340G | Exceptional Students ** | 2 |
| | EDEL 3350 | Curriculum Design and Assessment | 3 |
| | EDEL 4200 | Classroom Management I | 1 |

| | | | |
|---|---|---|---|
| | EDEL 4210 | Classroom Management II | 1 |
| | EDEL 4230 | Classroom Management III | 1 |
| | EDEL 4240 | Classroom Management IV | 1 |
| | EDEL 4400 | Literacy Methods I | 3 |
| | EDEL 4410 | Literacy Methods II WE | 3 |
| | EDEL 4420 | Language Arts Methods | 3 |
| | EDEL 443G | Teaching English as a Second Language WE | 3 |
| | EDEL 4510 | Elementary Math Methods I | 3 |
| | EDEL 4520 | Elementary Science Methods | 3 |
| | EDEL 4530 | Elementary Social Studies Methods | 3 |
| | EDEL 4540 | Elementary Creative Arts Methods | 3 |
| | EDEL 4550 | Elementary Math Methods II | 3 |
| | EDEL 4620 | Differentiation for Special Populations | 2 |
| | EDEL 4880 | Student Teaching--Grades K-6 | 9 |
| | EDEL 4980 | Elementary Education Capstone Seminar | 1 |
| | EDEL 4990 | Teacher Performance Assessment Project | 2 |
| Elective Requirements: | | | 10 Credits |
| Complete additional credits to meet requirements | | | 10 |
| Recommended elective courses: | | | |
| | ART 2100 | Teaching Art for Children (3.0) | |
| | DANC 2100 | Teaching Dance for Children (3.0) | |
| | MUSC 2100 | Teaching Music for Children (3.0) | |
| | THEA 2100 | Teaching Theatre For Children (3.0) | |
| | SLSS 120R | Testing Strategies for Educators (1.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 3.0 or above.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Application forms are available at the beginning of each Spring semester, must be completed by March 1st, and can be obtained in the Education Department, 801-863-8527.

| Footnotes |
|---|
| * Students must complete all Pre-Professional and General Education courses with an overall GPA of 3.0 before they are formally admitted into the Teacher Preparation Program. |
| ** Must be completed with a grade of B- or higher. |
| *** Course requires a C grade or higher |

# Emergency Services

## Emergency Services

The Emergency Services department is in the College of Health and Public Services. To find the most up-to-date information from the Emergency Services department, visit their website.

Emergency Services department

**DEPARTMENT CHAIR**

**NOLL, Gary B.** *Professor*

**FACULTY**

**ALLRED, Steven** *Associate Professor*
**BERGE, Nichole** *Lecturer*
**BROOME, Rodger** *Associate Professor*
**BYRNES, Andrew** *Professor*
**FISHER, John** *Professor*
**HOLLEY, Steve** *Assistant Professor*
**LINDQUIST, Chris** *Assistant Professor*
**MAXFIELD, Jeff** *Professor*
**MCCARTHY, Kevin P.** *Assistant Professor*
**MCENTIRE, David** *Professor*
**MITTELMAN, Margaret A.** *Professor*
**NOLL, Gary B.** *Professor*
**RUSSELL, Eric James** *Associate Professor*

## Course Descriptions


Emergency Services....623
Emerg Serv Aircraft Resc FF....621
Emergency Services Emerg Care....621
Emergency Services FireFighter....624
Emergency Services FireOfficer....625
Emergency Services Emerg Mgmt....629
Emergency Services WildInd FF....631


## Degrees & Programs

### Emergency Services - Fire Officer Emphasis, A.A.S.

#### *Requirements*

Our degree provides our students with the knowledge, skills, and abilities to assist them in obtaining a job in Emergency Services, or if already employed, to give them the knowledge, skills, and abilities to advance in their careers.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ESFO 1350 | Fire Protection Hydraulics and Water Supply (3) | 3 |
| or | MAT 1010 | Intermediate Algebra (4) | |
| or | MAT 1000 | Integrated Beginning and Intermediate Algebra (5) | |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course (COMM 1020 and COMM 1025 Recommended) | | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course (PSY 1010 or SOC 1010 Recommended) | | 3 |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety or Environment Course (PES 1097 recommended) | | 1 |
| Discipline Core Requirements: | | | 16 Credits |
| | ESEC 1140 | Emergency Medical Technician--Basic (9) | 9 |
| or | ESEC 114A | Emergency Medical Technician-Part I (3) | |
| and | ESEC 114B | Emergency Medical Technician-Part II (4) | |
| and | ESEC 114C | Emergency Medical Technician-Part III (2) | |
| | ESFF 1000 | Introduction to Emergency Services and Ability Testing | 4 |
| | ESFF 2100 | Introduction to Emergency Services Leadership | 3 |
| Emphasis Requirements: | | | 15 Credits |
| Choose 15 credits from the following: | | | 15 |
| | ESFO 1100 | Fire Behavior and Combustion (3) | |
| | ESFO 1110 | Fire Prevention (3) | |
| | ESFF 1120 | Principles of Fire and Emergency Services Safety and Survival (3) | |
| | ESFO 1350 | Fire Protection Hydraulics and Water Supply (3) | |
| | ESFO 2030 | Fire Inspector I (3) | |
| | ESFO 2050 | Fire Protection and Detection Systems (3) | |
| | ESFO 2080 | Building Construction for the Fire Services (3) | |
| | ESFO 2100 | Fire Officer I: Supervision and Leadership (3) | |
| | ESFO 2310 | Fire Investigator I (3) | |
| Emphasis Elective Requirements: | | | 16 Credits |
| | Any Emergency Services or related advisor approved courses | | 16 |

Graduation Requirements:

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

### Emergency Services - Firefighter/Emergency Care Emphasis, A.A.S.

#### *Requirements*

Our degree provides our students with the knowledge, skills, and abilities to assist them in obtaining a job in Emergency Services, or if

already employed, to give them the knowledge, skills, and abilities to advance in their careers.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ESFO 1350 | Fire Protection Hydraulics and Water Supply (3.0) | 3 |
| or | MAT 1010 | Intermediate Algebra (4.0) | |
| or | MAT 1000 | Integrated Beginning and Intermediate Algebra (5.0) | |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course (COMM 1020 and COMM 1025 Recommended) | | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course (PSY 1010 or SOC 1010 Recommended) | | 3 |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety or Environment Course (PES 1097 recommended) | | 1 |
| Discipline Core Requirements: | | | 16 Credits |
| | ESEC 1140 | Emergency Medical Technician--Basic (9.0) | 9 |
| or | ESEC 114A | Emergency Medical Technician-Part I (3.0) | |
| and | ESEC 114B | Emergency Medical Technician-Part II (4.0) | |
| and | ESEC 114C | Emergency Medical Technician-Part III (2.0) | |
| | ESFF 1000 | Introduction to Emergency Services and Ability Testing (4.0) | 4 |
| | ESFF 2100 | Introduction to Emergency Services Leadership (3.0) | 3 |
| Emphasis Requirements: | | | 31 Credits |
| | Any ESEC, ESMG, ES, ESFO, ESFF, ESAF, CJ, NSS, FSCI, MILS, courses | | 31 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

NOTE: Upon completion, students are eligible to apply for certification as a Paramedic through the National Registry of EMT's and the Utah Bureau of Emergency Medical Services.

## Emergency Services, A.S.

### *Requirements*

Our degree provides our students with the knowledge, skills, and abilities to assist them in obtaining a job in Emergency Services, or if already employed, to give them the knowledge, skills, and abilities to advance in their careers.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| Complete the following: | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government 3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 25 Credits |
| | ESFF 1000 | Introduction to Emergency Services and Ability Testing | 4 |
| or | ESFF 100A | Introduction to Emergency Services (3.0) | |
| and | ESFF 100B | Firefighter Physical Ability Testing (1.0) | |

| | | | |
|---|---|---|---|
| or | Sufficient Emergency Services work experience | | |
| | ESFF 2100 | Introduction to Emergency Services Leadership | 3 |
| | Any Emergency Services advisor approved courses | | 18 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Wildland Fire Management, A.A.S.

### *Requirements*

Our degree provides our students with the knowledge, skills, and abilities to assist them in obtaining a job in Wildland Firefighting, or if already employed, to give them the knowledge, skills, and abilities to advance in their careers.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ESFO 1350 | Fire Protection Hydraulics and Water Supply | 3 |
| or | MAT 1010 | Intermediate Algebra (4) | |
| or | MAT 1000 | Integrated Beginning and Intermediate Algebra (5) | |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 3 |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety or Environment Course (PES 1097 recommended) | | 1 |
| Discipline Core Requirements: | | | 6 Credits |
| | ESWF 1310 | S131 Wildland Firefighter Type I | 0.5 |
| | ESWF 1330 | Look Up Look Down Look Around | 0.5 |
| | ESWF 1400 | Wildland Firefighting Fundamentals | 4 |
| | ESWF 2010 | Basic Incident Command System for Initial Response | 1 |
| Elective Requirements: | | | 41 Credits |
| | Choose 12 credits from the following course list. | | 12 |
| | ESWF 1410 | Wildland Firefighter Internship I (5) | |
| | ESWF 1420 | Wildland Firefighter Internship II (5) | |
| | ESWF 2000 | S200 Initial Attack Incident Commander Type IV (1) | |
| | ESWF 2110 | S211 Portable Pumps and Water Use (1.5) | |
| | ESWF 2150 | S215 Fire Operations in the Wildland Urban Interface (2) | |
| | ESWF 2212 | S212 Chain Saw Use in Wildland Fire Operations (2) | |
| | ESWF 2231 | S231 Wildland Fire Engine Boss (1) | |
| | ESWF 2236 | S236 Heavy Equipment Boss (2) | |
| | ESWF 2244 | S244 Field Observer (2) | |
| | ESWF 2261 | S261 Applied Interagency Incident Business Management (1) | |
| | ESWF 2301 | S230 Crew Boss Single Resource (2) | |
| | ESWF 2340 | Firing Operations (2) | |
| | ESWF 2430 | Wildland Firefighter Internship III (5) | |
| | ESWF 2600 | S260 Interagency Incident Business Management (1) | |
| | ESWF 2700 | S270 Basic Air Operations (1) | |
| | ESWF 2800 | L280 Followership to Leadership (1) | |
| | ESWF 2900 | S290 Intermediate Wildland Fire Behavior (2) | |
| | Choose Any ESWF, ESMG, ESEC, or ESFF courses | | 29 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Completion of all core and elective courses with a C- grade or higher.
4. Residency hours -- minimum of 20 credit hours earned through course attendance at UVU.
5. Completion of GE and specified departmental requirements.

## Firefighter Recruit Candidate, Certificate of Completion

### *Requirements*

Our degree provides our students with the knowledge, skills, and abilities to assist them in obtaining a job in Emergency Services, or if already employed, to give them the knowledge, skills, and abilities to advance in their careers.

**Total Program Credits: 32**

| Matriculation Requirements: |
|---|
| 1. Must be admitted to UVU<br>2. Complete pre-requisites of ESFF 1000 and ESFF 1120 with a grade of C- or higher<br>3. Be NREMT certified or complete an EMT course through UVU or another recognized agency/institution<br>4. Demonstrate competency in English and Math (by one of the following: ACT, SAT, High School Transcript, College Level courses, degrees, and/or RCA entrance exam.)<br>5. Be at least 18 years of age before class starts<br>6. Have any valid form of Government Issue Photo Identification (Driver's license, State ID or Passport)<br>7. Complete online application found at www.uvu.edu/es/rca |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 32 Credits |
| Complete the following: | | | |
| | ESEC 1140 | Emergency Medical Technician--Basic | 9 |
| | ESFF 1000 | Introduction to Emergency Services and Ability Testing | 4 |
| | ESFF 1120 | Principles of Fire and Emergency Services Safety and Survival | 3 |

| | | | |
|---|---|---|---|
| | ESFF 250A | Firefighter Recruit Candidate Academy I | 8 |
| | ESFF 250B | Firefighter Recruit Candidate Academy II | 8 |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above, with completion of each Emergency Services class with a C- or higher.
2. Completion of a minimum of 32 credits.
3. Residency hours -- Minimum of 10 credits required through course attendance at UVU.

Note: CERTIFICATION: Upon completion of courses for the Basic Recruit Certificate, students are eligible to apply for certification at the Firefighter I, Firefighter II, Hazardous Materials First Responder-Awareness and Hazardous Materials First Responder-Operations levels through the Utah Fire Science Certification System. Students are also eligible for certification at the Emergency Medical Technician-Basic level through the Utah Bureau of Emergency Medical Services.

## Paramedic, Certificate of Completion

### *Requirements*

Our degree provides our students with the knowledge, skills and abilities to assist them in obtaining a job in Emergency Services, or if already employed, to give them the knowledge, skills and abilities to advance in their careers.

**Total Program Credits: 31**

Matriculation Requirements:

1. Complete Anatomy and Physiology (transfer credit accepted) with a grade of C or higher: ZOOL 1090 (requires BIOL 1010 as a pre-req) or ZOOL 2320 and 2420 with labs (requires BIOL 1610 and CHEM 1110 as pre-req).
2. Meet the English requirement: Placement into ENGL 1010 or ENGH 1005 or higher with valid test scores, (Completion of ENGL 1010 or ENGH 1005 highly recommended).
3. Meet the Math requirement: Completion of MAT 0950 with a grade of C- or higher, or placement into MAT 1000 or higher valid test scores, (Completion of QL Requirement highly recommended).
4. Possess a current Utah EMT certification (MUST REMAIN VALID THROUGH THE COURSE)
5. Have current CPR certification.
6. Successful completion of criminal background requirements (UVU and State of Utah Bureau of Emergency Medical Services).
7. Be at least 18 years old and have a valid driver's license.
8. Have current vaccinations as required by Utah Bureau of EMS. (Additional vaccinations may be required for clinical site internships)
9. Have current TB test results as required by Utah Bureau of EMS.
10. Obtain a current physical examination supporting entrance into the Paramedic Program.
11. Complete UVU paramedic application process, including written testing, oral interview, passing of background and drug screening \testing, and be accepted to the program.

| Discipline Core Requirements: | | | 31 Credits |
|---|---|---|---|
| | ESEC 3210 | Paramedic I-Operations | 3 |
| | ESEC 3220 | Paramedic II-Cardiac and Respiratory Patient Care | 3 |
| | ESEC 3225 | Paramedic II Lab-Cardiac and Respiratory Emergencies | 1 |
| | ESEC 3230 | Paramedic III-Trauma Patient Care | 3 |
| | ESEC 3235 | Paramedic III Lab-Trauma Emergencies | 1 |
| | ESEC 3240 | Paramedic IV-Medical and Geriatric Patient Care | 3 |
| | ESEC 3245 | Paramedic IV Lab-Medical Emergencies | 1 |
| | ESEC 3250 | Paramedic V-Obstetric and Pediatric Patient Care | 3 |
| | ESEC 3255 | Paramedic V Lab-Obstetric and Pediatric Emergencies | 1 |
| | ESEC 4210 | Paramedic VI-Research | 2 |
| | ESEC 4220 | Paramedic VII-Clinical Internship Hospital and Field Phase I and II | 4 |
| | ESEC 4230 | Paramedic VIII-Practical Preparation and Testing | 3 |
| | ESEC 4240 | Paramedic Capstone | 3 |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.) Upon completion of the course requirements and recommendation from the Medical Director, Program Director and Utah Bureau of Emergency Services Course Coordinator, students are eligible to apply for certification as an Emergency Medical Technician/Paramedic through the National Registry EMT and the Utah Bureau of Emergency Medical Services.
2. Completion of a minimum of 31 credits.
3. Overall course GPA of 2.7 or higher.
4. Residency hours -- Minimum of 10 credits required through course attendance at UVU.

## Emergency Services Administration - Emergency Care Emphasis, B.S.

### *Requirements*

A degree in emergency services prepares practicing and future emergency service professionals through a program that balances technical skills, critical and ethical thinking, leadership, and effective communication. The department's programs address multiple emergency service educational needs, from professional certifications to degrees.

**Total Program Credits: 126**

| General Education Requirements: | | | 35 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |

| | | | |
|---|---|---|---|
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science ( ES 1150 Community Emergency Preparedness recommended) | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | ESFF 2100 | Introduction to Emergency Services Leadership | 3 |
| | ESMG 310G | Introduction to Homeland Security | 3 |
| | ESMG 3150 | Principles of Management for the Emergency Services | 3 |
| | ESMG 3600 | Psychology of Emergency Services | 3 |
| | ESMG 4600 | Public Administration for the Emergency Services | 3 |
| | ESMG 4650 | Emergency Services Capstone WE | 3 |
| Elective Requirements: | | | 42 Credits |
| | Complete any Emergency Services or related advisor approved courses | | 18 |
| | Any courses 1000 or higher | | 24 |
| Emphasis Requirements: | | | 31 Credits |
| Choose one of the following two options for 31 credits: | | | 31 |
| Must be accepted into Paramedic Program to take the following courses: | | | |
| | ESEC 3210 | Paramedic I-Operations | |
| | ESEC 3220 | Paramedic II-Cardiac and Respiratory Patient Care | |
| | ESEC 3225 | Paramedic II Lab-Cardiac and Respiratory Emergencies | |
| | ESEC 3230 | Paramedic III-Trauma Patient Care | |
| | ESEC 3235 | Paramedic III Lab-Trauma Emergencies | |
| | ESEC 3240 | Paramedic IV-Medical and Geriatric Patient Care | |
| | ESEC 3245 | Paramedic IV Lab-Medical Emergencies | |
| | ESEC 3250 | Paramedic V-Obstetric and Pediatric Patient Care | |
| | ESEC 3255 | Paramedic V Lab-Obstetric and Pediatric Emergencies | |
| | ESEC 4210 | Paramedic VI-Research | |
| | ESEC 4220 | Paramedic VII-Clinical Internship Hospital and Field Phase I and II | |
| | ESEC 4230 | Paramedic VIII-Practical Preparation and Testing | |
| | ESEC 4240 | Paramedic Capstone | |
| Paramedic transfer credit and certification must be accepted for this option: | | | |
| | ESMG 481R | Emergency Services Internship (1) 1 | |
| | ESMG 491R | Topics in Cardiology and Medical Trends (1.0) 2 | |
| | ESMG 492R | Topics in Trauma and Pharmacology (1) 3 | |
| | ESMG 493R | Topics in Medical Litigation (1) 4 | |

**Graduation Requirements:**

1. Completion of a minimum of 126 semester credits.
2. Overall grade point average of 2.0 (C) or above, with completion of each Emergency Services class with a "C-" or higher.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

| Footnotes: |
|---|
| 1-Repeatable for a maximum of 15 credits. |
| 2-Repeatable for a maximum of 6 credits. |
| 3-Repeatable for a maximum of 6 credits. |
| 4-Repeatable for a maximum of 4 credits. |

## Emergency Services Administration - Emergency Leadership Emphasis, B.S.

### *Requirements*

A degree in emergency services prepares practicing and future emergency service professionals through a program that balances technical skills, critical and ethical thinking, leadership, and effective communication. The department's programs address multiple emergency service educational needs, from professional certifications to degrees.

**Total Program Credits: 120**

| General Education Requirements: | | | 35 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |

| | | | |
|---|---|---|---|
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science ( ES 1150 Community Emergency Preparedness recommended) | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | ESFF 2100 | Introduction to Emergency Services Leadership | 3 |
| | ESMG 310G | Introduction to Homeland Security | 3 |
| | ESMG 3150 | Principles of Management for the Emergency Services | 3 |
| | ESMG 3600 | Psychology of Emergency Services | 3 |
| | ESMG 4600 | Public Administration for the Emergency Services | 3 |
| | ESMG 4650 | Emergency Services Capstone WE | 3 |
| Elective Requirements: | | | 42 Credits |
| Complete any Emergency Services or related advisor approved courses | | | 18 |
| Any courses 1000 or higher | | | 24 |
| Emphasis Requirements: | | | 25 Credits |
| Complete 25 credits from the following: | | | 25 |
| | ESMG 3200 | Health and Safety Program Management (3) | |
| | ESMG 3250 | Managing Emergency Medical Services (3) | |
| | ESMG 3300 | Master Planning for Public Emergency Services (3) | |
| | ESMG 3350 | Analytical Research Approaches to Public Emergency Services (3) | |
| | ESMG 4000 | Advanced Emergency Services Leadership (4) | |
| | ESMG 4400 | Legal Considerations for the Emergency Services (3) | |
| | ESMG 445G | Human Factors in Emergency Management (3) | |
| | ESMG 4500 | Customer Service and Marketing for the Emergency Services (3) | |
| | ESMG 489R | Special Topics in Emergency Management (1)[1] | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above, with completion of each Emergency Services class with a "C-" or higher.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| 1-May be repeated for a maximum of 6 credits |

## Emergency Services Administration - Emergency Management and Disaster Assistance Emphasis, B.S.

### *Requirements*

The Emergency Management and Disaster Assistance emphasis is designed to meet the needs of students aspiring for a career in emergency management and/or disaster assistance at the local, regional, state, or national level.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |

| | | | |
|---|---|---|---|
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science (ES 1150 Community Emergency Preparedness recommended) | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | ESFF 2100 | Introduction to Emergency Services Leadership | 3 |
| | ESMG 310G | Introduction to Homeland Security | 3 |
| | ESMG 3150 | Principles of Management for the Emergency Services | 3 |
| | ESMG 3600 | Psychology of Emergency Services | 3 |
| | ESMG 4600 | Public Administration for the Emergency Services | 3 |
| | ESMG 4650 | Emergency Services Capstone WE | 3 |
| Elective Requirements: | | | 42 Credits |
| | Complete any Emergency Services or related advisor approved courses | | 18 |
| | Any courses 1000 or higher | | 24 |
| Emphasis Requirements: | | | 25 Credits |
| Complete 25 credits from the following: | | | 25 |
| | ESMG 3350 | Analytical Research Approaches to Public Emergency Services (3) | |
| | ESMG 3400 | Critical Infrastructure Protection (3) | |
| | ESMG 3710 | Comparative Approaches to Homeland Security (3) | |
| | ESMG 4000 | Advanced Emergency Services Leadership (4) | |
| | ESMG 4150 | Humanitarian Services and Disaster Relief (3) | |
| | ESMG 4200 | Disaster Response and the Public (3) | |
| | ESMG 425G | Crisis and Disaster Management (3) | |
| | ESMG 4300 | Disaster Recovery and Mitigation (3) | |
| | ESMG 445G | Human Factors in Emergency Management (3) | |
| | ESMG 4500 | Customer Service and Marketing for the Emergency Services (3) | |
| | ESMG 4550 | Principles of Disaster and Emergency Management (3) | |
| | ESMG 481R | Emergency Services Internship (3)[1] | |
| | ESMG 489R | Special Topics in Emergency Management (3)[1] | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above, with completion of each Emergency Services class with a "C-" or higher.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| [1]May be repeated for a maximum of 6 credits |

# Engineering

## Engineering

The Engineering department is in the College of Engineering & Technology. To find the most up-to-date information from the Engineering department, visit their website.

Engineering department

**DEPARTMENT CHAIR**

**MINAIE, Afsaneh** *Professor*

**FACULTY**

**AMIN, Masood** *Associate Professor*
**BALLARD, Matthew** *Assistant Professor*
**BORDELON, Amanda C.** *Associate Professor*
**COX, James** *Associate Professor*
**JENSEN, Matthew J.** *Assistant Professor*
**MANAHILOH, Kalehiwot** *Assistant Professor*
**MASOUM, Mohammad A.S.** *Associate Professor*
**MINAIE, Afsaneh** *Professor*
**NARDIN, Mark** *Assistant Professor*
**ROHANI, Ehsan** *Assistant Professor*
**SCHWANI, Mohamed** *Lecturer*
**SEIBI, Abdennour** *Associate Professor*
**SHAABAN, Khaled** *Associate Professor*
**SHEIKH, Waseem Ahmad** *Associate Professor*
**SHEKARAMIZ, Mohammad** *Assistant Professor*
**STONE, Brett** *Lecturer*
**TOLMAN, Sean** *Associate Professor*
**WILLARDSON, Bennington** *Assistant Professor*

## Course Descriptions

Civil Engineering.....531
Electrical Comp Engineering.....581
Engineering.....617
Mechanical Engineering.....700

## Degrees & Programs

### Associate in Pre-Engineering - Biological and Chemical Engineering Emphasis, A.P.E.

#### *Requirements*

The pre-engineering program at UVU has been created for students who plan to complete the first two to three years of their engineering education at UVU and then transfer to a baccalaureate university to complete their engineering degree. With adequate planning, pre-engineering coursework completed at UVU will transfer to all of the Utah universities with baccalaureate engineering degrees. All students who declare pre-engineering as their major are automatically accepted into pre-engineering status. After completion of the pre-engineering program at UVU, the student applies for professional status at an institution of the student's choice.

**Total Program Credits: 69**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 28 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete the following Natural and Physical Science courses: | | | |
| | Biology | | 3 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| Complete any combination of the following with no more than 1 course each from Humanities, Fine Arts, and Social/Behavioral Science: | | | 6 |
| | Humanities (from list) | | |
| | Fine Arts (from list) | | |
| | Social/Behavioral Sciences (from list) | | |
| Complete any American Institutions course: | | | 3 |
| | POLS 1000 | American Heritage (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1100 | American National Government (3) | |
| Discipline Core Requirements: | | | 18 Credits |
| | MATH 1210 | Calculus I | 5 |
| | MATH 1220 | Calculus II | 5 |
| | ENGR 1030 | Engineering Programming | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| Emphasis Requirements: | | | 5 Credits |
| | CHEM 1220 | Principles of Chemistry II | 4 |
| | CHEM 1225 | Principles of Chemistry II Laboratory | 1 |
| Emphasis Elective Requirements: | | | 18 Credits |
| Students should carefully select electives from the following list, based on the engineering discipline (Biological or Chemical) they are interested in and the college or university they want to attend to finish their BS degree. See your advisor. | | | 18 |
| | BIOL 1610 | College Biology I (4) | |
| | BIOL 1615 | College Biology I Laboratory (1) | |
| | BIOL 1620 | College Biology II (3) | |
| | BIOL 1625 | College Biology II Laboratory (1) | |
| | BIOL 3400 | Cell Biology (3) | |
| | CHEM 2310 | Organic Chemistry I (4) | |
| | CHEM 2315 | Organic Chemistry I Laboratory (1) | |
| | CHEM 2320 | Organic Chemistry II (4) | |

| | | | |
|---|---|---|---|
| | CHEM 2325 | Organic Chemistry II Laboratory (1) | |
| | ECE 1000 | Introduction to Electrical and omputer Engineering (3) | |
| | CS 1400 | Fundamentals of Programming (3) | |
| | ENGR 1000 | Introduction to Engineering WE (3) | |
| | ENGR 1020 | Survey of Engineering (1) | |
| | ENGR 2160 | Introduction to Materials Science and Engineering (3) | |
| | ENGR 2300 | Engineering Thermodynamics (3) | |
| | ENGR 2450 | Computational Methods for Engineering Analysis (3) | |
| | MATH 2210 | Calculus III (3) | |
| | MATH 2250 | Differential Equations and Linear Algebra (4) | |
| or | MATH 2270 | Linear Algebra (3) | |
| and | MATH 2280 | Ordinary Differential Equations (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 69 semester credits.
2. Overall grade point average of 2.0 (C) or above. 2.5 or above in Math, Science, and Engineering
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Associate in Pre-Engineering - Civil and Mechanical Engineering Emphasis, A.P.E.

### *Requirements*

The pre-engineering program at UVU has been created for students who plan to complete the first two to three years of their engineering education at UVU and then transfer to a baccalaureate university to complete their engineering degree. With adequate planning, pre-engineering coursework completed at UVU will transfer to all of the Utah universities with baccalaureate engineering degrees. All students who declare pre-engineering as their major are automatically accepted into pre-engineering status. After completion of the pre-engineering program at UVU, the student applies for professional status at an institution of the student's choice.

**Total Program Credits: 69**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 28 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete the following Natural and Physical Science courses: | | | |
| | Biology | | 3 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |

| | | | |
|---|---|---|---|
| Complete any combination of the following with no more than 1 course each from Humanities, Fine Arts, and Social/Behavioral Science: | | | 6 |
| | Humanities (from list) | | |
| | Fine Arts (from list) | | |
| | Social/Behavioral Sciences (from list) | | |
| Complete any American Institutions course: | | | 3 |
| | POLS 1000 | American Heritage (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1100 | American National Government (3) | |
| Discipline Core Requirements: | | | 18 Credits |
| | MATH 1210 | Calculus I | 5 |
| | MATH 1220 | Calculus II | 5 |
| | ENGR 1030 | Engineering Programming | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| Emphasis Requirements: | | | 9 Credits |
| | ENGR 2010 | Engineering Statics | 3 |
| | ENGR 2030 | Engineering Dynamics | 3 |
| | ENGR 2140 | Mechanics of Materials | 3 |
| or | ENGR 2160 | Introduction to Materials Science and Engineering (3) | |
| or | ENGR 2450 | Computational Methods for Engineering Analysis (3) | |
| Emphasis Elective Requirements: | | | 14 Credits |
| Students should carefully select electives from the following list, based on the engineering discipline (Civil or Mechanical) they are interested in and the college or university they want to attend to finish their BS degree. See your advisor. | | | 14 |
| | ECE 1000 | Introduction to Electrical and Computer Engineerin (3) | |
| | ECE 2210 | Fundamentals of Electric Circuit Analysis (3) | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3) | |
| | EGDT 1071 | 3 Dimensional Modeling--Solidworks (3) | |
| | EGDT 1400 | Surveying Applications and Field Techniques (3) | |
| | ENGR 1000 | Introduction to Engineering WE (3) | |
| | ENGR 1020 | Survey of Engineering (1) | |
| | ENGR 2140 | Mechanics of Materials (3) | |
| | ENGR 2160 | Introduction to Materials Science and Engineering (3) | |
| | ENGR 2300 | Engineering Thermodynamics (3) | |

| | | | |
|---|---|---|---|
| | ENGR 2450 | Computational Methods for Engineering Analysis (3) | |
| | MATH 2210 | Calculus III (3) | |
| | MATH 2250 | Differential Equations and Linear Algebra (4) | |
| or | MATH 2270 | Linear Algebra (3) | |
| and | MATH 2280 | Ordinary Differential Equations (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 69 semester credits.
2. Overall grade point average of 2.0 (C) or above. 2.5 or above in Math, Science, and Engineering
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Associate in Pre-Engineering - Computer and Electrical Engineering Emphasis, A.P.E.

### *Requirements*

The pre-engineering program at UVU has been created for students who plan to complete the first two to three years of their engineering education at UVU and then transfer to a baccalaureate university to complete their engineering degree. With adequate planning, pre-engineering coursework completed at UVU will transfer to all of the Utah universities with baccalaureate engineering degrees. All students who declare pre-engineering as their major are automatically accepted into pre-engineering status. After completion of the pre-engineering program at UVU, the student applies for professional status at an institution of the student's choice.

**Total Program Credits: 69**

| General Education Requirements: | | | 28 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete the following Natural and Physical Science courses: | | | |
| | Biology | | 3 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| Complete any combination of the following with no more than 1 course each from Humanities, Fine Arts, and Social/Behavioral Science: | | | 6 |
| | Humanities (from list) | | |
| | Fine Arts (from list) | | |
| | Social/Behavioral Sciences (from list) | | |
| Complete any American Institutions course: | | | 3 |
| | POLS 1000 | American Heritage (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1100 | American National Government (3) | |
| Discipline Core Requirements: | | | 18 Credits |
| | MATH 1210 | Calculus I | 5 |
| | MATH 1220 | Calculus II | 5 |
| | ENGR 1030 | Engineering Programming | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| Emphasis Requirements: | | | 11 Credits |
| | ECE 1000 | Introduction to Electrical and Computer Engineering | 3 |
| | ECE 2250 | Circuit Theory | 3 |
| | ECE 2255 | Circuit Theory Lab | 1 |
| | ECE 2700 | Digital Design I | 3 |
| | ECE 2705 | Digital Design I Lab | 1 |
| Emphasis Elective Requirements: | | | 12 Credits |
| Students should carefully select electives from the following list (or other advisor approved courses), based on the engineering discipline (Computer or Electrical) they are interested in and the college or university they want to attend to finish their BS degree. See your advisor. | | | 12 |
| | CS 1410 | Object-Oriented Programming (3) | |
| | CS 2300 | Discrete Mathematical Structures I (3) | |
| | CS 2420 | Introduction to Algorithms and Data Structures (3) | |
| | CS 2600 | Computer Networks I (3) | |
| | CS 2810 | Computer Organization and Architecture (3) | |
| | ECE 2760 | Introduction to Semiconductor Theory and Nanotechnology (3) | |
| | ENGR 1000 | Introduction to Engineering WE (3) | |
| | ENGR 2450 | Computational Methods for Engineering Analysis (3) | |
| | ENGR 1020 | Survey of Engineering (1) | |
| | MATH 2210 | Calculus III (3) | |
| | MATH 2250 | Differential Equations and Linear Algebra (4) | |
| or | MATH 2270 | Linear Algebra (3) | |
| and | MATH 2280 | Ordinary Differential Equations (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 69 semester credits.
2. Overall grade point average of 2.0 (C) or above. 2.5 or above in Math, Science, and Engineering.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

# Pre-Engineering, A.S.

## *Requirements*

The pre-engineering program at UVU has been created for students who plan to complete the first two to three years of their engineering education at UVU and then transfer to a baccalaureate university to complete their engineering degree. With adequate planning, pre-engineering coursework completed at UVU will transfer to all of the Utah universities with baccalaureate engineering degrees. All students who declare pre-engineering as their major are automatically accepted into pre-engineering status. After completion of the pre-engineering program at UVU, the student applies for professional status at an institution of the student's choice.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| | Biology | | 3 |
| Discipline Core Requirements: | | | 24 Credits |
| | ENGR 1030 | Engineering Programming | 3 |
| or | CS 1400 | Fundamentals of Programming (3.0) | |
| | MATH 1220 | Calculus II | 5 |
| Complete ONE of the following sets of courses: | | | 16 |
| General Engineering Focus: | | | |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab (1.0) | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (1.0) | |
| | ENGR 1000 | Introduction to Engineering WE (3.0) | |
| | ENGR 2160 | Introduction to Materials Science and Engineering (3.0) | |
| | CS 2810 | Computer Organization and Architecture (3.0) | |
| or | CS 1410 | Object-Oriented Programming (3.0) | |
| | Complete five credits of Pre-Engineering electives | | |
| Mechanical/Civil Engineering Focus: | | | |
| | PHYS 2220 | Physics for Scientists and Engineers II (4.0) | |
| | ENGR 2010 | Engineering Statics (3.0) | |
| | ENGR 2030 | Engineering Dynamics (3.0) | |
| | ENGR 2140 | Mechanics of Materials (3.0) | |
| or | ENGR 2300 | Engineering Thermodynamics (3.0) | |
| or | ENGR 2450 | Computational Methods for Engineering Analysis (3.0) | |
| | Complete three credits of Pre-Engineering electives | | |
| Electrical/Computer Engineering Focus: | | | |
| | PHYS 2220 | Physics for Scientists and Engineers II (4.0) | |
| | ECE 1000 | Introduction to Electrical and Computer Engineering (3.0) | |
| | ECE 2700 | Digital Design I (3.0) | |
| | ECE 2705 | Digital Design I Lab (1.0) | |
| | Complete four credits of Pre-Engineering electives | | |
| Chemical/Biological Engineering Focus: | | | |
| | PHYS 2220 | Physics for Scientists and Engineers II (4.0) | |
| | CHEM 1220 | Principles of Chemistry II (4.0) | |
| | CHEM 2310 | Organic Chemistry I (4.0) | |
| | Complete five credits of Pre-Engineering electives | | |
| Elective Requirements: | | | |
| Students should carefully select electives based on the engineering discipline they are interested in and the college or university they want to attend to finish their BS degree. See your advisor. | | | |
| Math and Science Electives: | | | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1060 | Trigonometry (3.0) | |
| | MATH 2210 | Calculus III (3.0) | |
| | MATH 2250 | Differential Equations and Linear Algebra (4.0) | |
| or | MATH 2270 | Linear Algebra (3.0) | |
| and | MATH 2280 | Ordinary Differential Equations (3.0) | |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab (1.0) | |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab (1.0) | |
| | CHEM 1010 | Introduction to Chemistry (3.0) | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (1.0) | |
| General Engineering Electives: | | | |

| | | | |
|---|---|---|---|
| | ENGR 1000 | Introduction to Engineering WE (3.0) | |
| | ENGR 1020 | Survey of Engineering (1.0) | |
| | ENGR 1030 | Engineering Programming(3.0) | |
| | ENGR 2140 | Mechanics of Materials (3.0) | |
| | ENGR 2160 | Introduction to Materials Science and Engineering (3.0) | |
| | ENGR 2300 | Engineering Thermodynamics (3.0) | |
| | ENGR 2450 | Computational Methods for Engineering Analysis (3.0) | |
| Biological and Chemical Electives: | | | |
| | BIOL 1610 | College Biology I (4.0) | |
| | BIOL 1615 | College Biology I Laboratory (1.0) | |
| | BIOL 1620 | College Biology II (3.0) | |
| | BIOL 1625 | College Biology II Laboratory (1.0) | |
| | BIOL 3400 | Cell Biology (3.0) | |
| | MICR 2060 | Microbiology for Health Professions (3.0) | |
| | MICR 2065 | Microbiology for Health Professions Laboratory (1.0) | |
| | CHEM 1220 | Principles of Chemistry II (4.0) | |
| | CHEM 1225 | Principles of Chemistry II Laboratory (1.0) | |
| | CHEM 2315 | Organic Chemistry I Laboratory (1.0) | |
| | CHEM 2320 | Organic Chemistry II (4.0) | |
| | CHEM 2325 | Organic Chemistry II Laboratory (1.0) | |
| CAD Electives: | | | |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing (3.0) | |
| | EGDT 1071 | 3 Dimensional Modeling--Solidworks (3.0) | |
| | EGDT 1400 | Surveying Applications and Field Techniques I (3) | |
| | EGDT 1200 | Mechanical Drafting (3.0) | |
| Computer and Electrical Electives: | | | |
| | CS 1400 | Fundamentals of Programming (3.0) | |
| | CS 1410 | Object-Oriented Programming (3.0) | |
| | CS 2300 | Discrete Mathematical Structures I (3.0) | |
| | CS 2420 | Introduction to Algorithms and Data Structures (3.0) | |
| | CS 2600 | Computer Networks I (3.0) | |
| | CS 2810 | Computer Organization and Architecture (3.0) | |
| | ECE 1000 | Introduction to Electrical and Computer Engineering (3.0) | |
| | ECE 2210 | Fundamentals of Electric Circuit Analysis (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above. 2.5 or above in Math, Science, and Engineering courses.
3. Residency hours: minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Civil Engineering, B.S.

### *Requirements*

Civil engineering is the oldest engineering discipline. The Bachelor of Science in Civil Engineering prepares graduates to apply mathematical and scientific principles to the design and supervision of infrastructure components including: buildings, roads, bridges, dams, tunnels, mass transit systems, and airports. Civil engineers are also involved in environmental studies and the design and supervision of municipal water supplies and sewage systems.

**Total Program Credits: 126**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. To be admitted to the BSCE program, a student must complete the foundation courses in Mathematics (MATH 1210, 1220, 2210, 2250); Physics and Chemistry (PHYS 2210, 2215, CHEM 1210, with 1215 and PHYS 2220 with 2225 or CHEM 1220 with 1225); English (ENGL 1010 or ENGH 1005, ENGL 2010); Engineering (ENGR 1000, 2010, 2030, 2140, 2160); Computer Aided Drafting (EGDT 1040), and Surveying Applications and Field Techniques I (EGDT 1400) with a minimum grade of C in these courses.<br>2. Must complete courses with a grade point average of 2.5 or above.<br>3. A student not meeting all of the admission requirements, may request in writing, a provisional admission status for a semester from the department. The provisional admission status must be approved by the civil engineering program coordinator. | | | |
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 205G | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Fine Arts | | 3 |
| | Biology | | 3 |
| | Humanities (COMM 1020 and COMM 1025 recommended) | | 3 |
| | Social/Behavioral Science (COMM 2110 recommended) | | 3 |

| | | | |
|---|---|---|---|
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| Discipline Core Requirements: | | | 72 Credits |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| | EGDT 1400 | Surveying Applications and Field Techniques I | 3 |
| | ENGR 1000 | Introduction to Engineering WE | 3 |
| | ENGR 2010 | Engineering Statics | 3 |
| | ENGR 2030 | Engineering Dynamics | 3 |
| | ENGR 2140 | Mechanics of Materials | 3 |
| | ENGR 2160 | Introduction to Materials Science and Engineering | 3 |
| | ENGR 2450 | Computational Methods for Engineering Analysis | 3 |
| | ENVT 1110 | Introduction to Environmental Management | 3 |
| | MATH 1220 | Calculus II | 5 |
| | MATH 2210 | Calculus III | 3 |
| | MATH 2250 | Differential Equations and Linear Algebra | 4 |
| | CIVE 3010 | Introduction to Transportation Engineering | 3 |
| | CIVE 3130 | Structural Analysis | 3 |
| | CIVE 3210 | Geotechnical Engineering | 3 |
| | ME 3310 | Fluid Mechanics | 3 |
| | CIVE 3320 | Hydraulics and Hydrology | 3 |
| | CIVE 3335 | Civil Engineering Experimentation I WE | 2 |
| | CIVE 4135 | Civil Engineering Experimentation II WE | 2 |
| | CIVE 4510 | Civil Engineering Seminar | 1 |
| | CIVE 4810 | Civil Engineering Capstone I | 3 |
| | CIVE 4820 | Civil Engineering Capstone II | 3 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| or | CHEM 1220 | Principles of Chemistry II (4) | |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| or | CHEM 1225 | Principles of Chemistry II Laboratory (1) | |
| Elective Requirements: | | | 15 Credits |
| Elective Courses (15 credit hours are required; two courses may be taken from Technical Elective list; at least six credit hours must be at 4000 level) | | | 15 |
| CIVE Elective Courses | | | |
| | CIVE 3140 | Structural Steel Design (3) | |
| | CIVE 3150 | Reinforced Concrete Design (3) | |
| | CIVE 3610 | Environmental Engineering (3) | |
| | CIVE 4010 | Traffic Engineering (3) | |
| | CIVE 4020 | Highway Planning and Design (3) | |
| | CIVE 4210 | Foundation Design (3) | |
| | CIVE 4310 | Storm Water Management (3) | |
| | CIVE 4320 | Open Channel Flow (3) | |
| | ME 4420 | Finite Element Methods (3) | |
| | CIVE 4610 | Water and Wastewater (3) | |
| | CIVE 490R | Advanced Current Topics in Civil Engineering (1) | |
| Technical Elective Courses | | | |
| | CIVE 481R | Internship (1) | |
| | CMGT 2025 | Heavy Civil Plans and Specifications (3) | |
| | CMGT 2060 | Construction Job Site Management (3) | |
| | CMGT 2080 | Principles of Construction Scheduling (3) | |
| | CMGT 3030 | Principles of Construction Estimating (3) | |
| | CMGT 3050 | Construction Equipment/Planning and Logistics (3) | |
| | CMGT 3160 | Building Information Modeling (3) | |
| | CMGT 4010 | Construction Contracts (3) | |
| | CMGT 4020 | Construction Project Management (3) | |
| | CMGT 405G | Global Sustainability and the Built Environment (3) | |
| | LEGL 3000 | Business Law (3) | |
| | ENVT 3280 | Environmental Law (3) | |
| | ENVT 3290 | Environmental Permits and Reports (3) | |
| | ENVT 3330 | Water Resources Management (3) | |
| | ENVT 3850 | Environmental Policy (3) | |
| | GEO 3000 | Environmental Geochemistry (3) | |
| | Students may also take upper level computer, electrical, and mechanical engineering classes as technical electives in consultation with their faculty advisors and approval of the department offering the courses. | | |

**Graduation Requirements:**

1. Completion of a minimum of 126 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.5 or above, with a minimum grade of C in all discipline core and elective requirements.
3. Residency hours - minimum of 30 credit hours through course attendance at UVU. Ten of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved CIVE courses.
4. All transfer credits must be approved in writing by UVU and the civil engineering program coordinator.
5. No more than 80 semester hours and no more than 20 hours in CIVE courses of transfer credit.
6. No more than 6 semester hours may be earned through independent study.
7. Successful completion of at least one Global/Intercultural course.

# Computer Engineering, B.S.

## *Requirements*

Computer Engineering encompasses the science and technology of design, construction, implementation, testing, and maintenance of integrated software and hardware components of modern computing systems and computer–controlled equipment (cell phones, video games, laptops).

**Total Program Credits: 126**

| Matriculation Requirements: | | | |
|---|---|---|---|
| To be admitted to the BSCE program a student must complete the following courses with a minimum grade of C in these courses and grade point average of 2.5 or above. A student not meeting all of the admission requirements, may request in writing, a provisional admission status for a semester from the department. the provisional admission status must be approved by the computer engineering program coordinator.<br>• MATH 1210 Calculus I (5)<br>• MATH 1220 Calculus II (5)<br>• PHYS 2210 Physics for Scientists and Engineers I (4)<br>• PHYS 2215 Physics for Scientists and Engineers I Lab (1)<br>• PHYS 2220 Physics for Scientists and Engineers II (4)<br>• PHYS 2225 Physics for Scientists and Engineers II Lab (1)<br>• CS 1400 Fundamentals of Programming (3)<br>• ECE 1000 Introduction to Electrical and Computer Engineering (3)<br>• ECE 2250 Circuit Theory (3)<br>• ECE 2255 Circuit Theory Lab (1)<br>• ECE 2700 Digital Design I (3)<br>• ECE 2705 Digital Design I Lab (1) | | | |
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 205G | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab | 1 |
| | COMM 2110 | Interpersonal Communication | 3 |
| | Fine Arts (Choose from list) | | 3 |
| | Biology (Choose from list) | | 3 |
| | MATH 1210 | Calculus I | 5 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| Discipline Core Requirements: | | | 84 Credits |
| | ECE 1000 | Introduction to Electrical and Computer Engineering | 3 |
| | ECE 2250 | Circuit Theory | 3 |
| | ECE 2255 | Circuit Theory Lab | 1 |
| | ECE 2700 | Digital Design I | 3 |
| | ECE 2705 | Digital Design I Lab | 1 |
| | ECE 3710 | Applied Probability and Statistics for Engineers and Scientists | 3 |
| | ECE 3730 | Embedded Systems I | 3 |
| | ECE 3740 | Digital Design II | 3 |
| | ECE 3750 | Engineering Analysis | 3 |
| | ECE 3760 | Electronic Systems | 3 |
| | ECE 3765 | Electronic Systems Lab | 1 |
| | ECE 3770 | Signals and Systems | 3 |
| | ECE 3780 | Communication Systems and Circuits | 3 |
| | ECE 3785 | Communication Systems and Circuits Lab | 1 |
| | ECE 4700 | Computer Architecture for Engineering Applications | 3 |
| | ECE 4730 | Embedded Systems II | 3 |
| | ECE 4750 | Digital Signal Processing | 3 |
| | ECE 4755 | Digital Signal Processing Lab | 1 |
| | ECE 4760 | VLSI Design | 3 |
| | ECE 4765 | VLSI Design Laboratory | 1 |
| | ECE 4900 | Electrical and Computer Engineering Capstone I WE | 3 |
| | ECE 4950 | Electrical and Computer Engineering Capstone II WE | 3 |
| | CS 1400 | Fundamentals of Programming | 3 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2300 | Discrete Mathematical Structures I | 3 |
| | CS 2370 | C plus plus Programming WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | CS 3060 | Operating Systems Theory | 3 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | MATH 1220 | Calculus II | 5 |
| Elective Requirements: | | | 3 Credits |
| | Complete 3 credits from the following: | | 3 |
| | ECE 4770 | Artificial Neural Networks (3) | |
| | ECE 4780 | Wireless and Mobile Communications (3) | |

| | | | |
|---|---|---|---|
| | ECE 481R | Electrical and Computer Engineering Internship (1) | |

**Graduation Requirements:**

1. Completion of a minimum of 126 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.5 or above, with a minimum grade of C- in all discipline core and elective requirements.
3. Residency hours - minimum of 30 credit hours through course attendance at UVU. 10 of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved CS + ECE courses.
4. All transfer credit must be approved in writing by UVU.
5. No more than 80 semester hours and no more than 20 hours in CS and ECE courses of transfer credit.
6. No more than 6 semester hours may be earned through independent study.
7. Successful completion of at least one Global/Intercultural course.

## Electrical Engineering, B.S.

### *Requirements*

A Bachelor of Science in Electrical Engineering provides a broad foundation in electrical engineering through combined classroom and laboratory work and prepares students for entering the profession of electrical engineering as well as further study at the graduate level. The core courses will provide students with a strong background in mathematics, physical science, and fundamentals of engineering.

**Total Program Credits: 126**

| Matriculation Requirements: |
|---|
| To be admitted to the BSEE program a student must complete the following courses with a minimum grade of C in these courses and grade point average of 2.5 or above. A student not meeting all of the admission requirements, may request in writing, a provisional admission status for a semester from the department. The provisional admission status must be approved by the electrical engineering program coordinator.<br>• MATH 1210 Calculus I<br>• MATH 1220 Calculus II<br>• PHYS 2210 Physics for Scientists and Engineers I<br>• PHYS 2215 Physics for Scientists and Engineers I Lab<br>• PHYS 2220 Physics for Scientists and Engineers II<br>• PHYS 2225 Physics for Scientists and Engineers II Lab<br>• CS 1400 Fundamentals of Programming<br>• ECE 1000 Introduction to Electrical and Computer Engineering<br>• ECE 2250 Circuit Theory<br>• ECE 2255 Circuit Theory Lab<br>• ECE 2700 Digital Design I<br>• ECE 2705 Digital Design I Lab |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab | 1 |
| | COMM 2110 | Interpersonal Communication | 3 |
| | Fine Arts (Choose from list) | | 3 |
| | Biology (Choose from list) | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| Discipline Core Requirements: | | | 81 Credits |
| | CS 1400 | Fundamentals of Programming | 3 |
| | ECE 1000 | Introduction to Electrical and Computer Engineering | 3 |
| | ECE 2250 | Circuit Theory | 3 |
| | ECE 2255 | Circuit Theory Lab | 1 |
| | ECE 2700 | Digital Design I | 3 |
| | ECE 2705 | Digital Design I Lab | 1 |
| | ECE 3250 | Energy Conversion | 3 |
| | ECE 3350 | Control Systems | 3 |
| | ECE 3450 | Electromagnetics and Transmission Lines | 3 |
| | ECE 3710 | Applied Probability and Statistics for Engineers and Scientists | 3 |
| | ECE 3730 | Embedded Systems I | 3 |
| | ECE 3740 | Digital Design II | 3 |
| | ECE 3750 | Engineering Analysis | 3 |
| | ECE 3760 | Electronic Systems | 3 |
| | ECE 3765 | Electronic Systems Lab | 1 |
| | ECE 3770 | Signals and Systems | 3 |
| | ECE 3780 | Communication Systems and Circuits | 3 |
| | ECE 3785 | Communication Systems and Circuits Lab | 1 |
| | ECE 4700 | Computer Architecture for Engineering Applications | 3 |
| | ECE 4730 | Embedded Systems II | 3 |
| | ECE 4750 | Digital Signal Processing | 3 |
| | ECE 4755 | Digital Signal Processing Lab | 1 |
| | ECE 4760 | VLSI Design | 3 |
| | ECE 4765 | VLSI Design Laboratory | 1 |
| | ECE 4900 | Electrical and Computer Engineering Capstone I WE | 3 |

| | | | |
|---|---|---|---|
| | ECE 4950 | Electrical and Computer Engineering Capstone II WE | 3 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | MATH 1220 | Calculus II | 5 |
| | MATH 2210 | Calculus III | 3 |
| Elective Requirements: | | | 6 Credits |
| Complete a minimum of six credits from the following: | | | 6 |
| | ECE 4770 | Artificial Neural Networks (3) | |
| | ECE 4780 | Wireless and Mobile Communications (3) | |
| | CS 4480 | Digital Image Processing and Computer Vision (3) | |
| | ECE 4250 | Power Systems Engineering (3) | |
| | ECE 481R | Electrical and Computer Engineering Internship (1) | |

**Graduation Requirements:**

1. Completion of a minimum of 126 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.5 or above, with a minimum grade of C in all discipline core and elective requirements.
3. Residency hours - minimum of 30 credit hours through course attendance at UVU. 10 of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved CS + ECE courses.
4. All transfer credit must be approved in writing by UVU and the electrical engineering program coordinator.
5. No more than 80 semester hours and no more than 20 hours in CS and ECE courses of transfer credit.
6. No more than 6 semester hours may be earned through independent study.
7. Successful completion of at least one Global/Intercultural course.
8. Taking Fundamentals of Engineering (FE) (NCEES - Electrical and Computer Engineering) exam.

# Mechanical Engineering, B.S.

## *Requirements*

Mechanical engineering, which has evolved over the years as new technologies have emerged, is one of the broadest engineering disciplines. The Bachelor of Science in Mechanical Engineering prepares graduates to apply mathematical and scientific principles to the design, development, testing, and manufacturing of machines, robots, tools, biomedical devices, power generating equipment such as steam and gas turbines, wind turbines, solar systems, internal combustion engines, and heating, cooling, and refrigeration equipment.

**Total Program Credits: 126**

| Matriculation Requirements: |
|---|
| 1. To be admitted to the BSME program, a student must complete the foundation courses in Mathematics (MATH 1210, 1220, 2210, 2250); Physics (PHYS 2210, 2215, 2220, 2225); Chemistry (CHEM 1210, 1215); English (ENGH 1005 or ENGL 1010, 2010); and Engineering (ENGR 1000, 1030, 2010, 2030, 2140, 2160, 2450) with a minimum grade of C.<br>2. Students need a grade point average of 2.5 or above.<br>3. A student not meeting all of the admission requirements, may request in writing, a provisional admission status for a semester from the department. The provisional admission status must be approved by the mechanical engineering program coordinator. |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Fine Arts | | 3 |
| | Humanities (COMM 1020 and COMM 1025 Recommended) | | 3 |
| | Social/Behavioral Science (COMM 2110 Recommended) | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | CHEM 1210 | Principles of Chemistry I | 4 |
| Discipline Core Requirements: | | | 78 Credits |
| | CHEM 1215 | Principles of Chemistry I Laboratory | 1 |
| | ECE 2210 | Fundamentals of Electric Circuit Analysis | 3 |
| | ENGR 1000 | Introduction to Engineering WE | 3 |
| | ENGR 1030 | Engineering Programming | 3 |
| | ENGR 2010 | Engineering Statics | 3 |
| | ENGR 2030 | Engineering Dynamics | 3 |
| | ENGR 2140 | Mechanics of Materials | 3 |
| | ENGR 2160 | Introduction to Materials Science and Engineering | 3 |
| | ENGR 2300 | Engineering Thermodynamics | 3 |
| | ENGR 2450 | Computational Methods for Engineering Analysis | 3 |
| | MATH 1220 | Calculus II | 5 |
| | MATH 2210 | Calculus III | 3 |
| | MATH 2250 | Differential Equations and Linear Algebra | 4 |
| | ME 3010 | Linear Systems | 3 |

| | | | |
|---|---|---|---|
| | ME 3140 | Machine Design | 3 |
| | ME 3210 | Manufacturing Processes for Engineers | 3 |
| | ME 3310 | Fluid Mechanics | 3 |
| | ME 3320 | Heat Transfer | 3 |
| | ME 3335 | Thermal/Fluid Experimentation WE | 2 |
| | ME 4010 | Automatic Controls | 3 |
| | ME 4015 | Control and Vibration Experimentation | 2 |
| | ME 4410 | Computer Aided Engineering | 3 |
| | ME 4510 | Mechanical Engineering Seminar | 1 |
| | ME 4810 | Mechanical Engineering Capstone I | 3 |
| | ME 4820 | Mechanical Engineering Capstone II | 3 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| Elective Requirements: | | | 9 Credits |
| Choose 9 credits from the following. One course may be taken from Technical Elective list. At least six credit-hours must be at 4000 level. | | | 9 |
| ME Elective Courses | | | |
| | ME 3130 | Kinematics (3) | |
| | ME 3160 | Intermediate Materials (3) | |
| | ME 3170 | Introduction to Plastics and Composites (3) | |
| | ME 3300 | Applied Thermodyamics (3) | |
| | ME 4180 | Compliant Mechanisms (3) | |
| | ME 4380 | Design of Thermal/Fluid Systems (3) | |
| | ME 4390 | Heating Ventilating and Air Conditioning Design (3) | |
| | ME 4420 | Finite Element Methods (3) | |
| | ME 4550 | Global Engineering (3) | |
| | ME 490R | Advanced Current Topics in Mechanical Engineering (1) | |
| Technical Elective Courses | | | |
| | ECE 3710 | Applied Probability and Statistics for Engineers and Scientists (3) | |
| | TECH 3400 | Project Management WE (3) | |
| | TECH 3850 | Quality Management in Technology (3) | |
| | Students may also take upper level computer, electrical, and mechanical engineering classes as technical electives in consultation with their faculty advisors and approval of the department offering the courses. | | |

**Graduation Requirements:**

1. Completion of a minimum of 126 semester credits, with a minimum of 40 mechanical engineering upper-division credits.
2. Overall grade point average of 2.5 or above, with a minimum grade of C in all discipline core and elective requirements.
3. Residency hours - minimum of 30 credit hours through course attendance at UVU. Ten of these hours must be within the last 45 hours earned. At least 12 of the credit hours earned in residence must be in approved ME courses.
4. All transfer credits must be approved in writing by UVU and the mechanical engineering program coordinator.
5. No more than 80 semester hours and no more than 20 hours in ME courses of transfer credit.
6. No more than 6 semester hours may be earned through independent study.
7. Successful completion of at least one Global/Intercultural course.

# Engineering Technology

## Engineering Technology

The Engineering Technology department is in the College of Engineering and Technology. To find the most up-to-date information from the Engineering Technology department, visit their website.

Engineering Technology department

**DEPARTMENT CHAIR**

**BIRD, Tyler** *Assistant Professor*

**FACULTY**

**AL-NSOUR, Rawan** *Assistant Professor*
**BIRD, Tyler** *Assistant Professor*
**ELBERT, Mike** *Assistant Professor*
**FRAME, David W.** *Assistant Professor*
**FRAUGHTON, Travis** *Lecturer*
**HAKALA, Tim** *Assistant Professor*
**HAWKER, John** *Lecturer - Placeholder*
**LUNDAHL, Diana** *Associate Professor*
**PARKER, Trever** *Lecturer*
**SEARLE, Scott** *Lecturer*
**WALKER, William Scott** *Assistant Professor*

## Course Descriptions

Automation and Electrical Tech.....473
Mechatronics Engineering Tech.....697

## Degrees & Programs

### Automation and Electrical Technology, A.S.

#### *Requirements*

The EART program prepares Electrical Automation Technicians to troubleshoot, wire, repair, adapt, maintain, program (PLC's & PAC's), and control large automated electrical systems found in Industrial and Manufacturing Industries worldwide. The EART Technician will work with DC & AC motor controlled machines; Programmable Logic Controlled (PLC's) and Programmable Automation Controlled (PAC's) machines, systems, and devices; Hydraulic and pneumatic controlled machines; conveyor, fluid, and bulk storage systems; flex, soft start, and variable frequency drives; Robots; servo, and stepper motors. Because of their highly skilled hands on training the EART student is in high demand from many industries.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| | Choose from AET or related courses (1000 level or higher) | | 16 |
| Elective Requirements: | | | 9 Credits |
| | Electives (1000 level or higher) | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above with no core course below a C-.
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

### Automation and Electrical Technology, A.A.S.

#### *Requirements*

The EART program prepares Electrical Automation Technicians to troubleshoot, wire, repair, adapt, maintain, program (PLC's & PAC's), and control large automated electrical systems found in Industrial and Manufacturing Industries worldwide. The EART Technician will work with DC & AC motor controlled machines; Programmable Logic Controlled (PLC's) and Programmable Automation Controlled (PAC's) machines, systems, and devices; Hydraulic and pneumatic controlled machines; conveyor, fluid, and bulk storage systems; flex, soft start, and variable frequency drives; Robots; servo, and stepper motors. Because of their highly skilled hands on training the EART student is in high demand from many industries.

**Total Program Credits: 65**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 14 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | Any approved Humanities or Fine Art | | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety, or Environment Course | | 2 |
| | Any approved Biology or Physical Science | | 3 |
| Discipline Core Requirements: | | | 51 Credits |
| | AET 1050 | Electrical Math I | 2 |
| | AET 1060 | Electrical Math II | 2 |
| | AET 1130 | Applied DC Theory | 1 |
| | AET 1135 | Applied DC Lab | 1 |
| | AET 1140 | Applied AC Theory | 1 |
| | AET 1145 | Applied AC Lab | 2 |
| | AET 1150 | Industrial Logic | 1 |
| | AET 1155 | Industrial Logic Lab | 1 |
| | AET 1250 | Industrial Electrical Code | 2 |
| | AET 1280 | Electric Motor Control | 4 |
| | AET 1285 | Electric Motor Control Lab | 4 |
| | AET 2110 | Industrial Electronics I | 4 |
| | AET 2115 | Industrial Electronics I Lab | 2 |
| | AET 2250 | Industrial Programmable Logic Controllers--PLCs | 4 |
| | AET 2255 | Industrial Programmable Logic Controllers--PLCs Lab | 2 |
| | EGDT 1040 | Fundamentals of Technical Engineering Drawing | 3 |
| or | EGDT 1071 | 3 Dimensional Modeling--Solidworks | |
| | EGDT 1200 | Mechanical Drafting and Design | 3 |
| Choose 12 Credits from the Following Options: | | | 12 |
| | AET 2010 | Manufacturing Technology (1) | |
| | AET 2015 | Manufacturing Technology Lab (2) | |
| | AET 2150 | Introduction to Fluid Power Systems (2) | |
| | AET 2155 | Introduction to Fluid Power Systems Lab (1) | |
| | AET 2160 | Industrial Electronics II (2) | |
| | AET 2165 | Industrial Electronics II Lab (1) | |
| | AET 2270 | Industrial Programmable Automation Controllers--PACs (2) | |
| | AET 2275 | Industrial Programmable Automation Controllers--PACs Lab (1) | |
| | AET 2280 | Process Control Instrumentation (2) | |
| | AET 2285 | Process Control Instrumentation Lab (1) | |
| | AET 281R | Cooperative Work Experience (1) | |
| | AET 2900 | Capstone Project (3) | |
| | AET 291R | Special Topics in Industrial Systems (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 65 semester credits
2. Overall grade point average of 2.0 (C) or above, with no core course below a 'C-'.
3. Residency hours: minimum of 20 credit hours through course attendance at UVU
4. Completion of GE and specified departmental requirements

## Mechatronics Engineering Technology, A.A.S.

### *Requirements*

The Mechatronics Engineering Technology Degree from Utah Valley University prepares graduates to work in the Utah manufacturing sector as an automation technologist, design technician, PLC programmer, as well as many other aspects of implementing manufacturing systems. Students complete courses in PLC programming and architecture, materials, CAD, electrical and mechanical components, pneumatics, and motor control. Students will also take courses in technical writing, physics, chemistry, and business to round out their professional profile.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 18 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| | Humanities (ENGL 2310 Recommended) | | 3 |
| | Social Science (ECON 1010 Recommended) | | 3 |
| | Physical Science (PHYS 1010 Recommended) | | 3 |
| Discipline Core Requirements: | | | 45 Credits |
| | EGDT 1071 | 3 Dimensional Modeling--Solidworks | 3 |
| | MECH 1010 | Introduction to Mechatronics | 3 |
| | MECH 1200 | Electronics in Automation Design | 3 |
| | MECH 1205 | Electronics in Automation Design Laboratory | 2 |
| | MECH 1300 | Industrial Wiring for Mechatronic Systems | 1 |
| | MECH 1305 | Industrial Wiring for Mechatronic Systems Laboratory | 2 |
| | MECH 2200 | Semiconductors Used in Mechatronic Systems | 3 |
| | MECH 2205 | Semiconductors in Mechatronic Systems Lab | 1 |
| | MECH 2300 | Microcontroller Architecture and Programming | 4 |
| | MECH 2305 | Microcontroller Architecture and Programming Lab | 1 |
| | MECH 2400 | Mechanical Components | 4 |

| | | | |
|---|---|---|---|
| | MECH 2500 | Introduction to PLCs in Mechatronic Design | 2 |
| | MECH 2505 | Introduction to PLCs in Mechatronic Design Laboratory | 2 |
| | MECH 2510 | Fundamentals of Automation Controls | 2 |
| | MECH 2515 | Fundamentals of Automation Controls Laboratory | 1 |
| | MECH 2550 | Advanced PLC Programming and Applications | 2 |
| | MECH 2555 | Advanced PLC Programming and Applications Laboratory | 2 |
| | MECH 2600 | Introduction to Fluid Power Systems | 2 |
| | MECH 2605 | Introduction to Fluid Power Systems Laborator | 1 |
| | MECH 2700 | Industrial Motor Control Mechatronic Systems | 2 |
| | MECH 2705 | Industrial Motor Control Mechatronic Systems Laboratory | 2 |

**Graduation Requirements:**

1. Completion of 63 or more credit hours.
2. Overall grade point average of 2.0 (C) or above, with no core course below a C-.
3. Residency hours: minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Electrical and Control Technology CA, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Electrical and Control Technology CA prepares technicians and technologists to troubleshoot, wire, repair, adapt, install, and maintain electrical and industrial motor control equipment found in many local industries. Knowledge and experience are gained through theory and engaging “hands on” labs that prepare graduates to work safely around industrial and commercial electrical equipment. Electrical DC and AC theory, transformers, circuits, wiring, motors, motor controls, relay logic, logic gates, and the National Electrical Code for commercial and industrial systems is emphasized. Skills are developed in troubleshooting, testing, and analyzing electrical circuits. This is the first employable step in the exciting career path of working with electrically automated equipment.

**Total Program Credits: 21**

| Discipline Core Requirements: | | | 21 Credits |
|---|---|---|---|
| | AET 1050 | AET - Automation and Electrical Technology | 2 |
| | AET 1060 | AET - Automation and Electrical Technology | 2 |
| | AET 1130 | Applied DC Theory | 1 |
| | AET 1135 | Applied DC Lab | 1 |
| | AET 1140 | Applied AC Theory | 1 |
| | AET 1145 | Applied AC Lab | 2 |
| | AET 1150 | Industrial Logic | 1 |
| | AET 1155 | Industrial Logic Lab | 1 |
| | AET 1250 | Industrial Electrical Code | 2 |
| | AET 1280 | Electric Motor Control | 4 |
| | AET 1285 | Electric Motor Control Lab | 4 |

**Graduation Requirements:**

1. Completion of a minimum of 21 semester credits.
2. Overall grade point average of 2.0 (C) or above, with no core course below a 'C-'.
3. All courses must be completed at UVU.

## Mechatronics Engineering Technology, B.S.

### *Requirements*

The Mechatronics Engineering Technology Degree from Utah Valley University prepares graduates to work in the Utah manufacturing sector as an automation technologist, design technician, PLC programmer, as well as many other aspects of implementing manufacturing systems. Students complete courses in PLC programming and architecture, materials, CAD, electrical and mechanical components, pneumatics, and motor control. Students will also take courses in technical writing, physics, chemistry, and business to round out their professional profile.

**Total Program Credits: 121**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Graduates of the Mechatronics Engineering Technology, Electrical Automation Robotic Technology (E.A.R.T) or Automation and ElectricalTechnology (A.E.T) A.A.S. degree programs at UVU may automatically matriculate into the Bachelor of Science degree program inMechatronics Engineering Technology.<br>2. E.A.R.T and A.E.T graduates that have not taken college algebra (MATH 1050) should enroll prior to or during their first semester in whichthey are enrolled in the Mechatronics B.S. program. | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | PHIL 205G | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (recommended) (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Distribution Courses: | | | |
| | Biology | BIOL 1010 Recommended | 3 |

| | | | |
|---|---|---|---|
| | Physical Science | PHYS 1010 Recommended | 3 |
| | Science | | 3 |
| | Humanities | ENGL 2310 Recommended | 3 |
| | Social Science | | 3 |
| | Fine Arts | | 3 |
| Discipline Core Requirements: | | | 79 Credits |
| | EGDT 1071 | 3 Dimensional Modeling--Solidworks | 3 |
| | MECH 1010 | Introduction to Mechatronics | 3 |
| | MECH 1200 | Electronics in Automation Design | 3 |
| | MECH 1205 | Electronics in Automation Design Laboratory | 2 |
| | MECH 1300 | Industrial Wiring for Mechatronic Systems | 1 |
| | MECH 1305 | Industrial Wiring for Mechatronic Systems Laboratory | 2 |
| | MECH 2200 | Semiconductors Used in Mechatronic Systems | 3 |
| | MECH 2205 | Semiconductors in Mechatronic Systems Lab | 1 |
| | MECH 2300 | Microcontroller Architecture and Programming | 4 |
| | MECH 2305 | Microcontroller Architecture and Programming Lab | 1 |
| | MECH 2400 | Mechanical Components | 4 |
| | MECH 2500 | Introduction to PLCs in Mechatronic Design | 2 |
| | MECH 2505 | Introduction to PLCs in Mechatronic Design Laboratory | 2 |
| | MECH 2510 | Fundamentals of Automation Controls | 2 |
| | MECH 2515 | Fundamentals of Automation Controls Laboratory | 1 |
| | MECH 2550 | Advanced PLC Programming and Applications | 2 |
| | MECH 2555 | Advanced PLC Programming and Applications Laboratory | 2 |
| | MECH 2600 | Introduction to Fluid Power Systems | 2 |
| | MECH 2605 | Introduction to Fluid Power Systems Laboratory | 1 |
| | MECH 2700 | Industrial Motor Control Mechatronic Systems | 2 |
| | MECH 2705 | Industrial Motor Control Mechatronic Systems Laboratory | 2 |
| | MECH 3220 | Motion Control for Mechatronic Systems | 3 |
| | MECH 3225 | Motion Control for Mechatronic Systems Laboratory | 1 |
| | MECH 3300 | Industrial Networks | 2 |
| | MECH 3305 | Industrial Networks Laboratory | 1 |
| | MECH 3400 | Statics and Material Properties for Mechatronics | 4 |
| | MECH 3405 | Statics and Material Properties for Mechatronics Laboratory | 1 |
| | MECH 3500 | Industrial Robots | 2 |
| | MECH 3505 | Industrial Robots Laboratory | 1 |
| | MECH 3570 | Design Analysis and Rapid Prototyping WE | 3 |
| | MECH 3700 | CNC Machines in Mechatronic Design | 2 |
| | MECH 3705 | CNC Machines in Mechatronic Design Laboratory | 1 |
| | MECH 4300 | Advanced Design in Mechatronic Systems | 2 |
| | MECH 4305 | Advanced Design in Mechatronic Systems Laboratory | 1 |
| | MECH 4400 | Polymers/Composites and Processes | 3 |
| | MECH 4500 | Advanced Automation Controls | 3 |
| | MECH 4505 | Advanced Automation Controls Laboratory | 1 |
| | MECH 4800 | Capstone Project WE | 3 |
| Elective Requirements: | | | 6 Credits |
| | MECH 481R | Mechatronics Internship (3) | 6 |
| | MECH 490R | Topics in Mechatronics (3) | |

**Graduation Requirements:**

1. Completion of 121 or more credit hours.
2. Overall grade point average of 2.0 (C) or above, with no core course below a C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU.
4. Successful completion of at least one Global/Intercultural course.

# English Language Learning

## University College

The English Language Learning department is in the University College. To find the most up-to-date information from the English Language Learning department, visit their website.

English Language Learning

**DEPARTMENT CHAIR**

**CONDIE, Heidi** *Associate Professor*

**FACULTY**

**BAILEY, Brooke** *Lecturer*

**CONDIE, Heidi** *Associate Professor*

**EYRAUD, Kevin** *Associate Professor*

**PETTERSSON, James** *Professor*

## Course Descriptions

English as a Second Lang..... 627

# English and Literature

## English and Literature

The English and Literature department is in the College of Humanities & Social Sciences. To find the most up-to-date information from the English and Literature department, visit their website.

English and Literature department

**DIRECTOR**

**MCPHERSON, Kathryn R.** *Professor*

**FACULTY**

**ALBRECHT-CRANE, Christa** *Professor*
**BENACQUISTA, Jane** *Lecturer*
**BONE, Kirstin** *Lecturer*
**BRADY, Jane** *Lecturer*
**CAMMACK, Susanne** *Lecturer*
**CARNEY, Rob** *Professor*
**CARTER, Angie** *Senior Lecturer*
**CHADWICK, Tyler** *Lecturer*
**COUSINS, Robert J.** *Professor*
**CRANE, Mark E.** *Associate Professor*
**DEBETTA, Elizabeth** *Lecturer*
**FEDECZKO, Wioleta** *Associate Professor*
**FLANAGAN, Suzan** *Assistant Professor*
**FULLMER, Stephen B.** *Associate Professor*
**GALE, Nathan A.** *Assistant Professor*
**GIBSON, Stephen D.** *Associate Professor*
**GODDARD, Todd** *Associate Professor*
**GORELICK, Nathan** *Associate Professor*
**GORRELL, Nicholas** *Lecturer*
**GOSHERT, John** *Professor*
**HANNEMAN, Katherine** *Lecturer*
**JONES, Brock** *Assistant Professor*
**KAMAIOPILI, Kyle R.** *Assistant Professor*
**KERR, Lydia** *Associate Professor*
**LERBERG, Matthew** *Lecturer*
**LUI, Catherine** *Lecturer*
**LUSZECK, Amanda** *Assistant Professor*
**MA, Ruen-chuan** *Assistant Professor*
**MAHNKE, Stephanie** *Assistant Professor*
**MATHESON, Breeanne** *Assistant Professor*
**MCDONALD, Richard B.** *Professor*
**MCPHERSON, Kathryn R.** *Professor*
**MORTENSEN, Lee Ann** *Professor*
**MOSS, David Grant** *Associate Professor*
**NADEAU, Ashley** *Assistant Professor*
**NICHOLS, Julie** *Associate Professor*
**PATTEN, Devin** *Lecturer*
**PATTERSON, Jonathan** *Lecturer*
**PEPPER, Mark** *Associate Professor*
**PETERSEN, Boyd** *Lecturer*
**PETERSEN, Jerry** *Associate Professor*
**ROBERTSON, Jacob Levi** *Lecturer*
**SCHUMANN, Larisa** *Lecturer*
**SCOTT, Christopher** *Lecturer*
**SHELTON, Linda** *Senior Lecturer*
**SMITH, Thomas B.** *Associate Professor*
**SMITH-JOHNSON, Amber** *Lecturer*
**THORNTON, Debra L.** *Professor*
**VAN DE GRAAF, Kara** *Assistant Professor*
**VOGEL, Charles A.** *Associate Professor*
**WAGER, Jans** *Professor*
**WHALEY, Brian** *Associate Professor*

# Course Descriptions

Cinema Studies..... 530
English..... 609

# Degrees & Programs

## English with an Emphasis in Technical Communication, A.A.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Compete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| | ENGL 2030 | Writing for Social Change | 3 |
| | ENGL 2050 | Editing | 3 |
| | ENGL 2250 | Creative Process and Imaginative Writing | 3 |
| or | ENGL 225H | Creative Process and Imaginative Writing (3) | |
| | ENGL 2310 | Technical Communication | 3 |
| Select ONE from the following list: | | | 3 |
| | ART 1400 | Graphic Computer Applications (3) | |
| | DGM 1110 | Digital Media Essentials I (4) | |
| Elective Requirements: | | | 10 Credits |
| | One Foreign Language | | 8 |
| | Any course 1000 or higher | | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one foreign language.

## English with an Emphasis in Technical Communication, A.S.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| | ENGL 2030 | Writing for Social Change | 3 |
| | ENGL 2050 | Editing | 3 |
| | ENGL 2250 | Creative Process and Imaginative Writing | 3 |
| or | ENGL 225H | Creative Process and Imaginative Writing (3) | |
| | ENGL 2310 | Technical Communication | 3 |
| Select ONE from the following list: | | | 3 |
| | ART 1400 | Graphic Computer Applications (3) | |
| | DGM 1110 | Digital Media Essentials I (4) | |
| Elective Requirements: | | | 10 Credits |
| | Any course 1000 or higher | | 10 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## English, A.A.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |

| | | | |
|---|---|---|---|
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Compete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| Select 9 credits from the following: | | | 9 |
| | ENGL 2510 | American Literature before 1865 (3.0) | |
| | ENGL 2520 | American Literature after 1865 (3.0) | |
| | ENGL 2610 | British Literature before 1800 (3.0) | |
| | ENGL 2620 | British Literature after 1800 (3.0) | |
| Complete a minimum of any two lower-division ENGL courses or any lower-division course listed above that has not been previously completed. | | | 6 |
| Elective Requirements: | | | 10 Credits |
| | One Foreign Language | | 8 |
| | Any course 1000 or higher | | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one foreign language.

## English, A.S.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| Select THREE from the following list: | | | 9 |
| | ENGL 2510 | American Literature before 1865 (3.0) | |
| | ENGL 2520 | American Literature after 1865 (3.0) | |
| | ENGL 2610 | British Literature before 1800 (3.0) | |
| | ENGL 2620 | British Literature after 1800 (3.0) | |

| | | | |
|---|---|---|---|
| Complete a minimum of any two lower-division ENGL courses or any lower-division course listed above that has not been previously completed. | | | 6 |
| Elective Requirements: | | | 10 Credits |
| | Any course 1000 or higher | | 10 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Editing and Document Design, Certificate of Proficiency

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 15**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. AA/AS degree or higher from a regionally accredited institution of higher learning and one year full-time employment. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| Complete the following: | | | |
| | ENGL 2050 | Editing | 3 |
| | ENGL 2310 | Technical Communication | 3 |
| | ENGL 3340 | Digital Document Design | 3 |
| | ENGL 3050 | Advanced Editing and Design for Print Media | 3 |
| Elective Requirements: | | | 3 Credits |
| Complete ONE of the following: | | | 3 |
| | ENGL 3300 | Collaborative Communication for Technology Professions (3.0) | |
| | ENGL 3320 | Grant and Proposal Writing (3.0) | |
| | ENGL 4340 | Advanced Technical Communication (3.0) | |
| | ENGL 436R | Topics in Technical Communication (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 15 credits.
2. Overall GPA of 2.0 or above.
3. Residency hours -- Minimum of 4 credits required through Course attendance at UVU.

## Cinema and Media Studies, Minor

### *Requirements*

Cinema Studies focuses on analyzing film and the screen arts as some of the most important cultural productions of the twenty-first century. Students approach movies as cultural texts and gain an understanding of the social, political, historical, and industrial contexts that produce cinema. The minor broadens students' knowledge of how these texts shape and are shaped by culture. As an interdisciplinary program, cinema studies draws on faculty expertise from various disciplines and includes global and historical perspectives. The minor also builds personal knowledge and professional competencies.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of 30 hours of credit.<br>2. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 9 Credits |
| | CINE 2150 | Critical Introduction to Cinema Studies | 3 |
| or | ENGL 2150 | Critical Introduction to Cinema Studies (3.0) | |
| | CINE 3150 | Cinema and Television Theory | 3 |
| or | ENGL 3150 | Cinema and Television Theory (3.0) | |
| Complete one of the following: | | | 3 |
| | CINE 2311 | Film History I | |
| | THEA 2311 | Film History I (3.0) | |
| | CINE 2312 | Film History II | |
| | THEA 2312 | Film History II (3.0) | |
| Elective Requirements: | | | 9 Credits |
| In addition to the 9 core requirements, students must complete an additional 9 hours of advisor-approved electives. Six (6) of the 9 hours must be upper-division (see coordinator for a list of approved electives). | | | 9 |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above.
2. Residency hours--minimum of 12 credit hours through course attendance at UVU.

## English Creative Writing, Minor

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 18 Credits |
| Introductory Course (complete the following) | | | 3 |
| | ENGL 2250 | Creative Process and Imaginative Writing (3) | |
| or | ENGL 225H | Creative Process and Imaginative Writing (3) | |
| Creative Writing Courses (complete THREE from the following) | | | 9 |
| | ENGL 3420 | Intermediate Fiction Writing (3) | |
| | ENGL 3430 | Play Writing for Creative Writers (3) | |
| | ENGL 3440 | Intermediate Poetry Writing (3) | |
| | ENGL 3450 | Intermediate Creative Nonfiction Writing (3) | |
| | ENGL 4420 | Advanced Fiction Writing I (3) | |
| | ENGL 4425 | Advanced Fiction Writing II (3) | |
| | ENGL 4440 | Advanced Poetry Writing (3) | |
| | ENGL 4445 | Advanced Poetry Writing II (3) | |
| | ENGL 4450 | Advanced Creative Nonfiction Writing (3) | |
| | ENGL 4455 | Advanced Creative Nonfiction Writing II (3) | |
| Form and Theory Courses (complete the following) | | | 6 |
| | ENGL 2600 | Critical Introduction to Literature (3) | |
| | ENGL 412R | Studies in Literary Genres (3) | |
| Elective Requirements: | | | 3 Credits |
| Choose from the following: | | | 3 |
| | ENGL 3050 | Advanced Editing and Design for Print Media (3) | |
| | ENGL 3460 | Wilderness and Environmental Writing (3) | |
| | ENGL 373R | Literature of Cultures and Places (3) | |
| | ENGL 471R | Eminent Authors (3) | |
| | ENGL 481R | Internship (1) * | |
| | ENGL 490R | Directed Readings (1) * | |

**Graduation Requirements:**

1. Complete all courses with no grade lower than a C-.

| Footnote |
|---|
| * Must be completed for a total of 3 credits |

## English Education, Minor

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete the following courses:ENGL 2600, Critical Introduction to Literature; ENGL 2510, American Literature before 1865, or ENGL 2520, American Literature after 1865; and ENGL 2610, British Literature before 1800, or ENGL 2620, British Literature after 1800.<br>2. Must be accepted into a Secondary Education major | | | |
| Discipline Core Requirements: | | | 18 Credits |
| | ENGL 2510 | American Literature before 1865 (3.0) | |
| | ENGL 2520 | American Literature after 1865 (3.0) | |
| | ENGL 2610 | British Literature before 1800 (3.0) | |
| | ENGL 2620 | British Literature after 1800 (3.0) | |
| | ENGL 2600 | Critical Introduction to Literature (3.0) | |
| Complete the following: | | | |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4210 | Methods in Teaching Literacy I | 3 |
| | ENGL 4220 | Methods in Teaching Literacy II | 3 |
| Choose one from the following: | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3.0) | |
| | ENGL 3020 | Modern English Grammars (3.0) | |
| | ENGL 3040 | History of the English Language (3.0) | |
| Complete one from the following: | | | 3 |
| | ENGL 3510 | Early American Literature (3.0) | |
| | ENGL 3520 | Literature of the American Renaissance (3.0) | |
| | ENGL 3525 | American Literary Realism and Naturalism (3.0) | |
| | ENGL 3530 | Modern American Literature (3.0) | |
| | ENGL 3540 | Contemporary American Literature (3.0) | |
| Complete one from the following: | | | 3 |
| | ENGL 3610 | Medieval Literature (3.0) | |
| | ENGL 3620 | Tudor British Literature (3.0) | |
| | ENGL 3630 | Stuart British Literature (3.0) | |
| | ENGL 3640 | Restoration and 18th Century British Literature (3.0) | |
| | ENGL 3650 | Romantic British Literature (3.0) | |
| | ENGL 3655 | Victorian British Literature (3.0) | |
| | ENGL 3660 | Modern British Literature (3.0) | |
| | ENGL 3670 | Contemporary British Literature (3.0) | |

**Graduation Requirements:**

1. Complete all courses with no grade lower than a C- and no grade lower than a B- in methods courses.

## English Literary Studies, Minor

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete the following courses: ENGL 2600, Critical Introduction to Literature; ENGL 2510, American Literature before 1865, or ENGL 2520, American Literature after 1865; and ENGL 2610, British Literature before 1800, or ENGL 2620, British Literature after 1800. | | | |
| Discipline Core Requirements: | | | 18 Credits |
| Complete the following: | | | |
| | ENGL 3090 | Academic Writing for English Majors WE | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| Complete ONE from the following: | | | 3 |
| | ENGL 3510 | Early American Literature (3) | |
| | ENGL 3520 | Literature of the American Renaissance (3) | |
| | ENGL 3525 | American Literary Realism and Naturalism (3) | |
| | ENGL 3530 | Modern American Literature (3) | |
| | ENGL 3540 | Contemporary American Literature (3) | |
| Complete ONE of the following: | | | 3 |
| | ENGL 3610 | Medieval Literature (3) | |
| | ENGL 3620 | Tudor British Literature (3) | |
| | ENGL 3630 | Stuart British Literature (3) | |
| | ENGL 3640 | Restoration and 18th Century British Literature (3) | |
| | ENGL 3650 | Romantic British Literature (3) | |
| | ENGL 3655 | Victorian British Literature (3) | |
| | ENGL 3660 | Modern British Literature (3) | |
| | ENGL 3670 | Contemporary British Literature (3) | |
| Complete ONE from the following: | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| Complete ONE from the following: | | | 3 |
| | ENGL 3420 | Intermediate Fiction Writing (3) | |
| | ENGL 3440 | Intermediate Poetry Writing (3) | |
| | ENGL 3710 | Literature by Women (3) | |
| | ENGL 373R | Literature of Cultures and Places (3) | |
| | ENGL 374G | Literature of the Sacred (3) | |
| | ENGL 376G | World Literature (3) | |
| | ENGL 3780 | Mormon Literature (3) | |
| | ENGL 3820 | History of Literary Criticism (3) | |
| | ENGL 401R | Topics in Rhetoric (3) | |
| | ENGL 412R | Studies in Literary Genres (3) | |
| | ENGL 4420 | Advanced Fiction Writing I (3) | |
| | ENGL 4440 | Advanced Poetry Writing (3) | |
| | ENGL 4450 | Advanced Creative Nonfiction Writing (3) | |
| | ENGL 4570 | Studies in the American Novel (3) | |
| | ENGL 4620 | Chaucer (3) | |
| | ENGL 463R | Topics in Shakespeare (3) | |
| | ENGL 4640 | Milton (3) | |
| | ENGL 471R | Eminent Authors (3) | |
| | ENGL 474R | Topics in Folklore (3) | |
| | ENGL 476G | Multi-ethnic Literature in America (3) | |
| | ENGL 486R | Topics in Literature (3) | |
| | ENGL 490R | Directed Readings (1) | |

**Graduation Requirements:**

1. Complete all courses with no grade lower than a C-.

## Technical Communication, Minor

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 20**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of 35 semester credits with a cumulative GPA: 2.5 minimum. Or completion of an Associate in Science or an Associate in Arts degree. Minimum grade of "C" in all courses.<br>2. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 20 Credits |
| Complete the following: | | | |
| | ENGL 2310 | Technical Communication | 3 |
| | ENGL 3010 | Rhetorical Theory | 3 |

| | | | |
|---|---|---|---|
| | ENGL 481R | Internship (1.0) (must be taken for a minimum of 2 credits) | 2 |
| Complete FOUR courses from the following: | | | 12 |
| | ENGL 3020 | Modern English Grammars (3.0) | |
| | ENGL 3050 | Advanced Editing and Design for Print Media (3.0) | |
| | ENGL 3300 | Collaborative Communication for Technology Professions (3.0) | |
| | ENGL 3320 | Grant and Proposal Writing (3.0) | |
| | ENGL 3340 | Digital Document Design (3.0) | |
| | ENGL 3460 | Wilderness and Environmental Writing (3.0) | |
| | ENGL 4340 | Advanced Technical Communication (3.0) | |
| | ENGL 436R | Topics in Technical Communication (3.0) | |

## Writing Studies, Minor

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| Complete the following: | | | |
| | ENGL 2310 | Technical Communication (3.0) | 3 |
| | ENGL 3010 | Rhetorical Theory (3.0) | 3 |
| | ENGL 3060 | Visual Rhetoric (3.0) | 3 |
| | ENGL 3070 | Public Rhetorics (3.0) | 3 |
| Elective Requirements: | | | 9 Credits |
| Professional Writing Practices: Complete TWO of the following (or other advisor-approved Writing Studies course): | | | 6 |
| | ENGL 2050 | Editing (3.0) | |
| | ENGL 3050 | Advanced Editing and Design for Print Media (3.0) | |
| | ENGL 3320 | Grant and Proposal Writing (3.0) | |
| | ENGL 4340 | Advanced Technical Communication (3.0) | |
| | ENGL 436R | Topics in Technical Communication (3.0) | |
| | ENLG 481R | Internship (1.0) | |

| | | | |
|---|---|---|---|
| Language and Cultural Rhetorics: Complete ONE of the following (or other advisor-approved Writing Studies course): | | | 3 |
| | ENGL 2030 | Writing for Social Change (3.0) | |
| | ENGL 3030 | Writing in the Disciplines (3.0) | |
| | ENGL 3085 | Rhetorical Approaches to Popular Culture (3.0) | |
| | ENGL 401R | Topics in Rhetoric (3.0) | |

## English - Creative Writing Emphasis, B.A.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |

| | | | |
|---|---|---|---|
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (Fulfilled with Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 22 Credits |
| | ENGL 2510 | American Literature before 1865 | 3 |
| or | ENGL 2520 | American Literature after 1865 (3) | |
| | ENGL 2610 | British Literature before 1800 | 3 |
| or | ENGL 2620 | British Literature after 1800 (3) | |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | ENGL 3000 | Professional Considerations for the English Major[1] | 1 |
| | ENGL 3090 | Academic Writing for English Majors WE[2] | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4950 | Senior Seminar | 3 |
| Language Core- Complete one of the following:[3] | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| Elective Requirements: | | | 35 Credits |
| | One Foreign Language (Foreign Language 202G/2020 course fulfills Humanities Distribution) | | 12 |
| | Complete any courses 1000 level or higher. Upper division courses may be necessary for graduation. Please see Adviser. | | 23 |
| Emphasis Requirements: | | | 27 Credits |
| Complete THREE from the following: | | | 9 |
| | ENGL 3420 | Intermediate Fiction Writing (3) | |
| | ENGL 3430 | Play Writing for Creative Writers (3) | |
| | ENGL 3440 | Intermediate Poetry Writing (3) | |
| | ENGL 3450 | Intermediate Creative Nonfiction Writing (3) | |
| Complete TWO from the following (both courses must be within the same genre): | | | 6 |
| | ENGL 4420 | Advanced Fiction Writing I (3) | |
| | ENGL 4425 | Advanced Fiction Writing II (3) | |
| | ENGL 4440 | Advanced Poetry Writing (3) | |
| | ENGL 4445 | Advanced Poetry Writing II (3) | |
| | ENGL 4450 | Advanced Creative Nonfiction Writing (3) | |
| | ENGL 4455 | Advanced Creative Nonfiction Writing II (3) | |
| Complete the following: | | | |
| | ENGL 412R | Studies in Literary Genres[4] | 6 |
| Complete 6 upper-division credits of ENGL coursework beyond those courses taken to fulfill discipline core or emphasis requirements. | | | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 of which must be upper division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. No grade below C- in required courses.
7. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1] Should be taken early on in the student's course of study, by the junior year at the latest. |
| [2]Should be taken early in the student's junior year, as it serves as crucial preparation for nearly all upper-division English courses. |
| [3] Students pursuing the Writing Studies emphasis should take ENGL 3010 Rhetorical Theory. |
| [4]Course is taken twice as two different genres. |

## English - Creative Writing Emphasis, B.S.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 120**

| Matriculation Requirements: | |
|---|---|
| 1. Complete the following courses: ENGL 2600, Critical Introduction to Literature; ENGL 2510, American Literature before 1865, or ENGL 2520, American Literature after 1865; and ENGL 2610, British Literature before 1800, or ENGL 2620, British Literature after 1800. | |
| General Education Requirements: | 35 Credits |

| | | | |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 22 Credits |
| | ENGL 2510 | American Literature before 1865 | 3 |
| or | ENGL 2520 | American Literature after 1865 (3) | |
| | ENGL 2610 | British Literature before 1800 | 3 |
| or | ENGL 2620 | British Literature after 1800 (3) | |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | ENGL 3000 | Professional Considerations for the English Major[1] | 1 |
| | ENGL 3090 | Academic Writing for English Majors WE[2] | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4950 | Senior Seminar | 3 |
| Language Core- Complete one of the following:[3] | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| Elective Requirements: | | | 36 Credits |
| Complete any courses 1000 level or higher. Upper division may be necessary for graduation. Please see Adviser. | | | 36 |
| Emphasis Requirements: | | | 27 Credits |
| Complete THREE from the following: | | | 9 |
| | ENGL 3420 | Intermediate Fiction Writing (3) | |
| | ENGL 3430 | Play Writing for Creative Writers (3) | |
| | ENGL 3440 | Intermediate Poetry Writing (3) | |
| | ENGL 3450 | Intermediate Creative Nonfiction Writing (3) | |
| Complete TWO from the following (both courses must be within the same genre): | | | 6 |
| | ENGL 4420 | Advanced Fiction Writing I (3) | |
| | ENGL 4425 | Advanced Fiction Writing II (3) | |
| | ENGL 4440 | Advanced Poetry Writing (3) | |
| | ENGL 4445 | Advanced Poetry Writing II (3) | |
| | ENGL 4450 | Advanced Creative Nonfiction Writing (3) | |
| | ENGL 4455 | Advanced Creative Nonfiction Writing II (3) | |
| Complete the following: | | | |
| | ENGL 412R | Studies in Literary Genres[4] | 6 |
| Complete 6 upper-division credits of ENGL coursework beyond those courses taken to fulfill discipline core or emphasis requirements. | | | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 of which must be 3000 level or higher.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. No grade below C- in required courses.
6. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1]Should be taken early on in the student's course of study, by the junior year at the latest. |
| [2]Should be taken early in the student's junior year, as it serves as crucial preparation for nearly all upper-division English courses. |
| [3]Students pursuing the Writing Studies emphasis should take ENGL 3010 Rhetorical Theory. |
| [4]Course is taken twice as two different genres. |

## English - Literary Studies Emphasis, B.A.

### *Requirements*

(6.0UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (Fulfilled with Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 22 Credits |
| | ENGL 2510 | American Literature before 1865 | 3 |
| or | ENGL 2520 | American Literature after 1865 (3) | |
| | ENGL 2610 | British Literature before 1800 | 3 |
| or | ENGL 2620 | British Literature after 1800 (3) | |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | ENGL 3000 | Professional Considerations for the English Major[1] | 1 |
| | ENGL 3090 | Academic Writing for English Majors WE[2] | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4950 | Senior Seminar | 3 |
| Language Core- Complete one of the following:[3] | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| Elective Requirements: | | | 35 Credits |
| | One Foreign Language (Foreign Language 202G/2020 course fulfills Humanities Distribution) | | 12 |
| | Complete any courses 1000 level or higher. Upper division courses may be necessary for graduation. Please see Adviser. | | 23 |
| Emphasis Requirements: | | | 27 Credits |
| American Literature (complete TWO from the following) | | | 6 |
| | ENGL 3510 | Early American Literature (3) | |
| | ENGL 3520 | Literature of the American Renaissance (3) | |
| | ENGL 3525 | American Literary Realism and Naturalism (3) | |
| | ENGL 3530 | Modern American Literature (3) | |
| | ENGL 3540 | Contemporary American Literature (3) | |
| British Literature, pre-1800 (complete ONE from the following) | | | 3 |
| | ENGL 3610 | Medieval Literature (3) | |
| | ENGL 3620 | Tudor British Literature (3) | |
| | ENGL 3630 | Stuart British Literature (3) | |
| | ENGL 3640 | Restoration and 18th Century British Literature (3) | |
| British Literature, post-1800 (complete ONE from the following) | | | 3 |
| | ENGL 3650 | Romantic British Literature (3) | |
| | ENGL 3655 | Victorian British Literature (3) | |
| | ENGL 3660 | Modern British Literature (3) | |

| | | | |
|---|---|---|---|
| | ENGL 3670 | Contemporary British Literature (3) | |
| Shakespeare (Complete the following) | | | |
| | ENGL 463R | Topics in Shakespeare | 3 |
| Literature Elective (Complete ONE of the following) | | | 3 |
| | ENGL 357G | Native American Literature (3) | |
| | ENGL 3710 | Literature by Women (3) | |
| | ENGL 373R | Literature of Cultures and Places (3) | |
| | ENGL 374G | Literature of the Sacred (3) | |
| | ENGL 376G | World Literature (3) | |
| | ENGL 3780 | Mormon Literature (3) | |
| | ENGL 3820 | History of Literary Criticism (3) | |
| | ENGL 4570 | Studies in the American Novel (3) | |
| | ENGL 4620 | Chaucer (3) | |
| | ENGL 4640 | Milton (3) | |
| | ENGL 471R | Eminent Authors (3) | |
| | ENGL 476G | Multi-ethnic Literature in America (3) | |
| | ENGL 486R | Topics in Literature (3) | |
| | Complete 9 upper-division credits of ENGL coursework beyond those courses taken to fulfill discipline core or emphasis requirements. | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 of which must be upper division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. No grade below C- in required courses.
7. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1] Should be taken early on in the student's course of study, by the junior year at the latest. |
| [2] Should be taken early in the student's junior year, as it serves as crucial preparation for nearly all upper-division English courses. |
| [3] Students pursuing the Writing Studies emphasis should take ENGL 3010 Rhetorical Theory. |

## English - Literary Studies Emphasis, B.S.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete the following courses: ENGL 2600, Critical Introduction to Literature; ENGL 2510, American Literature before 1865, or ENGL 2520, American Literature after 1865; and ENGL 2610, British Literature before 1800, or ENGL 2620, British Literature after 1800. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MATH 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 22 Credits |
| | ENGL 2510 | American Literature before 1865 | 3 |
| or | ENGL 2520 | American Literature after 1865 (3) | |
| | ENGL 2610 | British Literature before 1800 | 3 |
| or | ENGL 2620 | British Literature after 1800 (3) | |

| | | | |
|---|---|---|---|
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | ENGL 3000 | Professional Considerations for the English Major[1] | 1 |
| | ENGL 3090 | Academic Writing for English Majors WE[2] | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4950 | Senior Seminar | 3 |
| Language Core- Complete one of the following:[3] | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| Elective Requirements: | | | 36 Credits |
| | Complete any courses 1000 level or higher. Upper division may be necessary for graduation. Please see Adviser. | | 36 |
| Emphasis Requirements: | | | 27 Credits |
| American Literature (complete TWO from the following) | | | 6 |
| | ENGL 3510 | Early American Literature (3) | |
| | ENGL 3520 | Literature of the American Renaissance (3) | |
| | ENGL 3525 | American Literary Realism and Naturalism (3) | |
| | ENGL 3530 | Modern American Literature (3) | |
| | ENGL 3540 | Contemporary American Literature (3) | |
| British Literature, pre-1800 (complete ONE from the following) | | | 3 |
| | ENGL 3610 | Medieval Literature (3) | |
| | ENGL 3620 | Tudor British Literature (3) | |
| | ENGL 3630 | Stuart British Literature (3) | |
| | ENGL 3640 | Restoration and 18th Century British Literature (3) | |
| British Literature, post-1800 (complete ONE from the following) | | | 3 |
| | ENGL 3650 | Romantic British Literature (3) | |
| | ENGL 3655 | Victorian British Literature (3) | |
| | ENGL 3660 | Modern British Literature (3) | |
| | ENGL 3670 | Contemporary British Literature (3) | |
| Shakespeare (Complete the following) | | | |
| | ENGL 463R | Topics in Shakespeare | 3 |
| Literature Elective (Complete ONE of the following) | | | 3 |
| | ENGL 357G | Native American Literature (3) | |
| | ENGL 3710 | Literature by Women (3) | |
| | ENGL 373R | Literature of Cultures and Places (3) | |
| | ENGL 374G | Literature of the Sacred (3) | |
| | ENGL 376G | World Literature (3) | |
| | ENGL 3780 | Mormon Literature (3) | |
| | ENGL 3820 | History of Literary Criticism (3) | |
| | ENGL 4570 | Studies in the American Novel (3) | |
| | ENGL 4620 | Chaucer (3) | |
| | ENGL 4640 | Milton (3) | |
| | ENGL 471R | Eminent Authors (3) | |
| | ENGL 476G | Multi-ethnic Literature in America (3) | |
| | ENGL 486R | Topics in Literature (3) | |
| | Complete 9 upper-division credits of ENGL coursework beyond those courses taken to fulfill discipline core or emphasis requirements. | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 of which must be 3000 level or higher.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. No grade below C- in required courses.
6. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1]Should be taken early on in the student's course of study, by the junior year at the latest. |
| [2]Should be taken early in the student's junior year, as it serves as crucial preparation for nearly all upper-division English courses. |
| [3]Students pursuing the Writing Studies emphasis should take ENGL 3010 Rhetorical Theory. |

## English - Writing Studies Emphasis, B.A.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 120**

| General Education Requirements: | | | 36 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |

| | | | |
|---|---|---|---|
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (Fulfilled with Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 22 Credits |
| | ENGL 2510 | American Literature before 1865 | 3 |
| or | ENGL 2520 | American Literature after 1865 (3) | |
| | ENGL 2610 | British Literature before 1800 | 3 |
| or | ENGL 2620 | British Literature after 1800 (3) | |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | ENGL 3000 | Professional Considerations for the English Major[1] | 1 |
| | ENGL 3090 | Academic Writing for English Majors WE[2] | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4950 | Senior Seminar | 3 |
| Language Core- Complete one of the following:[3] | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| Elective Requirements: | | | 35 Credits |
| | One Foreign Language (Foreign Language 202G/2020 course fulfills Humanities Distribution) | | 12 |
| | Complete any courses 1000 level or higher. Upper division courses may be necessary for graduation. Please see Adviser. | | 23 |
| Emphasis Requirements: | | | 27 Credits |
| Complete ALL of the following: | | | 12 |
| | ENGL 2310 | Technical Communication (3) | |
| | ENGL 3060 | Visual Rhetoric (3) | |
| | ENGL 3070 | Public Rhetorics (3) | |
| | ENGL 481R | Internship (take for at least 3 credits) (1) | |
| Professional Writing Practices--Complete TWO of the following (or other advisor-approved Writing Studies courses): | | | 6 |
| | ENGL 2050 | Editing (3) | |
| | ENGL 3050 | Advanced Editing and Design for Print Media (3) | |
| | ENGL 3320 | Grant and Proposal Writing (3) | |
| | ENGL 3340 | Digital Document Design (3) | |
| | ENGL 4340 | Advanced Technical Communication (3) | |
| | ENGL 436R | Topics in Technical Communication (3) | |
| Language and Cultural Rhetorics--Complete TWO of the following (or other advisor-approved Writing Studies courses): | | | 6 |
| | ENGL 2030 | Writing for Social Change (3) | |
| | ENGL 3030 | Writing in the Disciplines (3) | |
| | ENGL 3085 | Rhetorical Approaches to Popular Culture (3) | |
| | ENGL 401R | Topics in Rhetoric (3) | |
| | ENGL 4020 | Multicultural Rhetorics (3) | |
| | Complete 3 upper-division credits of ENGL coursework beyond those courses taken to fulfill discipline core or emphasis requirements. | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 of which must be upper division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. No grade below C- in required courses.
7. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1]Should be taken early on in the student's course of study, by the junior year at the latest. |
| [2]Should be taken early in the student's junior year, as it serves as crucial preparation for nearly all upper-division English courses. |

[3]Students pursuing the Writing Studies emphasis should take ENGL 3010 Rhetorical Theory.

## English - Writing Studies Emphasis, B.S.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete the following courses: ENGL 2600, Critical Introduction to Literature; ENGL 2510, American Literature before 1865, or ENGL 2520, American Literature after 1865; and ENGL 2610, British Literature before 1800, or ENGL 2620, British Literature after 1800. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 22 Credits |
| | ENGL 2510 | American Literature before 1865 | 3 |
| or | ENGL 2520 | American Literature after 1865 (3) | |
| | ENGL 2610 | British Literature before 1800 | 3 |
| or | ENGL 2620 | British Literature after 1800 (3) | |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | ENGL 3000 | Professional Considerations for the English Major[1] | 1 |
| | ENGL 3090 | Academic Writing for English Majors WE[2] | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4950 | Senior Seminar | 3 |
| Language Core- Complete one of the following:[3] | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| Elective Requirements: | | | 36 Credits |
| | Complete any courses 1000 level or higher. Upper division may be necessary for graduation. Please see Adviser. | | 36 |
| Emphasis Requirements: | | | 27 Credits |
| Complete ALL of the following: | | | 12 |
| | ENGL 2310 | Technical Communication (3) | |
| | ENGL 3060 | Visual Rhetoric (3) | |
| | ENGL 3070 | Public Rhetorics (3) | |
| | ENGL 481R | Internship (take for at least 3 credits) (1) | |
| Professional Writing Practices--Complete TWO of the following (or other advisor-approved Writing Studies courses): | | | 6 |
| | ENGL 2050 | Editing (3) | |
| | ENGL 3050 | Advanced Editing and Design for Print Media (3) | |
| | ENGL 3320 | Grant and Proposal Writing (3) | |
| | ENGL 3340 | Digital Document Design (3) | |

| | | | |
|---|---|---|---|
| | ENGL 4340 | Advanced Technical Communication (3) | |
| | ENGL 436R | Topics in Technical Communication (3) | |
| Language and Cultural Rhetorics--Complete TWO of the following (or other advisor-approved Writing Studies courses): | | | 6 |
| | ENGL 2030 | Writing for Social Change (3) | |
| | ENGL 3030 | Writing in the Disciplines (3) | |
| | ENGL 3085 | Rhetorical Approaches to Popular Culture (3) | |
| | ENGL 401R | Topics in Rhetoric (3) | |
| | ENGL 4020 | Multicultural Rhetorics (3) | |
| Complete 3 upper-division credits of ENGL coursework beyond those courses taken to fulfill discipline core or emphasis requirements. | | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 of which must be 3000 level or higher.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. No grade below C- in required courses.
6. Successful completion of at least one Global/Intercultural course.

| Footnote |
|---|
| [1]Should be taken early on in the student's course of study, by the junior year at the latest. |
| [2]Should be taken early in the student's junior year, as it serves as crucial preparation for nearly all upper-division English courses. |
| [3]Students pursuing the Writing Studies emphasis should take ENGL 3010 Rhetorical Theory. |

# English Education, B.A.

## *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 122**

| Matriculation Requirements: |
|---|
| 1. Complete the following courses: ENGL 2600, Critical Introduction to Literature; ENGL 2510, American Literature before 1865, or ENGL 2520, American Literature after 1865; and ENGL 2610, British Literature before 1800, or ENGL 2620, British Literature after 1800. |

Secondary Education Matriculation Requirements:

1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.
2. GPA of 3.0 or higher with no grade lower than a C in content area courses.
3. Completion of all General Education requirements and the majority of content area courses.
4. Pass LiveScan Criminal Background Check.

| General Education Requirements: | | | 36 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (Fulfilled with Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 74 Credits |
| Complete the following: | | | |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | ENGL 2510 | American Literature before 1865 (3) | |

| | | | |
|---|---|---|---|
| or | ENGL 2520 | American Literature after 1865 | 3 |
| | ENGL 2610 | British Literature before 1800 (3) | |
| or | ENGL 2620 | British Literature after 1800 | 3 |
| | ENGL 3090 | Academic Writing for English Majors WE | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4210 | Methods in Teaching Literacy I | 3 |
| | ENGL 4220 | Methods in Teaching Literacy II | 3 |
| | ENGL 4230 | Methods in Teaching Literacy III Teaching the Conventions of Writing | 3 |
| Language Core (complete ONE from the following) | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| American Literature (complete TWO from the following) | | | 6 |
| | ENGL 3510 | Early American Literature (3) | |
| | ENGL 3520 | Literature of the American Renaissance (3) | |
| | ENGL 3525 | American Literary Realism and Naturalism (3) | |
| | ENGL 3530 | Modern American Literature (3) | |
| | ENGL 3540 | Contemporary American Literature (3) | |
| British Literature, pre-1800 (complete ONE from the following) | | | 3 |
| | ENGL 3610 | Medieval Literature (3) | |
| | ENGL 3620 | Tudor British Literature (3) | |
| | ENGL 3630 | Stuart British Literature (3) | |
| | ENGL 3640 | Restoration and 18th Century British Literature (3) | |
| British Literature, post-1800 (complete ONE from the following) | | | 3 |
| | ENGL 3650 | Romantic British Literature (3) | |
| | ENGL 3655 | Victorian British Literature (3) | |
| | ENGL 3660 | Modern British Literature (3) | |
| | ENGL 3670 | Contemporary British Literature (3) | |
| Complete TWO from the following: | | | 6 |
| | ENGL 3420 | Intermediate Fiction Writing (3) | |
| | ENGL 3440 | Intermediate Poetry Writing (3) | |
| | ENGL 3710 | Literature by Women (3) | |
| | ENGL 373R | Literature of Cultures and Places (3) | |
| | ENGL 374G | Literature of the Sacred (3) | |
| | ENGL 376G | World Literature (3) | |
| | ENGL 3780 | Mormon Literature (3) | |
| | ENGL 3820 | History of Literary Criticism (3) | |
| | ENGL 401R | Topics in Rhetoric (3) | |
| | ENGL 412R | Studies in Literary Genres (3) | |
| | ENGL 4250 | Adolescent Literature (3) | |
| | ENGL 4420 | Advanced Fiction Writing I (3) | |
| | ENGL 4440 | Advanced Poetry Writing (3) | |
| | ENGL 4450 | Advanced Creative Nonfiction Writing (3) | |
| | ENGL 4570 | Studies in the American Novel (3) | |
| | ENGL 4620 | Chaucer (3) | |
| | ENGL 463R | Topics in Shakespeare (3) | |
| | ENGL 4640 | Milton (3) | |
| | ENGL 471R | Eminent Authors (3) | |
| | ENGL 474R | Topics in Folklore (3) | |
| | ENGL 476G | Multi-ethnic Literature in America (3) | |
| | ENGL 486R | Topics in Literature (3) | |
| Secondary Education Licensure (ENGL 4210 is substituted for EDSC 4440): | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| Elective Requirements: | | | 12 Credits |
| | One Foreign Language (Foreign Language 202G/2020 course fulfills Humanities Distribution) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 122 semester credits.
2. Overall GPA of 3.0 (B) or above with no grade lower than a C in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. For the BA degree, completion of 16 credit hours of course work from one foreign language to include the 1010, 1020, 2010, and 202G/2020* levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.

## English Education, B.S.

### *Requirements*

UVU's English program is designed to give students skill, confidence, and versatility in writing, speaking, and interpreting texts. The program provides opportunities for students to consider and practice the applications of effective language use in diverse situations: professional, pragmatic, social, political, and aesthetic. The English program emphasizes knowledge and use of standard English in all written work, yet incorporates an understanding that English is a desirably diverse and variable phenomenon. The courses of study in English are designed to familiarize students with much of the traditional canon of literature. They are also designed to provide students with the critical and ethical skills necessary to interrogate this canon, to incorporate

and legitimize their own and others' "different" voices, not just in the academy, but in any of the many situations in which language influences human activity.

**Total Program Credits: 122**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of the following prerequisite courses: ENGL 2600, Critical Introduction to Literature; ENGL 2510, American Literature before 1865 or ENGL 2520, American Literature after 1865; ENGL 2610, British Literature before 1800 or ENGL 2620, British Literature after 1800.<br><br>Secondary Education Matriculation Requirements:<br><br>1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 74 Credits |
| Complete the following: | | | |
| | ENGL 2600 | Critical Introduction to Literature | 3 |
| | ENGL 2510 | American Literature before 1865 (3) | |
| or | ENGL 2520 | American Literature after 1865 | 3 |
| | ENGL 2610 | British Literature before 1800 (3) | |
| or | ENGL 2620 | British Literature after 1800 | 3 |
| | ENGL 3090 | Academic Writing for English Majors WE | 3 |
| | ENGL 3890 | Contemporary Critical Approaches to Literature WE | 3 |
| | ENGL 4210 | Methods in Teaching Literacy I | 3 |
| | ENGL 4220 | Methods in Teaching Literacy II | 3 |
| | ENGL 4230 | Methods in Teaching Literacy III Teaching the Conventions of Writing | 3 |
| Language Core (complete ONE from the following) | | | 3 |
| | ENGL 3010 | Rhetorical Theory (3) | |
| | ENGL 3020 | Modern English Grammars (3) | |
| | ENGL 3040 | History of the English Language (3) | |
| American Literature (complete TWO from the following) | | | 6 |
| | ENGL 3510 | Early American Literature (3) | |
| | ENGL 3520 | Literature of the American Renaissance (3) | |
| | ENGL 3525 | American Literary Realism and Naturalism (3) | |
| | ENGL 3530 | Modern American Literature (3) | |
| | ENGL 3540 | Contemporary American Literature (3) | |
| British Literature, pre-1800 (complete ONE from the following) | | | 3 |
| | ENGL 3610 | Medieval Literature (3) | |
| | ENGL 3620 | Tudor British Literature (3) | |
| | ENGL 3630 | Stuart British Literature (3) | |
| | ENGL 3640 | Restoration and 18th Century British Literature (3) | |
| British Literature, post-1800 (complete ONE from the following) | | | 3 |
| | ENGL 3650 | Romantic British Literature (3) | |
| | ENGL 3655 | Victorian British Literature (3) | |
| | ENGL 3660 | Modern British Literature (3) | |
| | ENGL 3670 | Contemporary British Literature (3) | |
| Complete TWO from the following: | | | 6 |
| | ENGL 3420 | Intermediate Fiction Writing (3) | |
| | ENGL 3440 | Intermediate Poetry Writing (3) | |
| | ENGL 3710 | Literature by Women (3) | |
| | ENGL 373R | Literature of Cultures and Places (3) | |
| | ENGL 374G | Literature of the Sacred (3) | |
| | ENGL 376G | World Literature (3) | |

| | | | |
|---|---|---|---|
| | ENGL 3780 | Mormon Literature (3) | |
| | ENGL 3820 | History of Literary Criticism (3) | |
| | ENGL 401R | Topics in Rhetoric (3) | |
| | ENGL 412R | Studies in Literary Genres (3) | |
| | ENGL 4250 | Adolescent Literature (3) | |
| | ENGL 4420 | Advanced Fiction Writing I (3) | |
| | ENGL 4440 | Advanced Poetry Writing (3) | |
| | ENGL 4450 | Advanced Creative Nonfiction Writing (3) | |
| | ENGL 4570 | Studies in the American Novel (3) | |
| | ENGL 4620 | Chaucer (3) | |
| | ENGL 463R | Topics in Shakespeare (3) | |
| | ENGL 4640 | Milton (3) | |
| | ENGL 471R | Eminent Authors (3) | |
| | ENGL 474R | Topics in Folklore (3) | |
| | ENGL 476G | Multi-ethnic Literature in America (3) | |
| | ENGL 486R | Topics in Literature (3) | |
| Secondary Education Licensure (ENGL 4210 is substituted for EDSC 4440): | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| Elective Requirements: | | | 13 Credits |
| | Any course 1000 or higher | | 13 |

**Graduation Requirements:**

1. Completion of a minimum of 122 semester credits.
2. Overall GPA of 3.0 (B) or above with no grade lower than a C in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

# Exercise Science and Outdoor Recreation

## Exercise Science and Outdoor Recreation

The Exercise Science and Outdoor Recreation department is in the College of Science. To find the most up-to-date information from the Exercise Science department, visit their website.

Exercise Science and Outdoor Recreation department

**DEPARTMENT CHAIR**

**BOHNE, Michael** *Professor*

**FACULTY**

**BOHNE, Michael** *Professor*
**BOYER, Bret** *Associate Professor*
**CICCONE, Anthony B.** *Assistant Professor*
**CLARK, Nicolas** *Assistant Professor*
**CREER, Andrew** *Professor*
**DRAPER, Shane N.** *Assistant Professor*
**JENSEN, Ellis B.** *Associate Professor*
**LINDLEY, Betsy** *Professor*
**MINER, M. Vinson** *Professor*
**STANDIFIRD, Tyler** *Assistant Professor*
**WHEATLEY, Laura** *Lecturer*
**WILLIAMS, Scott** *Associate Professor*

# Course Descriptions

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# Degrees & Programs

## Exercise Science and Outdoor Recreation, A.A.

### *Requirements*

Students who complete an Associate's Degree in Exercise Science and Outdoor Recreation have received the basic knowledge necessary to continue their education in a Bachelor's Program or pursue employment in the Fitness industry.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social Science majors) (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology[1] | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| | EXSC 270G | Foundations of Exercise Science | 3 |
| Complete 13 credits from the following: | | | 13 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences (4.0) | |
| | ZOOL 2320 | Human Anatomy (3.0) | |
| and | ZOOL 2325 | Human Anatomy Laboratory (1.0) | |
| | ZOOL 2420 | Human Physiology (3.0) | |
| and | ZOOL 2425 | Human Physiology Laboratory (1.0) | |
| | STAT 2040 | Principles of Statistics (4.0) | |
| | EXSC 2500 | Sports Medicine (3.0) | |
| | Any EXSC or PETE courses approved by department (maximum of 2 hours) | | |
| Elective Requirements: | | | 9 Credits |
| | Same Foreign Language | | 8 |
| | Any 1000-level course or higher | | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one language.

| |
|---|
| 1-ZOOL 1090 strongly recommended |

## Exercise Science and Outdoor Recreation, A.S.

### *Requirements*

Students who complete an Associate's Degree in Exercise Science and Outdoor Recreation have received the basic knowledge necessary to continue their education in a Bachelor's Program or pursue employment in the Fitness industry.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social Science majors) (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology[1] | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| | EXSC 270G | Foundations of Exercise Science | 3 |
| Complete 13 credits from the following: | | | 13 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences (4.0) | |
| | ZOOL 2320 | Human Anatomy (3.0) | |
| and | ZOOL 2325 | Human Anatomy Laboratory (1.0) | |
| | ZOOL 2420 | Human Physiology (3.0) | |
| and | ZOOL 2425 | Human Physiology Laboratory (1.0) | |
| | STAT 2040 | Principles of Statistics (4.0) | |
| | EXSC 2500 | Sports Medicine (3.0) | |
| | Any EXSC or PETE courses approved by department (maximum of 2 hours may be applied to graduation) | | |
| Elective Requirements: | | | 9 Credits |
| | Complete any 1000-level or higher | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

| Footnote |
|---|
| 1-ZOOL 1090 strongly recommended |

## Exercise Science, Minor

### *Requirements*

In the Exercise Science and Outdoor Recreation Minor students complete courses in Anatomy, Physiology, Sport Medicine, Exercise Testing and Prescription, and Exercise Physiology. The program is designed to prepare students for employment at the entry level in health and fitness related occupations as well as for higher education.

**Total Program Credits: 23**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 23 Credits |
| | EXSC 270G | Foundations of Exercise Science | 3 |
| | EXSC 2500 | Sports Medicine | 3 |
| | EXSC 3270 | Exercise Testing and Preparation | 3 |
| | EXSC 3700 | Exercise Physiology | 3 |
| | EXSC 3705 | Exercise Physiology Laboratory | 1 |

| | | | |
|---|---|---|---|
| | ZOOL 2320 | Human Anatomy | 3 |
| | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| | ZOOL 2420 | Human Physiology | 3 |
| | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | Choose one of the following: | | 2 |
| | EXSC 3500 | Kinesiology (3) | |
| | EXSC 3750 | Psychosocial Aspects of Human Performance (2) | |
| | EXSC 3550 | Motor Learning and Control WE (3) | |
| | EXSC 4000 | Clinical Exercise Physiology (3) | |
| | EXSC 4100 | Fitness Across the Lifespan (3) | |
| | EXSC 4550 | Principles of Strength and Conditioning (3) | |

## Outdoor Recreation, Minor

### *Requirements*

In the Exercise Science and Outdoor Recreation Minor students complete courses in Anatomy, Physiology, Sport Medicine, Exercise Testing and Prescription, and Exercise Physiology. The program is designed to prepare students for employment at the entry level in health and fitness related occupations as well as for higher education.

**Total Program Credits: 20**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 20 Credits |
| | REC 1535 | Backpacking | 1 |
| | REC 2200 | Foundations of Recreation | 3 |
| | REC 2400 | Principles of Experiential Education in Recreation | 3 |
| | REC 3100 | Recreation Program Planning | 3 |
| | REC 3400 | Risk Management | 3 |
| Complete 1 credit from the the following: | | | 1 |
| | REC 1500 | Canoeing I (1.0) | |
| | REC 1527 | Rock Climbing I (1.0) | |
| | REC 1550 | Mountain Biking (1.0) | |
| | REC 1580 | Kayak Touring(1.0) | |
| Complete 6 credits from the following: | | | 6 |
| | REC 3200 | Inclusive Recreation (3.0) | |
| | REC 3500 | Recreation Administration (3.0) | |
| | REC 3700 | Natural Resource Interpretation (3.0) | |
| | REC 385G | Ethical Concerns in Recreation (3.0) | |
| | REC 4000 | Outdoor Leadership (4.0) | |
| | REC 4400 | Natural Resource and Protected Area Management (3.0) | |
| | REC 4500 | Wildland Recreation Behavior (3.0) | |

## Exercise Science and Outdoor Recreation - Exercise Science Emphasis, B.A.

### *Requirements*

The Exercise Science curriculum has been designed to address student needs and current market demands. Through practical experiences in laboratory settings using state of the art equipment such as the Biodex S4, students are exposed to real life rehabilitation experiences as well as researching functional abilities and performance aspects of collegiate athletes. Additional classroom and lab experiences allow students to conduct 3-D motion analysis, measure muscle activity using wireless EMG technology, and analyze gait patterns using the GaitRite System, as well as conducting assessments to determine maximum oxygen uptake (VO2 Max), body composition, and anaerobic power.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 37 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology[1] | 3 |
| or | BIOL 1610 | College Biology I (4) | |
| | Physical Science | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| | Humanities Distribution (any foreign language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| | EXSC 2500 | Sports Medicine | 3 |
| | EXSC 3550 | Motor Learning and Control WE | 3 |
| | EXSC 3750 | Psychosocial Aspects of Human Performance | 2 |
| | EXSC 3270 | Exercise Testing and Prescription[2] | 3 |
| or | REC 385G | Ethical Concerns in Recreation (3) | |

| | | | |
|---|---|---|---|
| | EXSC 4300 | Research Methods in Exercise Science and Outdoor Recreation | 3 |
| | EXSC 4950 | Senior Seminar[3](2) | |
| or | REC 4950 | Senior Seminar | 2 |
| Elective Requirements: | | | 13 Credits |
| Complete 12 credit hours of course work from one language to include the 1010, 1020, and 2010 levels (202G/2020 level completed in GE requirements). | | | 12 |
| Complete 1 credit hour any course 1000 or higher | | | 1 |
| Emphasis Requirements: | | | 51 Credits |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences | 4 |
| or | CHEM 1210 | Principles of Chemistry I (4) | |
| | ZOOL 2320 | Human Anatomy | 3 |
| and | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| | ZOOL 2420 | Human Physiology | 3 |
| and | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | EXSC 270G | Foundations of Exercise Science | 3 |
| | EXSC 3500 | Kinesiology | 3 |
| | EXSC 3700 | Exercise Physiology | 3 |
| and | EXSC 3705 | Exercise Physiology Laboratory | 1 |
| | EXSC 3730 | Biomechanics | 3 |
| | STAT 2040 | Principles of Statistics | 3 |
| or | PSY 3110 | Statistics for the Behavioral Sciences (4) | |
| or | EXSC 3400 | Statistical Analysis in Exercise Science (3) | |
| Choose 22 credits from the following (make sure selections will satisfy the requirements for upper-division course work): | | | 22 |
| | EXSC 4000 | Clinical Exercise Physiology (3) | |
| | EXSC 4050 | Obesity Physiology and Physical Activity (3) | |
| | EXSC 4100 | Fitness Across the Lifespan (3) | |
| | EXSC 4200 | Exercise Metabolism (3) | |
| | EXSC 4400 | Physical Activity Promotion in the Community (3) | |
| | EXSC 4500 | Advanced Sports Nutrition (3) | |
| | EXSC 4550 | Principles of Strength and Conditioning (3) | |
| | EXSC 4600 | Advanced Biomechanics (3) | |
| | EXSC 4700 | Advanced Gross Motor Assessment (3) | |
| | CHEM 1220 | Principles of Chemistry II (4) | |
| | PHYS 2020 | College Physics II (4) | |
| | ZOOL 4400 | Pathophysiology (4) | |
| | ZOOL 4700 | Advanced Anatomy (4) | |
| | PSY 2300 | Abnormal Psychology (3) | |
| Emphasis Elective Requirements: | | | 3 Credits |
| | Any course 1000-level or higher | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. No grades below C- in Discipline Core or Emphasis Courses.
7. Successful completion of at least one Global/Intercultural course.

Note: Students must obtain the departmental advisor's signature on an approved program plan prior to enrollment in their second semester of study.

| Footnote |
|---|
| [1] Eercise Science students must take BIOL 1610; Outdoor Recreation students must take BIOL 1010 |
| [2]Exercise Science students must take EXSC 3270; Outdoor Recreation students must take REC385G |
| [3]Exercise Science students must take EXSC 4950; Outdoor Recreation students must take REC 4950 |

## Exercise Science and Outdoor Recreation - Exercise Science Emphasis, B.S.

### *Requirements*

The Exercise Science curriculum has been designed to address student needs and current market demands. Through practical experiences in laboratory settings using state of the art equipment such as the Biodex S4, students are exposed to real life rehabilitation experiences as well as researching functional abilities and performance aspects of collegiate athletes. Additional classroom and lab experiences allow students to conduct 3-D motion analysis, measure muscle activity using wireless EMG technology, and analyze gait patterns using the GaitRite System, as well as conducting assessments to determine maximum oxygen uptake (VO2 Max), body composition, and anaerobic power.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |

| | | | |
|---|---|---|---|
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology[1] | 3 |
| or | BIOL 1610 | College Biology I (4) | |
| | Physical Science | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| | EXSC 2500 | Sports Medicine | 3 |
| | EXSC 3550 | Motor Learning and Control WE | 3 |
| | EXSC 3750 | Psychosocial Aspects of Human Performance | 2 |
| | EXSC 3270 | Exercise Testing and Prescription[2] | 3 |
| or | REC 385G | Ethical Concerns in Recreation (3) | |
| | EXSC 4300 | Research Methods in Exercise Science and Outdoor Recreation | 3 |
| | EXSC 4950 | Senior Seminar[3] (2) | |
| or | REC 4950 | Senior Seminar | 2 |
| Elective Requirements: | | | 14 Credits |
| | Any 1000 level or higher | | 14 |
| Emphasis Requirements: | | | 51 Credits |
| | BIOL 1615 | College Biology I Laboratory | 1 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences | 4 |
| or | CHEM 1210 | Principles of Chemistry I (4) | |
| | ZOOL 2320 | Human Anatomy | 3 |
| and | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| | ZOOL 2420 | Human Physiology | 3 |
| and | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | EXSC 270G | Foundations of Exercise Science | 3 |
| | EXSC 3500 | Kinesiology | 3 |
| | EXSC 3700 | Exercise Physiology | 3 |
| and | EXSC 3705 | Exercise Physiology Laboratory | 1 |
| | EXSC 3730 | Biomechanics | 3 |
| | STAT 2040 | Principles of Statistics (4) | |
| or | PSY 3110 | Statistics for the Behavioral Sciences (4) | |
| | EXSC 3400 | Statistical Analysis in Exercise Science | 3 |
| Complete 22 credits from the following (make sure selections will satisfy the requirements for upper-division course work): | | | 22 |
| | EXSC 4000 | Clinical Exercise Physiology (3) | |
| | EXSC 4050 | Obesity Physiology and Physical Activity (3) | |
| | EXSC 4100 | Fitness Across the Lifespan (3) | |
| | EXSC 4200 | Exercise Metabolism (3) | |
| | EXSC 4400 | Physical Activity Promotion in the Community (3) | |
| | EXSC 4500 | Advanced Sports Nutrition (3) | |
| | EXSC 4550 | Principles of Strength and Conditioning (3) | |
| | EXSC 4600 | Advanced Biomechanics (3) | |
| | EXSC 4700 | Advanced Gross Motor Assessment (3) | |
| | CHEM 1220 | Principles of Chemistry II (4) | |
| | PHYS 2020 | College Physics II (4) | |
| | ZOOL 4400 | Pathophysiology (4) | |
| | ZOOL 4700 | Advanced Anatomy (4) | |
| | PSY 2300 | Abnormal Psychology (3) | |
| Emphasis Elective Requirements: | | | 3 Credits |
| | Any courses 1000-level or higher | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. No grades below C- in Discipline Core or Emphasis Courses.
6. Successful completion of at least one Global/Intercultural course.

Note: Students must obtain the departmental advisor's signature on an approved program plan prior to enrollment in their second semester of study.

| Footnote |
|---|
| [1] Exercise Science students must take BIOL 1610; Outdoor Recreation students must take BIOL1010 |
| [2] Exercise Science students must take EXSC 3270; Outdoor Recreation students must take REC385G |
| [3] Exercise Science students must take EXSC 4950; Outdoor Recreation students must take REC 4950 |

## Exercise Science and Outdoor Recreation - Outdoor Recreation Management Emphasis, B.A.

### *Requirements*

In addition to a strong background in recreation theory, experiential education, outdoor leadership, risk management and program planning, graduates of this program leave with a proficiency in a variety of both land and water-based skill acquisition courses, such as avalanche awareness, whitewater kayaking and backpacking. More than preparation for a career in the outdoor field, the major in Outdoor Recreation Management grooms students for a lifetime of outdoor participation and leadership.

**Total Program Credits: 121**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 37 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts | |

| | | | |
|---|---|---|---|
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology[1] | 3 |
| or | BIOL 1610 | College Biology I (3) | |
| | Physical Science | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| | Humanities Distribution (any foreign language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| | EXSC 2500 | Sports Medicine | 3 |
| | EXSC 3550 | Motor Learning and Control WE | 3 |
| | EXSC 3750 | Psychosocial Aspects of Human Performance | 2 |
| | EXSC 3270 | Exercise Testing and Prescription[2] | 3 |
| or | REC 385G | Ethical Concerns in Recreation (3) | |
| | EXSC 4300 | Research Methods in Exercise Science and Outdoor Recreation | 3 |
| | EXSC 4950 | Senior Seminar[3] (2) | |
| or | REC 4950 | Senior Seminar | 2 |
| Elective Requirements: | | | 13 Credits |
| | Complete 12 credit hours of course work from one language to include the 1010, 1020, and 2010 levels (202G/2020 level completed in GE requirements). | | 12 |
| | Complete 1 credit hour any course 1000 or higher | | 1 |
| Emphasis Requirements: | | | 55 Credits |
| | REC 1500 | Canoeing I | 1 |
| or | REC 1580 | Kayak Touring (1) | |
| | REC 1527 | Rock Climbing I | 1 |
| | REC 1535 | Backpacking | 1 |
| | REC 1542 | Wilderness First Responder | 2 |
| | REC 1600 | Winter Exploration | 1 |

| | | | |
|---|---|---|---|
| | REC 2200 | Foundations of Recreation | 3 |
| | REC 2400 | Principles of Experiential Education in Recreation | 3 |
| | REC 2600 | Principles of Outdoor and Adventure Education | 3 |
| | REC 2700 | Leave No Trace Trainer | 1 |
| | REC 3100 | Recreation Program Planning | 3 |
| | REC 3200 | Inclusive Recreation | 3 |
| | REC 3300 | Wilderness Skills | 1 |
| | REC 3400 | Risk Management | 3 |
| | REC 3500 | Recreation Administration | 3 |
| | REC 4400 | Natural Resource and Protected Area Management | 3 |
| | REC 420R | Outdoor Leadership and Management Practicum | 2 |
| | REC 4800 | Professional Preparation in Recreation | 1 |
| | REC 481R | Senior Internship | 7 |
| Complete one of the following: | | | 3 |
| | ACC 2010 | Financial Accounting (3) | |
| | ENTR 3170 | Entrepreneurship and Opportunity Validation (3 | |
| | ENTR 3180 | Developing Small Business (3) | |
| | ENGL 3320 | Grant and Proposal Writing (3) | |
| | HR 3430 | Introduction to Human Resource Management (3) | |
| | BIOL 3800 | Conservation Biology (3) | |
| Complete 3 credits from the following: | | | 3 |
| | REC 1505 | Whitewater Kayaking I (1) | |
| | REC 1516 | Ropes Course and Teambuilding (1) | |
| | REC 1525 | Mountaineering (1) | |
| | REC 1528 | Rock Climbing II (1) | |
| | REC 1550 | Mountain Biking (1) | |
| | REC 2010 | Avalanche Awareness (1) | |
| Complete 3 credits from the following: | | | 3 |
| | REC 2450 | Rock Climbing Site Management and Facilitation (3) | |
| or | REC 2650 | Principles of Challenge Education (3) | |
| or | REC 2750 | Principles of Water-Based Adventure Education (3) | |
| | REC 3700 | Natural Resource Interpretation (3) | |
| | REC 4000 | Outdoor Leadership (4) | |
| | REC 4500 | Wildland Recreation Behavior (3) | |
| | Complete any course(s) 1000 level or higher | | 4 |

**Graduation Requirements:**

1. Completion of a minimum of 121 semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)

3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. No grades below C- in Discipline Core or Emphasis Courses.
7. Successful completion of at least one Global/Intercultural course.

Note: Students must obtain the departmental advisor's signature on an approved program plan prior to enrollment in their second semester of study.

| Footnote |
|---|
| [1] Exercise Science students must take BIOL 1610; Outdoor Recreation students must take BIOL 1010 |
| [2]Exercise Science students must take EXSC 3270; Outdoor Recreation students must take REC385G |
| [3]Exercise Science students must take EXSC 4950; Outdoor Recreation students must take REC 4950 |

## Exercise Science and Outdoor Recreation - Outdoor Recreation Management Emphasis, B.S.

### *Requirements*

In addition to a strong background in recreation theory, experiential education, outdoor leadership, risk management and program planning, graduates of this program leave with a proficiency in a variety of both land and water-based skill acquisition courses, such as avalanche awareness, whitewater kayaking and backpacking. More than preparation for a career in the outdoor field, the major in Outdoor Recreation Management grooms students for a lifetime of outdoor participation and leadership.

**Total Program Credits: 121**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology[1] | 3 |
| or | BIOL 1610 | College Biology I (4) | |
| | Physical Science | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| | EXSC 2500 | Sports Medicine | 3 |
| | EXSC 3550 | Motor Learning and Control WE | 3 |
| | EXSC 3750 | Psychosocial Aspects of Human Performance | 2 |
| | EXSC 3270 | Exercise Testing and Prescription[2] | 3 |
| or | REC 385G | Ethical Concerns in Recreation (3) | |
| | EXSC 4300 | Research Methods in Exercise Science and Outdoor Recreation | 3 |
| | EXSC 4950 | Senior Seminar[3] (2) | |
| or | REC 4950 | Senior Seminar | 2 |
| Elective Requirements: | | | 14 Credits |
| | Any 1000 level or higher | | 14 |
| Emphasis Requirements: | | | 55 Credits |
| | REC 1500 | Canoeing I | 1 |
| or | REC 1580 | Kayak Touring (1) | |
| | REC 1527 | Rock Climbing I | 1 |
| | REC 1535 | Backpacking | 1 |
| | REC 1542 | Wilderness First Responder | 2 |
| | REC 1600 | Winter Exploration | 1 |
| | REC 2200 | Foundations of Recreation | 3 |
| | REC 2400 | Principles of Experiential Education in Recreation | 3 |
| | REC 2600 | Principles of Outdoor and Adventure Education | 3 |
| | REC 2700 | Leave No Trace Trainer | 1 |
| | REC 3100 | Recreation Program Planning | 3 |
| | REC 3200 | Inclusive Recreation | 3 |
| | REC 3300 | Wilderness Skills | 1 |
| | REC 3400 | Risk Management | 3 |
| | REC 3500 | Recreation Administration | 3 |
| | REC 420R | Outdoor Leadership and Management Practicum | 2 |
| | REC 4400 | Natural Resource and Protected Area Management | 3 |
| | REC 4800 | Professional Preparation in Recreation | 1 |
| | REC 481R | Senior Internship | 7 |
| Complete one of the following: | | | 3 |
| | ACC 2010 | Financial Accounting (3) | |

| | | | |
|---|---|---|---|
| | ENTR 3170 | Entrepreneurship and Opportunity Validation (3) | |
| | ENTR 3180 | Developing Small Business (3) | |
| | ENGL 3320 | Grant and Proposal Writing (3) | |
| | HR 3430 | Introduction to Human Resource Management (3) | |
| | BIOL 3800 | Conservation Biology (3) | |
| Complete 3 credits from the following: | | | 3 |
| | REC 1505 | Whitewater Kayaking I (1.0) | |
| | REC 1516 | Ropes Course and Teambuilding (1.0) | |
| | REC 1525 | Mountaineering (1.0) | |
| | REC 1528 | Rock Climbing II (1) | |
| | REC 1550 | Mountain Biking (1.0) | |
| | REC 2010 | Avalanche Awareness (1) | |
| Complete3 credits from the following: | | | 3 |
| | REC 2450 | Rock Climbing Site Management and Facilitation (3) | |
| or | REC 2650 | Principles of Challenge Education (3) | |
| or | REC 2750 | Principles of Water-Based Adventure Education (3) | |
| | REC 3700 | Natural Resource Interpretation (3) | |
| | REC 4000 | Outdoor Leadership (4) | |
| | REC 4500 | Wildland Recreation Behavior (3) | |
| | REC 1500 | Canoeing I | |
| or | REC 1580 | Kayak Touring (1.0) | |
| | Complete any course(s) 1000 level or higher | | 4 |

**Graduation Requirements:**

1. Completion of a minimum of 121 semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. No grades below C- in Discipline Core or Emphasis Courses.
6. Successful completion of at least one Global/Intercultural course.

Note: Students must obtain the departmental advisor's signature on an approved program plan prior to enrollment in their second semester of study.

| Footnote |
|---|
| [1] Exercise Science students must take BIOL 1610; Outdoor Recreation students must take BIOL1010 |
| [2] Exercise Science students must take EXSC 3270; Outdoor Recreation students must take REC385G |
| [3] Exercise Science students must take EXSC 4950; Outdoor Recreation students must take REC 4950 |

# Finance and Economics

## Finance and Economics

The Finance and Economics department is in the Woodbury School of Business. To find the most up-to-date information from the Finance-Economics department, visit their website.

Finance and Economics department

**DEPARTMENT CHAIR**

**GLENN, Lowell M.** *Associate Professor*

**FACULTY**

**BI, Rachel** *Associate Professor*
**CHAN, Leo** *Associate Professor*
**CHERRINGTON, Mark** *Professional in Residence*
**COX, Vaughn** *Professional in Residence*
**CUMMINGS, Benjamin** *Assistant Professor*
**DEAN, Lukas Ray** *Associate Professor*
**GLENN, Lowell M.** *Associate Professor*
**KERTAMUS, Layne** *Professional in Residence*
**KIA, Amir** *Professor*
**LAW, Ryan** *Professional In Residence*
**MARTIN, Terrance K.** *Assistant Professor*
**RICALDI, Laura** *Assistant Professor*
**ROSSI DE OLIVEIRA, Andre** *Associate Professor*
**SAMAD, Abdus** *Professor*
**SMITH, Hyrum** *Professional in Residence*
**SOTOMAYOR, Maritza** *Associate Professor*
**STRATTON, Scott** *Lecturer*
**SUN, Xu (Keira)** *Assistant Professor*
**WASDEN, Cary D.** *Professional in Residence*
**WELKER, Adam** *Assistant Professor*

## Course Descriptions

Economics.....585
Finance.....639
Business Management.....704

## Degrees & Programs

### Financial Planning, Certificate of Proficiency

#### *Requirements*

This certificate adds to the Woodbury School of Business flexibility to meet the needs of individuals seeking to complete the educational requirement to sit for the Certified Financial Planning Board's professional accreditation. It provides the required seven courses in a residential setting for individuals who already have a bachelor degree but lack these required courses. It will supplement the existing bachelor program in Personal Financial Planning and the online seven course program the Woodbury School of Business currently offers in collaboration with Dalton Education.

**Total Program Credits: 21**

| Matriculation Requirements: | |
|---|---|
| Completion of a bachelor degree. | |
| Discipline Core Requirements: | 21 Credits |

| Prerequisites may be required. | | | |
|---|---|---|---|
| | FIN 3060 | Introduction to the PFP Profession | 3 |
| | FIN 3210 | Retirement Planning | 3 |
| | FIN 3220 | Risk Management and Insurance | 3 |
| | FIN 3300 | Tax Planning for Personal Financial Planners | 3 |
| | FIN 3400 | Investment Management | 3 |
| | FIN 4210 | Estate Planning Fundamentals | 3 |
| | FIN 4800 | Personal Financial Planning Capstone | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 21 semester credits.
2. Overall grade point average of 2.5 GPA in all courses. No grade lower than a "C-".

### Operations Management, Certificate of Proficiency

#### *Requirements*

The Certificate in Operations Management gives graduates specialized skills in the analysis of how businesses manage processes to improve organizational functions. Graduates learn principles of scheduling, production, inventory management, quality management, lean processing, and other activities required for efficient organizational functions.

**Total Program Credits: 21**

| Discipline Core Requirements: | | | 21 Credits |
|---|---|---|---|
| All prerequisites must be met. | | | |
| | MATH 1050 | College Algebra (4.0) | |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| or | MATH 1090 | College Algebra for Business | 3 |
| or | Higher math course | | |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4.0) | |
| | MGMT 2340 | Business Statistics I | 3 |
| or | STAT 2040 | Principles of Statistics (4.0) | |
| | MGMT 3345 | Business Statistics II | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | MGMT 3070 | Total Quality Management | 3 |
| | MGMT 3470 | Lean Management Systems | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 21 semester credits.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: minimum of 6 credit hours through course attendance at UVU.

## Economics, Minor

### *Requirements*

The Minor in Economics is intended for graduates from other disciplines to obtain the basics of economic theory and application to facilitate their ability to use economics analytical processes in the development of professional careers. Graduates learn the concepts of marginal analysis, demand and supply theory, characteristics of production and cost processes, and other related issues.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| | ECON 2010 | Principles of Economics I | 3 |
| | ECON 2020 | Principles of Economics II | 3 |
| | ECON 3020 | Managerial Economics | 3 |
| | ECON 3830 | History of Economic Thought | 3 |
| Elective Requirements: | | | 6 Credits |
| Choose six hours from the following courses: | | | 6 |
| | ECON 3030 | Intermediate Macroeconomics (3) | |
| | ECON 3040 | Environmental Economics (3) | |
| | ECON 3370 | Economic Modeling and Quantitative Analysis (3) | |
| | ECON 3810 | Labor Economics (3) | |
| | ECON 3820 | Economic Development (3) | |
| | ECON 4150 | Public Finance (3) | |
| | FIN 4100 | Management of Financial Institutions (3) | |
| | FIN 4180 | International Finance Management (3) | |

## Finance, Minor

### *Requirements*

The Minor in Finance is intended for graduates from other disciplines to learn the basic analytical skills of financial management, investment, and related financial services industry functions.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 9 Credits |
| | ECON 2010 | Principles of Economics I | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| or | STAT 2040 | Principles of Statistics (4) | |
| | FIN 3100 | Principles of Finance | 3 |
| Elective Requirements: | | | 9 Credits |
| Choose nine hours from the following courses: | | | 9 |
| | FIN 3150 | Financial Management (3) | |
| | FIN 3400 | Investment Management (3) | |
| | FIN 4100 | Management of Financial Institutions (3) | |
| | FIN 4160 | Portfolio Management (3) | |
| | FIN 4170 | Derivative Securities (3) | |
| | FIN 4180 | International Finance Management (3) | |
| | FIN 4190 | Applied Asset Diversification and Management (3) | |
| | FIN 5130 | Financial Statement Analysis and Modeling (3) | |
| | MGMT 3345 | Business Statistics II (3) | |

## Risk Management, Minor

### *Requirements*

The Minor in Risk Management will help prepare students for possible Chartered Property Casualty Underwriter (CPCU) credentials. It focuses in depth on foundations of risk management and insurance, enterprise risk management, business law for insurance, commercial property risk management and insurance, and commercial liability risk management and insurance. In addition, students will achieve further distinction by complementing their demonstrated expertise in insurance issues with a mastery of general management principles finance, operations, and leadership

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 21 Credits |
| | MGMT 2340 | Business Statistics I | 3 |
| or | STAT 1040 | Introduction to Statistics (3) | |
| | FIN 3100 | Principles of Finance | 3 |
| | FIN 4020 | Enterprise Risk Management | 3 |
| | FIN 4030 | Foundations of Risk Management and Insurance | 3 |
| | FIN 4040 | Business Law for Insurance Professionals | 3 |
| | FIN 4050 | Commercial Property Risk Management and Insurance | 3 |
| | FIN 4060 | Commercial Liability Risk Management and Insurance | 3 |

## Economics, B.A.

### *Requirements*

The Bachelor degree in economics at WSB is designed to give graduates the analytic and quantitative skills to be effective business decision makers as well as to understand basic economic theory and application that can be useful should they choose to continue graduate studies in economics or related disciplines. Historically, graduates with economics degrees who go on to legal studies, an MBA, or other related professional degrees do significantly better than students from other disciplines. Students with language skills may take an appropriate range of academic courses and obtain a Bachelor of Arts degree.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| • My Educator or IM 2010 or IM 2600<br>• ACC 2110<br>• ECON 2010<br>• MGMT 2240 or MATH 1100<br>• MGMT 2340<br>• MKTG 220G | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |

| | | | |
|---|---|---|---|
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| or | MATH 1090 | College Algebra for Business | 3 |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2020 | Principles of Economics II (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (any foreign language 202G/2020 class) | | 4 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 70 Credits |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | My Educator[1] | | |
| or | IM 2010 | Business Computer Proficiency (3)[1] | |
| or | IM 2600 | Spreadsheet Applications (3)[1] | |
| | ECON 2010 | Principles of Economics I | 3 |
| | MATH 1100 | Introduction to Calculus (4) | |
| or | MGMT 2240 | Business Calculus | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management | 3 |
| Economics Core Requirements: | | | |
| | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| or | MGMT 495R | Executive Lecture Series | 1 |
| | ECON 3010 | Intermediate Microeconomics | 3 |
| | ECON 3030 | Intermediate Macroeconomics | 3 |
| | ECON 305G | International Economics | 3 |
| | MGMT 3345 | Business Statistics II | 3 |
| | ECON 3370 | Economic Modeling and Quantitative Analysis | 3 |
| | ECON 3830 | History of Economic Thought | 3 |
| | ECON 4340 | Econometrics Applications | 3 |
| | ECON 4960 | Senior Seminar Current Economic Issues | 3 |
| Economics Elective Requirements: | | | |
| Choose 15 credits from any 3000 or 4000 level ACC, ECON, or FIN course not already taken in consultation with appropriate faculty or an advisor. | | | 15 |
| Elective Requirements: | | | 14 Credits |
| Complete two (2) credits of general elective courses and 12 credits of any foreign language course 1010, 1020, 2010 sequence. | | | 14 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BA degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will not be allowed to take more than (9) hours of upper-division credit prior to matriculation.

| Footnote |
|---|
| [1] Students will be required to complete My Educator with a score of 80 percent or higher or complete IM 2010 or IM 2600 with a grade of B- or higher. |

# Economics, B.S.

## *Requirements*

The Bachelor degree in economics at WSB is designed to give graduates the analytic and quantitative skills to be effective business decision makers as well as to understand basic economic theory and application that can be useful should they choose to continue graduate studies in economics or related disciplines. Historically, graduates with economics degrees who go on to legal studies, an MBA, or other related professional degrees do significantly better than students from other disciplines. Students with language skills may take an appropriate range of academic courses and obtain a Bachelor of Arts degree.

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| • My Educator or IM 2100 or IM 2600<br>• ACC 2110<br>• ECON 2010<br>• MGMT 2240 or MATH 1100 |

- MGMT 2340
- MKTG 220G

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| or | MATH 1090 | College Algebra for Business | 3 |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2020 | Principles of Economics II (Complete with a B- or higher) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 70 Credits |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | My Educator[1] | | |
| or | IM 2010 | Business Computer Proficiency (3) [1] | |
| or | IM 2600 | Spreadsheet Applications (3)[1] | |
| | ECON 2010 | Principles of Economics I | 3 |
| | MATH 1100 | Introduction to Calculus (4) | |
| or | MGMT 2240 | Business Calculus | 3 |
| | MKTG 220G | Written Business Communication WE (Complete with B- grade or higher) | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| or | MGMT 495R | Executive Lecture Series | 1 |
| Economics Core Requirements: | | | |
| | ECON 3010 | Intermediate Microeconomics | 3 |
| | ECON 3030 | Intermediate Macroeconomics | 3 |
| | ECON 305G | International Economics | 3 |
| | MGMT 3345 | Business Statistics II | 3 |
| | ECON 3370 | Economic Modeling and Quantitative Analysis | 3 |
| | ECON 3830 | History of Economic Thought | 3 |
| | ECON 4340 | Econometrics Applications | 3 |
| | ECON 4960 | Senior Seminar Current Economic Issues | 3 |
| Economics Elective Requirements: | | | |
| Choose 15 credits from any 3000 or 4000 level ACC, ECON, or FIN course not already taken in consultation with appropriate faculty or an advisor. | | | 15 |
| Elective Requirements: | | | 15 Credits |
| Complete 15 credits of any courses 1000 or higher. | | | 15 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit prior to completing matriculation.

| Footnote |
|---|
| [1] Students will be required to complete My Educator with a score of 80 percent or higher or complete the IM 2010 or IM 2600 course with a grade of B- or higher. |

## Finance, B.A.

### *Requirements*

The Bachelor Degree in Finance at WSB prepares graduates for careers in the financial services industry. Students learn basic financial theory as well as specialized courses in financial management of corporate and business organizations, analysis of investment alternatives, and other more sophisticated finance related activities. Graduates go into banking, brokerages, become financial managers, and perform a variety of other financial services functions. Students with language skills may take an appropriate number of courses to obtain a Bachelor of Arts degree.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| • My Educator or IM 2100 or IM 2600<br>• ACC 2110<br>• ECON 2010<br>• MGMT 2240 or MATH 1100<br>• MGMT 2340<br>• MKTG 220G | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| or | MATH 1090 | College Algebra for Business | 3 |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2020 | Principles of Economics II (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (any foreign language 202G/2020 class) | | 4 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 70 Credits |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | My Educator[1] | | |
| or | IM 2010 | Business Computer Proficiency (3)[1] | |
| or | IM 2600 | Spreadsheet Applications (3)[1] | |
| | ECON 2010 | Principles of Economics I | 3 |
| | MATH 1100 | Introduction to Calculus (4) | |
| or | MGMT 2240 | Business Calculus | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |

| Business Core Courses: | | | |
|---|---|---|---|
| | FIN 3100 | Principles of Finance | 3 |
| | ACC 2600 | Business Law and Ethics | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | ECON 305G | International Economics | 3 |
| or | MGMT 330G | Survey of International Business (3) | |
| or | MGMT 332G | Cross-Cultural Communications for International Business (3) | |
| | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| or | MGMT 495R | Executive Lecture Series | 1 |
| Finance Core Requirements: | | | |
| | ECON 3010 | Intermediate Microeconomics (3) | |
| or | ECON 3020 | Managerial Economics | 3 |
| | FIN 3150 | Financial Management | 3 |
| | FIN 3400 | Investment Management | 3 |
| | FIN 4100 | Management of Financial Institutions | 3 |
| | MGMT 3345 | Business Statistics II | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation | 3 |
| Finance Elective Requirements: | | | |
| Complete 15 credits from any 3000 or 4000 level ACC, ECON, or FIN course not already taken in consultation with appropriate faculty or an advisor.[2] | | | 15 |
| Elective Requirements: | | | 14 Credits |
| Complete 2 hours of general electives and 12 credits of any foreign language course 1010, 1020, 2010 sequence | | | 14 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BA degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit prior to completing matriculation.

| Footnote |
|---|
| [1]Students will be required to complete My Educator with a score of 80 percent or higher or complete the IM 2010 or IM 2600 with grade of B- or higher. |
| [2]Note: FIN courses in the PFP Major will not be aurthorized for finance major electives except for FIN 3060. (FIN courses excluded: FIN 3200, FIN 3210, FIN 3220, FIN 3300, FIN 4200, FIN 4210, FIN 4270, FIN 4290, FIN 4800, and FIN 483R) |

# Finance, B.S.

## *Requirements*

The Bachelor degree in finance at WSB prepares graduates for careers in the financial services industry. Students learn basic financial theory as well as specialized courses in financial management of corporate and business organizations, analysis of investment alternatives, and other more sophisticated finance related activities. Graduates go into banking, brokerages, become financial managers, and perform a variety of other financial services functions. Students with languages skills may take an appropriate number of courses to obtain a Bachelor of Arts degree.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| • My Educator or IM 2100 or IM 2600<br>• ACC 2110<br>• ECON 2010<br>• MGMT 2240 or MATH 1100<br>• MGMT 2340<br>• MKTG 220G | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| or | MATH 1090 | College Algebra for Business | 3 |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2020 | Principles of Economics II (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 70 Credits |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | My Educator[1] | | |
| or | IM 2010 | Business Computer Proficiency (3)[1] | |
| or | IM 2600 | Spreadsheet Applications (3)[1] | |
| | ECON 2010 | Principles of Economics I | 3 |
| | MATH 1100 | Introduction to Calculus (4) | |
| or | MGMT 2240 | Business Calculus | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance | 3 |
| | ACC 2600 | Business Law and Ethics | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | ECON 305G | International Economics | 3 |
| or | MGMT 330G | Survey of International Business (3) | |
| or | MGMT 332G | Cross-Cultural Communications for International Business (3) | |
| | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| or | MGMT 495R | Executive Lecture Series | 1 |
| Finance Core Requirements: | | | |
| | ECON 3010 | Intermediate Microeconomics (3) | |
| or | ECON 3020 | Managerial Economics | 3 |
| | FIN 3150 | Financial Management | 3 |
| | FIN 3400 | Investment Management | 3 |
| | FIN 4100 | Management of Financial Institutions | 3 |
| | MGMT 3345 | Business Statistics II | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation | 3 |
| Finance Elective Requirements: | | | |
| Choose 15 credits from any 3000 or 4000 level ACC, ECON, or FIN course not already taken in consultation with appropriatefaculty or an advisor.[2] | | | 15 |
| Elective Requirements: | | | 15 Credits |
| Complete 15 credits of any courses 1000 or higher | | | 15 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit prior to completing matriculation.

| Footnote |
|---|
| [1] Students will be required to complete the Business Computer Proficiency exam with a score of 80 percent or higher or complete the IM 2010 or IM 2600 course with a grade of B- or higher. |
| [2]NOTE: FIN courses in the PFP Major will not be aurthorized for finance major electives except for FIN 3060. (FIN courses excluded FIN 3200, FIN 3210, FIN 3220, FIN 3300, FIN 4200, FIN 4210, FIN 4270, FIN 4290, FIN 4800, and FIN 483R) |

## Personal Financial Planning, B.S.

### *Requirements*

The WSB Bachelor of Science in Personal Financial Planning (PFP) prepares graduates with the courses necessary to meet educational requirements to sit for the Certified Financial Planning Board of Standards, Inc. accreditation process. It is intended to prepare students to become fee-for-service professional planners with strong ethical standards who work with families and individuals developing specific budget, asset management, and related planning processes.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | My Educator[1] | | |
| or | IM 2010 | Business Computer Proficiency (3) [1] | |
| or | IM 2600 | Spreadsheet Applications (3)[1] | |
| | ECON 2010 | Principles of Economics I | 3 |
| | MATH 1100 | Introduction to Calculus (4) | |
| or | MGMT 2240 | Business Calculus | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| or | MATH 1090 | College Algebra for Business | 3 |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2020 | Principles of Economics II (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| Discipline Core Requirements: | | | 70 Credits |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | My Educator[1] | | |
| or | IM 2010 | Business Computer Proficiency (3) [1] | |
| or | IM 2600 | Spreadsheet Applications (3)[1] | |
| | ECON 2010 | Principles of Economics I | 3 |
| | MATH 1100 | Introduction to Calculus (4) | |
| or | MGMT 2240 | Business Calculus | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| Business Core Courses: | | | |
| | MGMT 2390 | Professional Business Presentations | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | FIN 3100 | Principles of Finance | 3 |
| | ECON 305G | International Economics (3) | |
| or | MGMT 330G | Survey of International Business (3) | |
| or | MGMT 332G | Cross-Cultural Communications for International Business | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation | 3 |
| Personal Financial Planning Core Requirements: | | | |
| | FIN 3060 | Introduction to the PFP Profession | 3 |
| | FIN 3200 | Financial Counseling | 3 |
| | FIN 3210 | Retirement Planning | 3 |
| | FIN 3220 | Risk Management and Insurance | 3 |
| | FIN 3300 | Tax Planning for Personal Financial Planners | 3 |
| | FIN 3400 | Investment Management | 3 |
| | FIN 4210 | Estate Planning Fundamentals | 3 |
| | FIN 4270 | Wealth Management Seminar | 3 |
| | FIN 4290 | Technological Applications in Personal Financial Planning | 3 |

| | | | |
|---|---|---|---|
| | FIN 4800 | Personal Financial Planning Capstone | 3 |
| | FIN 481R | Personal Financial Planning Internship (2) (for a maximum of 3 credits) | 3 |
| | FIN 483R | Colloquium in PFP Professionalism | 1 |
| Elective Requirements: | | | 15 Credits |
| Twelve credit hours from the following (or other department approved courses): | | | 12 |
| | FIN 3170 | Financial Statement Analysis (3) | |
| | FIN 4190 | Applied Asset Diversification and Management (3) | |
| | FIN 4200 | Financial Counseling Practicum (3) | |
| | FIN 457R | Advanced Topics in Finance (3) | |
| | FIN 4700 | CFP Examination Preparation (3) | |
| | FIN 5180 | CFA Examination Preparation (3) | |
| | MGMT 494R | Seminar (3) | |
| | MKTG 3650 | Professional Selling (3) | |
| | Three credits of any course numbered 1000 or higher | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until matriculation into Woodbury School is completed.

| Footnote |
|---|
| [1] Students will be required to complete My Educator with a score of 80 percent or higher or complete the IM 2010 or IM 2600 course with a grade of B- or higher. |

# Financial Planning and Analytics Graduate Programs

## Financial Planning and Analytics Graduate Program

The Master of Financial Planning and Analytics Graduate Program is in the Woodbury School of Business. To find the most up-to-date information on Financial Planning and Analytics Graduate Program, visit their website.

Financial Planning and Analytics Graduate Program

## Course Descriptions

Finance..... 639

## Degrees & Programs

### Master of Financial Planning and Analytics, M.F.P.A.

#### *Requirements*

The Master of Financial Planning and Analytics (FPA) prepares students for professional positions in financial planning and analytics including an industry accreditation along with the master's degree. PFP undergraduates will study advanced levels of financial planning, retirement/estate planning, technology applications, preparation for Chartered Financial Analysis (CFA) accreditation, and other research and professional development. Another group of students without PFP undergraduate experience will pursue graduate education in the required topics for successfully completing the CFP® Board requirements to sit for the examination including retirement, estate, income tax, wealth, and a capstone experience. The second track candidates will also be required to complete pre-requisite courses in introduction to financial planning, risk management and insurance, and investment management basics.

**Total Program Credits: 36**

| Matriculation Requirements: | | |
|---|---|---|
| Students taking the CFP Track must complete the following three undergraduate courses at UVU or at a CFP© Board approved program prior to being admitted to this Master of Financial Planning and Analytics program:<br>• FIN 3060 Introduction to the PFP Profession<br>• FIN 3220 Risk Management and Insurance<br>• FIN 3400 Investment Management<br><br>Any substitution for any of the above three UVU undergraduate courses would need to be pre-approved by the Director of the UVU Master of Financial Planning and Analytics program. The three courses outlined above and the four (excluding FIN 6700 CFP Exam Preparation) outlined in the CFP track are required for an individual to be eligible to take the CFP© Exam. | | |
| Discipline Core: | | 36 Credits |
| Complete the following Core classes | | |
| FIN 6100 | Research Methods | 3 |
| FIN 6130 | Financial Statement Analysis and Modeling | 3 |
| FIN 6140 | Regulatory Policy in the Financial Services Industry | 3 |
| FIN 6170 | Investment Analysis and Portfolio Analysis | 3 |
| FIN 6200 | Behavioral Finance Seminar | 3 |
| FIN 6290 | Advanced Technology Applications in PFP | 3 |
| FIN 6340 | Analytics and Advanced Statistics | 3 |
| Complete one of the following Tracks | | 15 |
| CFP Track | | |
| FIN 6210 | Retirement Planning (3) | |
| FIN 6260 | Estate Planning (3) | |
| FIN 6300 | Income Tax Planning (3) | |
| FIN 6800 | PFP Capstone (3) | |
| FIN 6700 | CFP Exam Preparation (3) | |
| Analytic Track | | |
| FIN 6160 | International Financial Management (3) | |
| FIN 6250 | Retirement Income Planning (3) | |
| FIN 657R | Special Topics in Financial Planning (3) | |
| FIN 6810 | CFA Exam Preparation (3) | |
| Complete one of the following electives for the Analytics Track: | | |
| FIN 6180 | Asset Protection and Trust Planning (3) | |
| FIN 6270 | Wealth Management (3) | |
| FIN 6400 | Client Relationships Management (3) | |
| FIN 6450 | Planning for Financial Planning Business Owners (3) | |

**Graduation Requirements:**

1. Completion of 36 hours of approved credit as described in this program with no grade lower than a "C".
2. Maintain a minimum cumulative graduate GPA of 3.0 or higher to graduate with the degree.
3. Graduates may not transfer more than ten semester credit hours into this Masters of FPA program. Only transfer courses approved by the graduate program faculty designated by the FPA graduate program director shall be counted as approved credit for the degree.

# History and Political Science

## History and Political Science

The History and Political Science department is in the College of Humanities & Social Sciences. To find the most up-to-date information from the History and Political Science department, visit their website.

History and Political Science department

**FACULTY**

**ABDRISAEV, Baktybek** *Lecturer*
**BENNETT, Lyn E.** *Professor*
**BIBBY, Andrew** *Assistant Professor*
**CHO, Richard** *Assistant Professor*
**COCKERHAM, Geoffrey** *Associate Professor*
**DESART, Jay A.** *Associate Professor*
**ENGLAND, Lynn** *Lecturer*
**GOODE, Michael J.** *Associate Professor*
**GRIFFIN, Rick A.** *Associate Professor*
**HUNT, John M.** *Associate Professor*
**JANSEN, Dustin O.** *Assistant Professor*
**LENTZ, Mark** *Associate Professor*
**MCCARTHY, Brendan** *Assistant Professor*
**MUNIS, B. Kal** *Assistant Professor*
**NIGRO, Jenna** *Assistant Professor*
**PANG, Hong** *Assistant Professor*
**PETERSON, Luke P.** *Lecturer*
**SNEDEGAR, Keith** *Professor*
**SYLVESTER, Steven M.** *Assistant Professor*
**WINANS, Adrienne A.** *Assistant Professor*
**YOUNGBULL, Kristin** *Lecturer*
**YUREVITCH, Theo** *Lecturer - Placeholder*

# Course Descriptions


American Indian Studies..... 475
American Studies..... 476
Constitutional Studies..... 540
History..... 656
Peace and Justice Studies..... 748
Political Science..... 749
Social Science..... 773


# Degrees & Programs

## American Indian Studies, Minor

### *Requirements*

The American Indian Studies minor provides students with academic experiences, skills, and strategies to understand the scope of American indigenous communities within scholarly and applied contexts.

**Total Program Credits: 18**

| | |
|---|---|
| Matriculation Requirements: | |
| 1. Admitted to a bachelor degree program at UVU. | |
| Discipline Core Requirements: | 18 Credits |

| | | | |
|---|---|---|---|
| | AIST 180G | Introduction to American Indian Studies (3.0) | 3 |
| | AIST 4600 | Contemporary American Indian Political and Social Issues (3.0) | 3 |
| Complete four of the following: | | | 12 |
| | AIST 327G | Indians of Utah (3.0) | |
| | AIST 358G | American Indian Health Policy (3.0) | |
| | AIST 3600 | American Indian Policy and Tribal Government (3.0) | |
| | AIST 3810 | Pre-Columbian America (3.0) | |
| | AIST 3830 | Indians of the Great Plains (3.0) | |
| | AIST 384G | Indians of the Southwest (3.0) | |
| | AIST 3850 | The Struggle for Self-determination--American Indians 1891 to present (3.0) | |
| | AIST 490R | Special Topics in American Indian Studies (3.0) | |
| | ANTH 3300 | Culture Development and International Aid (3.0) | |
| | ANTH 3450 | Shamanism and Indigenous Religion (3.0) | |
| | BESC 4030 | Introduction to Practice Evaluation and Grant Writing (3.0) | |
| | ENGL 357G | Native American Literature (3.0) | |
| | HIST 382G | Indians of Eastern North America (3.0) | |

**Graduation Requirements:**

1. Overall GPA of 2.0 or above.
2. Residency hours--minimum of 12 credits counting towards the minor through attendance at UVU.

## American Studies, Minor

### *Requirements*

American Studies provides students with an interdisciplinary approach to the study of American cultures. Through examination of historical, religious, and literary texts, political institutions, popular culture, film, art, and the physical landscape, students will explore how Americans create meaning in their lives and make sense of the world in which they live. By encouraging students to approach their majors from the perspective of several overlapping disciplines, American Studies courses will foster deeper critical thinking and broader contextualization.

**Total Program Credits: 18**

| | | |
|---|---|---|
| Matriculation Requirements: | | |
| 1. Completion of 30 hours of credit at UVU.<br>2. Admitted to a bachelor degree program at UVU. | | |
| Discipline Core Requirements | | 6 Credits |
| AMST 2000 | Introduction to American Studies | 3 |
| AMST 300R | Topics in American Studies | 3 |
| Elective Requirements | | 12 Credits |
| Complete 12 hours from the following list of electives | | 12 |
| AIST 327G | Indians of Utah (3) | |

| | | |
|---|---|---|
| AIST 3810 | Precolumbian America (3) | |
| AIST 3830 | Indians of the Great Plains (3) | |
| AIST 384G | Indians of the Southwest (3) | |
| AIST 3850 | The Struggle for Self-determination American Indians 1891 to present (3) | |
| ANTH 3000 | Language and Culture (3) | |
| ANTH 3360 | Contemporary Issues in American Culture (3) | |
| ANTH 3460 | Anthropology of Mormonism (3) | |
| ANTH 3500 | Discourse Semiotics and Representation (3) | |
| ARTH 3100 | History of American Art and Architecture (3) | |
| COMM 3100 | Propaganda and Persuasion (3) | |
| COMM 3115 | Communicating in Environments (3) | |
| COMM 3700 | Free Expression in a Democratic Society (3) | |
| COMM 3780 | Mormons Media and Culture (3) | |
| CINE 217G | Race Class and Gender in U S Cinema (3) | |
| CNST 3870 | Constitutional History to Plessy 1896 (3) | |
| CNST 3880 | Constitutional History Since Plessy 1896 (3) | |
| CNST 4730 | Framing of the US Constitution (3) | |
| CNST 4795 | Civil Rights and Civil Liberties (3) | |
| ECON 4500 | US Economic Development and History (3) | |
| EDEL 3050 | Foundations of American Education (2) | |
| EDSC 3050 | Foundations of American Education (2) | |
| ENGL 2210 | Introduction to Folklore (3) | |
| ENGL 2510 | American Literature before 1865 (3) | |
| ENGL 2520 | American Literature after 1865 (3) | |
| ENGL 3510 | Early American Literature (3) | |
| ENGL 3520 | Literature of the American Renaissance (3) | |
| ENGL 3530 | Modern American Literature (3) | |
| ENGL 3540 | Contemporary American Literature (3) | |
| ENGL 3710 | Literature by Women (3) | |
| ENGL 3780 | Mormon Literature (3) | |
| ENGL 4570 | Studies in the American Novel (3) | |
| ENGL 476G | Multi-ethnic Literature in America (3) | |
| ENVT 3280 | Environmental Law (3) | |
| ENVT 3850 | Environmental Policy (3) | |
| GEOG 3100 | Cartography (3) | |
| GEOG 3800 | Environmental History of the United States (3) | |
| HIST 320G | Women in American History to 1870 WE (3) | |
| HIST 321G | Women in American History since 1870 (3) | |
| HIST 322G | History of the American West to 1850 WE (3) | |
| HIST 323G | History of the American West since 1850 WE (3) | |
| HIST 3260 | History of Utah (3) | |
| HIST 371R | Issues and Topics in American History (3) | |
| HIST 3730 | American Origins to 1790 (3) | |
| HIST 3731 | US History-Early Republic through the Progressive Era (3) | |
| HIST 3732 | U.S. History-Progressive Era to the 21st Century (3) | |
| HIST 3740 | American Revolution (3) | |
| HIST 3800 | Environmental History of the United States (3) | |
| HIST 466G | Legacies and Reckonings in the American West (3) | |
| HIST 471R | Special Issues and Topics in American History (3) | |

| | | |
|---|---|---|
| HUM 1010 | Humanities Through the Arts (3) | |
| HUM 3500 | Approaches to Humanities WE (3) | |
| LANG 3000 | Language and Culture (3) | |
| PHIL 3150 | Philosophical Issues in Feminism (3) | |
| PHIL 3470 | Pragmatism and American Philosophy (3) | |
| PHIL 3530 | Environmental Ethics (3) | |
| PHIL 3700 | Social and Political Philosophy (3) | |
| POLS 3150 | US Presidency (3) | |
| POLS 3200 | US Congress (3) | |
| POLS 3400 | American Foreign Policy (3) | |
| PSY 3100 | Psychology of Gender (3) | |
| REC 3700 | Natural Resource Interpretation (3) | |
| SOC 2370 | Sociology of Gender (3) | |
| SOC 320G | Race and Minority Relations(3) | |
| SOC 3430 | Sociology of Education (3) | |
| SOC 3460 | Political Sociology (3) | |
| SOC 4400 | Social Change (3) | |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above.
2. Residency hours--minimum of 12 credit hours through course attendance at UVU.

## Chinese Commerce, Minor

### *Requirements*

The Chinese Commerce minor focuses on important aspects of Chinese commerce, language and culture. This program is designed to combine an understanding of the social, political, historical, and economic factors that make China one of the leading international powers today. As such, the minor offers proficiency in the Chinese language, augmented with cultural knowledge of the country and an introduction to international business practices. As an interdisciplinary minor, the program draws on faculty expertise from various disciplines and includes varied perspectives.

**Total Program Credits: 22**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Students need to be admitted into a bachelor degree program. | | | |
| Discipline Core Requirements: | | | 13 Credits |
| 13 credit core requirement | | | 13 |
| | CHIN 2010 | Intermediate Chinese I (4.0) | |
| | MGMT 4620 | Developing Business in China (3.0) | |
| | POLS 362G | Modern Chinese Political Economy (3.0) | |
| | POLS 4610 | International Law (3.0) | |
| Elective Requirements: | | | 9 Credits |
| In addition to 13 credit core requirement, students need to take 9 credit electives | | | 9 |
| | CHIN 202G | Intermediate Chinese II (4.0) | |
| | CHIN 3050 | Advanced Chinese (3.0) | |
| | CHIN 3200 | Business Chinese I (3.0) | |
| | CHIN 351G | Chinese Culture and Civilization (3.0) | |
| | CHST 362G | Traditional Chinese History (3.0) | |
| | CHST 363G | Modern Chinese History (3.0) | |
| | MGMT 332G | Cross-Cultural Communications for International Business (3.0) | |
| | POLS 352G | Chinese Politics (3.0) | |
| | POLS 3600 | International Relations of East Asia (3.0) | |
| | CHIN 4200 | Business Chinese II (3.0) | |
| | Or other approved electives | | |

**Graduation Requirements**

1. Completion of 22 credits.
2. Completion of Baccalaureate Degree.

## Constitutional Studies, Minor

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| To be admitted into the program, students must:<br>1. Possess a 3.0 grade point average<br>2. Complete 30 credit hours<br>3. Complete POLS 1000 American Heritage or POLS 1100 American National Government | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | POLS 3250 | Introduction to Law and Politics | 3 |
| | CNST 4720 | Foundations of American Constitutionalism | 3 |
| | CNST 4790 | US Constitution | 3 |

| | | | |
|---|---|---|---|
| | CNST 4795 | Civil Rights and Civil Liberties | 3 |
| Elective Requirements: | | | 9 Credits |
| Complete three of the following courses for 9 credits: | | | 9 |
| | POLS 1020 | Political Ideologies (3.0) | |
| | POLS 3300 | Introduction to Public Administration (3.0) | |
| | POLS 4610 | International Law (3.0) | |
| | ECON 4500 | US Economic Development and History (3.0) | |
| | CNST 3870 | Constitutional History to Plessy 1896 (3.0) | |
| | CNST3880 | Constitutional History since Plessy 1896 (3.0) | |
| | HIST 3320 | Modern Britain (3.0) | |
| | LEGL 4190 | Constitutional Law (3.0) | |
| | CJ 4160 | Constitutional Criminal Rights (3.0) | |
| | CNST 4730 | Framing of the US Constitution (3.0) | |
| | CNST 2600 | Comparative Constitutionalism (3.0) | |
| | or any other Coordinator or Chair approved courses. | | |

## History, Minor

### *Requirements*

UVU's History Program is dedicated to developing the twenty-first century student. We provide the general student body a broad range of courses that increase global awareness, engagement and informed citizenship, as well as develop critical thinking, writing, and oral expression. In addition, History majors can choose from a large number of in-depth upper division courses that further their content knowledge and expand their abilities to critically analyze past and current events in a variety of regions and nations. In all courses, students and faculty observe the human experience by investigating the diverse historical perspectives of the past and present. History faculty endeavor to teach in ways that foster independent thinking, engage the students with historical conversations and debates, and improve students' ability to communicate in a variety of media. Students who successfully complete our programs will have a valuable set of skills for further study in graduate and professional programs, and careers in public service or private enterprise.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Successful completion of one history course at UVU.<br>2. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | HIST 1500 | World History to 1500 | 3 |
| | HIST 151G | World History from 1500 to the Present | 3 |
| | HIST 2700 | US History to 1877 | 3 |
| | HIST 2710 | US History since 1877 | 3 |
| Elective Requirements: | | | 9 Credits |
| | Any three upper division history courses except HIST 4860 and HIST 4990. | | 9 |

**Graduation Requirements:**

1. Complete all history courses with a grade of "C-" or better.

## Peace and Justice Studies, Minor

### *Requirements*

The Peace & Justice Studies minor approaches phenomena empirically and theoretically associated with violence/nonviolence and injustice/justice, including peace, justice, mediation and conflict resolution, philosophy and religion. These topics are investigated at multiple levels from the realm of the personal and familial, to international structures, conventions, institutions, and history.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU | | | |
| Discipline Core Requirements: | | | 6 Credits |
| | PJST 3400 | Conflict Transformation Resolution and Sustainable Peace | 3 |
| | PJST 4900 | Peace and Justice Studies Capstone | 3 |
| | PJST 3000 | Introduction to Peace and Justice Studies | 3 |
| Elective Requirements: | | | 12 Credits |
| Complete 12 credit hours selected from the following list: | | | 12 |
| Peace, War, and Conflict: | | | |
| | PJST 3020 | The Ethics of War and Peace (3.0) | |
| | PJST 3030 | The Scientific Study of War and Peace (3.0) | |
| | PJST 3040 | Peace in Historical Context (3.0) | |
| | PJST 3100 | Introduction to Human Security (3.0) | |
| | PJST 3200 | Global Poverty Facts Causes and Solutions (3.0) | |
| | PJST 3300 | Community Development (3.0) | |
| | PJST 4200 | Advanced Poverty Studies:Global Problems and Policies (3.0) | |
| | PJST 4300 | Race Gender and Class in Peace and Justice (3.0) | |
| | AIST 3850 | The Struggle for Self-determination--American Indians 1891 to present (3.0) | |
| | HIST 3540 | History of South Africa (3.0) | |
| | HIST 4130 | Anti-Semitism and the Holocaust (3.0) | |
| | HIST 4140 | Genocide in the Twentieth Century (3.0) | |
| | POLS 3100 | Survey of International Terrorism (3.0) | |
| | POLS 3650 | Model United Nations (3.0) | |
| Justice: | | | |
| | AIST 3600 | American Indian Policy and Tribal Government (3.0) | |
| | AIST 4600 | Contemporary American Indian Political and Social Issues (3.0) | |
| | HIST 3800 | Environmental History of the United States (3.0) | |
| | POLS 3500 | International Relations of the Middle East (3.0) | |
| | POLS 3600 | International Relations of East Asia (3.0) | |

| | | | |
|---|---|---|---|
| | SOC 320G | Race and Minority Relations (3.0) | |
| | SOC 3460 | Political Sociology (3.0) | |
| | SOC 3520 | Environmental Sociology (3.0) | |
| | SOC 3700 | Social Inequality (3.0) | |
| Mediation/Conflict Resolution: | | | |
| | LEGL 3410 | Mediation and Negotiation (3.0) | |
| | LEGL 4100 | Advanced Mediation (3.0) | |
| | LEGL 3150 | Survey of Dispute Resolution (3.0) | |
| | LEGL 4200 | Domestic Mediation (3.0) | |
| Philosophy and Religion: | | | |
| | CNST 4795 | Civil Rights and Civil Liberties (3.0) | |
| | PHIL 3530 | Environmental Ethics (3.0) | |
| | PHIL 3540 | Christian Ethics (3.0) | |
| | PHIL 3700 | Social and Political Philosophy (3.0) | |
| | PHIL 3150 | Philosophical Issues in Feminism (3.0) | |
| | PJST 475R | Issues in Peace and Justice Studies (3.0) | |
| | POLS 4500 | International Conflict and Security (3.0) | |

## Political Science, Minor

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of POLS 1010, Introduction to Political Science; or POLS 1100, American National Government.<br>2. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 21 Credits |
| Complete THREE of the following: | | | 9 |
| | POLS 1020 | Political Ideologies (3.0) | |
| | POLS 2100 | Introduction to International Relations (3.0) | |
| | POLS 2200 | Introduction to Comparative Politics (3.0) | |
| | POLS 230G | Introduction to Political Theory (3.0) | |
| | POLS 3120 | Political Parties (3.0) | |
| | POLS 3300 | Introduction to Public Administration (3.0) | |
| Complete TWO of the following: | | | 6 |
| | POLS 3030 | State and Local Government (3.0) | |
| | POLS 3150 | US Presidency (3.0) | |
| | POLS 3200 | US Congress (3.0) | |
| | POLS 3250 | Introduction to Law and Politics (3.0) | |
| | CNST 4720 | Foundations of American Constitutionalism (3.0) | |
| | CNST 4790 | US Constitution (3.0) | |
| Complete TWO of the following: | | | 6 |
| | AIST 3600 | American Indian Policy and Tribal Government (3.0) | |
| | POLS 3000 | Political Analysis (3.0) | |
| | POLS 3100 | Survey of International Terrorism (3.0) | |
| | POLS 3180 | Public Opinion and Political Behavior (3.0) | |
| | POLS 3400 | American Foreign Policy (3.0) | |
| | POLS 3500 | International Relations of the Middle East (3.0) | |
| | POLS 3600 | International Relations of East Asia (3.0) | |
| | POLS 3610 | International Organization (3.0) | |
| | POLS 3680 | International Political Economy (3.0) | |
| | POLS 4500 | International Conflict and Security (3.0) | |
| | POLS 4610 | International Law and Relations (3.0) | |
| | POLS 480R | Internship WE (2.0) | |

**Graduation Requirements:**

1. Complete all political science courses with a grade of "C-" or better.

## History and Social Studies Education, B.S.

### *Requirements*

UVU’s History Program is dedicated to developing the twenty-first century student. We provide the general student body a broad range of courses that increase global awareness, engagement and informed citizenship, as well as develop critical thinking, writing, and oral expression. In addition, History majors can choose from a large number of in-depth upper division courses that further their content knowledge and expand their abilities to critically analyze past and current events in a variety of regions and nations. In all courses, students and faculty observe the human experience by investigating the diverse historical perspectives of the past and present. History faculty endeavor to teach in ways that foster independent thinking, engage the students with historical conversations and debates, and improve students’ ability to communicate in a variety of media. Students who successfully complete our programs will have a valuable set of skills for further study in graduate and professional programs, and careers in public service or private enterprise.

**Total Program Credits: 121**

| |
|---|
| Matriculation Requirements: |
| 1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses. |

4. Pass LiveScan Criminal Background Check.

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete the following: | | | 3 |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | GEOG 1000 | Introduction to Physical Geography (Fulfills Physical Science) | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science-Complete one of the following: | | 3 |
| | POLS 2200 | Introduction to Comparative Politics (3) | |
| | POLS 2100 | Introduction to International Relations (3) | |
| Discipline Core Requirements: | | | 86 Credits |
| Complete the following: | | | |
| | HIST 1500 | World History to1500 | 3 |
| | HIST 151G | World History from 1500 to the Present | 3 |
| | HIST 2700 | US History to 1877 | 3 |
| | HIST 2710 | US History since 1877 | 3 |
| | HIST 3010 | The Historian's Craft WE | 3 |
| | HIST 3260 | History of Utah | 3 |
| | HIST 4250 | Teaching History in the Secondary Curriculum (Student must earn a minimum B- grade or higher) | 3 |
| Professional Education Courses-Must be completed with a grade of B- or higher. | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| Complete two courses from each of the following two areas of study, at least one of which must have a WE designation | | | 12 |
| United States | | | |
| | AIST 327G | Indians of Utah (3) | |
| | AIST 3810 | Precolumbian America (3) | |
| | AIST 3830 | Indians of the Great Plains (3) | |
| | AIST 384G | Indians of the Southwest (3) | |
| | AIST 3850 | The Struggle for Self-determination--American Indians 1891 to present (3) | |
| | HIST 320G | Women in American History to 1870 WE (3) | |
| | HIST 321G | Women in American History since 1870 (3) | |
| | HIST 322G | History of the American West to 1850 WE (3) | |
| | HIST 323G | History of the American West since 1850 WE (3) | |
| | HIST 371R | Issues and Topics in American History (3) | |
| | HIST 3730 | American Origins to 1790 (3) | |
| | HIST 3731 | US History-Early Republic through the Progressive Era (3) | |
| | HIST 3732 | U.S. History-Progressive Era to the 21st Century (3) | |
| | HIST 3740 | American Revolution (3) | |
| | HIST 3745 | Civil War and Reconstruction (3) | |
| | HIST 3800 | Environmental History of the United States (3) | |
| | HIST 466G | Legacies and Reckonings in the American West WE (3) | |
| | HIST 471R | Special Issues and Topics in American History (3) | |
| World History | | | |
| | HIST 204G | Colonial Latin America (3) | |
| | HIST 205G | Modern Latin America (3) | |
| | HIST 3030 | Introduction to African History (3) | |
| | HIST 3110 | Greek History (3) | |
| | HIST 3130 | Roman History (3) | |
| | HIST 3140 | Roman Empire (3) | |
| | HIST 3150 | Medieval Europe (3) | |

| | | | |
|---|---|---|---|
| | HIST 3160 | Renaissance and Reformation--Europe 1350 to 1600 (3) | |
| | HIST 3170 | Absolutism Enlightenment and Revolution--Europe from 1600 to 1815 (3) | |
| | HIST 3180 | Nineteenth Century Europe (3) | |
| | HIST 3190 | Twentieth Century Europe (3) | |
| | HIST 320R | Issues and Topics in Global History (3) | |
| | HIST 3320 | Modern Britain (3) | |
| | HIST 3340 | The French Revolution and Napoleon (3) | |
| | HIST 3440 | The History of World War I (3) | |
| | HIST 345G | The History of World War II (3) | |
| | HIST 3540 | History of South Africa (3) | |
| | HIST 366G | The History of Modern Russia--1864 to Present (3) | |
| | HIST 4130 | Anti-Semitism and the Holocaust (3) | |
| | HIST 4180 | The Italian Renaissance WE (3) | |
| | HIST 420R | Issues and Topics in Global History (3) | |
| | HIST 430G | Violence and Social Conflict in Latin America (3) | |
| | HIST 4320 | History of Scientific Thought (3) | |
| | HIST 461G | Peoples of the Atlantic World 1450-1800 (3) | |
| | HIST 463G | Missions and Conversion in the Early Americas (3) | |
| Social Studies Composite - Please see your Advisor. Students must receive a C grade or higher in all content area classes. | | | 21 |
| | Complete any two SOC/ANTH courses numbered 1000 or higher | | |
| | Complete any one ECON course numbered 1000 or higher | | |
| | Complete any one PSY course numbered 1000 or higher | | |
| | HIST 1740 | US Economic History (3) | |
| | GEOG 130G | Survey of World Geography (3) | |
| | GEOG 3200 | Geography of Utah (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 121 semester credits.
2. Overall GPA of 3.0 (B) or above with no grade lower than a C in major required content courses and no grade lower than a B- in Licensure and Methods courses. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## History, B.A.

### *Requirements*

UVU's History Program is dedicated to developing the twenty-first century student. We provide the general student body a broad range of courses that increase global awareness, engagement and informed citizenship, as well as develop critical thinking, writing, and oral expression. In addition, History majors can choose from a large number of in-depth upper division courses that further their content knowledge and expand their abilities to critically analyze past and current events in a variety of regions and nations. In all courses, students and faculty observe the human experience by investigating the diverse historical perspectives of the past and present. History faculty endeavor to teach in ways that foster independent thinking, engage the students with historical conversations and debates, and improve students' ability to communicate in a variety of media. Students who successfully complete our programs will have a valuable set of skills for further study in graduate and professional programs, and careers in public service or private enterprise.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (Fulfilled by completing Foreign Language Course 202G/2020) | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 39 Credits |

| | | | |
|---|---|---|---|
| | HIST 1500 | World History to1500 | 3 |
| | HIST 151G | World History from 1500 to the Present | 3 |
| | HIST 2700 | US History to 1877 | 3 |
| | HIST 2710 | US History since 1877 | 3 |
| | HIST 3010 | The Historian's Craft WE | 3 |
| | HIST 4980 | Senior Research Thesis Research Component | 3 |
| | HIST 4990 | Senior Research Thesis Writing Component | 3 |
| Select at least one course from each area of study and any two additional upper-division History courses | | | 18 |
| | A. European History | | |
| | HIST 3110 | Greek History (3) | |
| | HIST 3130 | Roman History (3) | |
| | HIST 3140 | Roman Empire (3) | |
| | HIST 3150 | Medieval Europe (3) | |
| | HIST 3160 | Renaissance and Reformation--Europe 1350 to 1600 (3) | |
| | HIST 3170 | Absolutism Enlightenment and Revolution--Europe from 1600 to 1815 (3) | |
| | HIST 3180 | Nineteenth Century Europe (3) | |
| | HIST 3190 | Twentieth Century Europe (3) | |
| | HIST 3320 | Modern Britain (3) | |
| | HIST 3340 | The French Revolution and Napoleon (3) | |
| | HIST 366G | The History of Modern Russia--1864 to Present (3) | |
| | HIST 4180 | The Italian Renaissance WE (3) | |
| | B. United States History | | |
| | AIST 327G | Indians of Utah (3) | |
| | AIST 3810 | Precolumbian America (3) | |
| | AIST 3830 | Indians of the Great Plains (3) | |
| | AIST 384G | Indians of the Southwest (3) | |
| | AIST 3850 | The Struggle for Self-determination American Indians 1891 to present (3) | |
| | HIST 320G | Women in American History to 1870 WE (3) | |
| | HIST 321G | Women in American History since 1870 (3) | |
| | HIST 322G | History of the American West to 1850 WE (3) | |
| | HIST 323G | History of the American West since 1850 WE (3) | |
| | HIST 3260 | History of Utah (3) | |
| | HIST 3730 | American Origins to 1790 (3) | |
| | HIST 3731 | US. History-Early Republic through the Progressive Era (3) | |
| | HIST 3732 | U.S. History-Progressive Era to the 21st Century (3) | |
| | HIST 3740 | American Revolution (3) | |
| | HIST 3745 | Civil War and Reconstruction (3) | |
| | HIST 3800 | Environmental History of the United States (3) | |
| | HIST 382G | Indians of Eastern North America (3) | |
| | HIST 466G | Legacies and Reckonings in the American West WE (3) | |
| | C. World History | | |
| | HIST 204G | Colonial Latin America (3) | |
| | HIST 205G | Modern Latin America (3) | |
| | HIST 3030 | Introduction to African History (3) | |
| | HIST 3540 | History of South Africa (3) | |
| | HIST 430G | Violence and Social Conflict in Latin America (3) | |
| | HIST 461G | Peoples of the Atlantic World 1450-1800 (3) | |
| | HIST 463G | Missions and Conversion in the Early Americas (3) | |
| | D. Special Topics | | |
| | HIST 3020 | Public and Digital History (3) | |
| | HIST 320R | Issues and Topics in Global History (3) | |
| | HIST 3440 | The History of World War I (3) | |
| | HIST 345G | The History of World War II (3) | |
| | HIST 371R | Issues and Topics in American History (3) | |
| | HIST 4130 | Anti-Semitism and the Holocaust (3) | |
| | HIST 4140 | Genocide in the Twentieth Century (3) | |
| | HIST 420R | Issues and Topics in Global History (3) | |
| | HIST 4320 | History of Scientific Thought (3) | |
| | HIST 471R | Special Issues and Topics in American History (3) | |
| | HIST 482R | Public History Internship (2) | |
| | HIST 491R | Directed Readings (2) | |
| Elective Requirements: | | | 39 Credits |
| | Any courses numbered 1000 or higher (15 credits must be upper division). | | 33 |
| | Complete additional 12 hours of one Foreign Language. | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 credits, 40 of which must be 3000 level or higher.
2. Minimum UVU GPA of 2.0 upon graduation, with no HIST course grade below a C-.
3. Completion of four semesters of one foreign language.
4. Comply with the catalog's rule on maximum number of years in the program.
5. Minimum of 30 credits must be taken at UVU.
6. Successful completion of at least one Global/Intercultural course.

NOTES: Students should frequently consult with his/her advisor on program requirements.

# Political Science - American Government Emphasis, B.A.

## *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (fulfilled by completing any foreign language 202G/2020 course ) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Elective Requirements: | | | 36 Credits |
| | Foreign Language Requirement: Complete 1010,1020, 2010, and 202G (one language) | | 12 |
| | Any courses numbered 1000 or higher. (9 credit hours must be upper division (3000-4000 level courses)) | | 24 |
| Emphasis Requirements: | | | 30 Credits |
| Complete 18 credits from the followings courses (at least one must be Writing Enriched): | | | 18 Credits |
| | AIST 4600 | Contemporary American Indian Political and Social Issues (3) | |
| | CNST 3870 | Constitutional History to Plessy 1896 (3) | |
| | CNST 3880 | Constitutional History Since Plessy 1896 (3) | |
| | CNST 4720 | Foundations of American Constitutionalism (3) | |
| | CNST 4790 | US Constitution (3) | |
| | PJST 4300 | Race Gender and Class in Peace and Justice (3) | |
| | POLS 3030 | State and Local Government (3) | |
| | POLS 3120 | Political Parties (3) | |
| | POLS 3150 | US Presidency (3) | |
| | POLS 3180 | Public Opinion and Political Behavior (3) | |
| | POLS 3200 | US Congress (3) | |
| | POLS 3220 | Interest Groups (3) | |
| | POLS 3310 | Introduction to Public Policy WE (3) | |
| | POLS 3480 | Race in Politics (3) | |
| | POLS 420R | Issues and Topics in Political Science (3) | |
| | POLS 4250 | Public Health Organization and Policy WE (3) | |
| | POLS 490R | Independent Study (1) | |
| | PHIL 3700 | Social and Political Philosophy (3) | |
| | SOC 3460 | Political Sociology (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division) | | 12 Credits |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade lower than a C-.

3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of coursework from one language to include 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.

## Political Science - American Government Emphasis, B.S.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 30 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Quantitative Requirement | | | |
| | POLS 3010 | Political Analysis II | 3 |
| Complete 9 credits from the following courses: | | | 9 |
| | POLS 3020 | Public Program Analysis (3) | |
| | POLS 3040 | Survey Research and Design Methods (3) | |
| | POLS 3050 | Experimental Methods in Political Science (3) | |
| | POLS 3060 | Qualitative Analysis (3) | |
| | POLS 3070 | Policy Analysis (3) | |
| Elective Requirements: | | | 25 Credits |
| | Any courses numbered 1000 or higher. (3 credit hours must be upper division (3000-4000 level courses)) | | 25 |
| Emphasis Requirements: | | | 30 Credits |
| Complete 18 credits from the following courses (at least one must be Writing Enriched): | | | 18 |
| | AIST 4600 | Contemporary American Indian Political and Social Issues (3) | |
| | CNST 3870 | Constitutional History to Plessy 1896 (3) | |
| | CNST 3880 | Constitutional History Since Plessy 1896 (3) | |
| | CNST 4720 | Foundations of American Constitutionalism (3) | |
| | CNST 4790 | US Constitution (3) | |
| | PJST 4300 | Race Gender and Class in Peace and Justice (3) | |
| | POLS 3030 | State and Local Government (3) | |
| | POLS 3040 | Survey Research and Design Methods (3) | |
| | POLS 3120 | Political Parties (3) | |
| | POLS 3150 | US Presidency (3) | |
| | POLS 3180 | Public Opinion and Political Behavior (3) | |
| | POLS 3200 | US Congress (3) | |

| | | | |
|---|---|---|---|
| | POLS 3220 | Interest Groups (3) | |
| | POLS 3310 | Introduction to Public Policy WE (3) | |
| | POLS 3480 | Race in Politics (3) | |
| | POLS 420R | Issues and Topics in Political Science (3) | |
| | POLS 4250 | Public Health Organization and Policy WE (3) | |
| | POLS 490R | Independent Study (1) | |
| | PHIL 3700 | Social and Political Philosophy (3) | |
| | SOC 3460 | Political Sociology (3) | |
| | Complete any 12 elective credits (4 credits must be upper division) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade below C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## Political Science - Global Politics Emphasis, B.A.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (fulfilled by completing any foreign language 202G/2020 course ) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Elective Requirements: | | | 36 Credits |
| | Foreign Language Requirement: Complete 1010,1020, 2010, and 202G (one language) | | 12 |
| | Any courses numbered 1000 or higher. (9 credit hours must be upper division (3000-4000 level courses)) | | 24 |
| Emphasis Requirements: | | | 30 Credits |
| Complete 18 credits from the followings courses: | | | 18 |
| | HIST 205G | Modern Latin America (3) | |
| | POLS 3100 | Survey of International Terrorism (3) | |
| | POLS 3210 | World Diplomacy (3) | |
| | POLS 3400 | American Foreign Policy (3) | |
| | POLS 3410 | Globalization and Sustainable Development (3) | |
| | POLS 3420 | Islam in World Affairs (3) | |
| | POLS 3500 | International Relations of the Middle East (3) | |
| | POLS 3510 | Post Soviet Politics (3) | |
| | POLS 352G | Chinese Politics (3) | |
| | POLS 353G | Asian Politics (3) | |

| | | | |
|---|---|---|---|
| | POLS 356G | Comparative Politics of Central Asia (3) | |
| | POLS 3600 | International Relations of East Asia (3) | |
| | POLS 3610 | International Organization (3) | |
| | POLS 362G | Modern Chinese Political Economy (3) | |
| | POLS 3620 | Latin American Politics (3) | |
| | POLS 3630 | Sustainable Mountain Development (3) | |
| | POLS 3640 | United Nations Sustainable Development Goals (3) | |
| | POLS 3650 | Model United Nations (3) | |
| | POLS 3680 | International Political Economy (3) | |
| | POLS 420R | Issues and Topics in Political Science (3) | |
| | POLS 4500 | International Conflict and Security (3) | |
| | POLS 4610 | International Law and Relations (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade lower than a C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of coursework from one language to include 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.

## Political Science - Global Politics Emphasis, B.S.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 30 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Quantitative Requirement | | | |
| | POLS 3010 | Political Analysis II | 3 |
| Complete 9 credits from the following courses: | | | 9 |
| | POLS 3020 | Public Program Analysis (3) | |
| | POLS 3040 | Survey Research and Design Methods (3) | |
| | POLS 3050 | Experimental Methods in Political Science (3) | |
| | POLS 3060 | Qualitative Analysis (3) | |
| | POLS 3070 | Policy Analysis (3) | |
| Elective Requirements: | | | 25 Credits |
| | Any courses numbered 1000 or higher. (3 credit hours must be upper division (3000-4000 level | | 25 |

| | | | |
|---|---|---|---|
| | courses)) | | |
| Emphasis Requirements: | | | 30 Credits |
| Complete 18 credits from the followings courses: | | | 18 |
| | HIST 205G | Modern Latin America (3) | |
| | POLS 3100 | Survey of International Terrorism (3) | |
| | POLS 3210 | World Diplomacy (3) | |
| | POLS 3400 | American Foreign Policy (3) | |
| | POLS 3410 | Globalization and Sustainable Development (3) | |
| | POLS 3420 | Islam in World Affairs (3) | |
| | POLS 3500 | International Relations of the Middle East (3) | |
| | POLS 3510 | Post Soviet Politics (3) | |
| | POLS 352G | Chinese Politics (3) | |
| | POLS 353G | Asian Politics (3) | |
| | POLS 356G | Comparative Politics of Central Asia (3) | |
| | POLS 3600 | International Relations of East Asia (3) | |
| | POLS 3610 | International Organization (3) | |
| | POLS 362G | Modern Chinese Political Economy (3) | |
| | POLS 3620 | Latin American Politics (3) | |
| | POLS 3630 | Sustainable Mountain Development (3) | |
| | POLS 3640 | United Nations Sustainable Development Goals (3) | |
| | POLS 3650 | Model United Nations (3) | |
| | POLS 3680 | International Political Economy (3) | |
| | POLS 420R | Issues and Topics in Political Science (3) | |
| | POLS 4500 | International Conflict and Security (3) | |
| | POLS 4610 | International Law and Relations (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade below C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## Political Science - Indian Affairs Administration Emphasis, B.A.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (fulfilled by completing any foreign language 202G/2020 course ) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |

| | | | |
|---|---|---|---|
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Elective Requirements: | | | 36 Credits |
| | Foreign Language Requirement: Complete 1010,1020, 2010, and 202G (one language) | | 12 |
| | Any courses numbered 1000 or higher. (9 credit hours must be upper division (3000-4000 level courses)) | | 24 |
| Emphasis Requirements: | | | 30 Credits |
| Complete 18 credits from the followings courses: | | | 18 |
| | AIST 180G | Introduction to American Indian Studies (3) | |
| | AIST 3360 | American Indian Education Policy (3) | |
| | AIST 3590 | American Indian Law (3) | |
| | AIST 3600 | American Indian Policy and Tribal Government (3) | |
| | AIST 3850 | The Struggle for Self-determination American Indians 1891 to present (3) | |
| | AIST 4600 | Contemporary American Indian Political and Social Issues (3) | |
| | AIST 490R | Special Topics in American Indian Studies (3) | |
| | CNST 4795 | Civil Rights and Civil Liberties (3) | |
| | POLS 3030 | State and Local Government (3) | |
| | POLS 3320 | Nonprofits and The Public Sector (3) | |
| | POLS 3480 | Race in Politics (3) | |
| | POLS 4250 | Public Health Organization and Policy WE (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division, and at least 3 credits must be a POLS Writing Enriched course) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade lower than a C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of coursework from one language to include 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.

## Political Science - Indian Affairs Administration Emphasis, B.S.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 30 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |

| | | | |
|---|---|---|---|
| Quantitative Requirement | | | |
| | POLS 3010 | Political Analysis II | 3 |
| Complete 9 credits from the following courses: | | | 9 |
| | POLS 3020 | Public Program Analysis (3) | |
| | POLS 3040 | Survey Research and Design Methods (3) | |
| | POLS 3050 | Experimental Methods in Political Science (3) | |
| | POLS 3060 | Qualitative Analysis (3) | |
| | POLS 3070 | Policy Analysis (3) | |
| Elective Requirements: | | | 25 Credits |
| | Any courses numbered 1000 or higher. (3 credit hours must be upper division (3000-4000 level courses)) | | 25 |
| Emphasis Requirements: | | | 30 Credits |
| Complete 18 credits from the followings courses: | | | 18 |
| | AIST 180G | Introduction to American Indian Studies (3) | |
| | AIST 3360 | American Indian Education Policy (3) | |
| | AIST 3590 | American Indian Law (3) | |
| | AIST 3600 | American Indian Policy and Tribal Government (3) | |
| | AIST 3850 | The Struggle for Self-determination American Indians 1891 to present (3) | |
| | AIST 4600 | Contemporary American Indian Political and Social Issues (3) | |
| | AIST 490R | Special Topics in American Indian Studies (3) | |
| | CNST 4795 | Civil Rights and Civil Liberties (3) | |
| | POLS 3030 | State and Local Government (3) | |
| | POLS 3320 | Nonprofits and The Public Sector (3) | |
| | POLS 3480 | Race in Politics (3) | |
| | POLS 4250 | Public Health Organization and Policy WE (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division, and at least 3 credits must be a POLS Writing Enriched course) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade lower than a C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## Political Science - Peace and Justice Studies Emphasis, B.A.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (fulfilled by completing any foreign language 202G/2020 course ) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |

| | | | |
|---|---|---|---|
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Elective Requirements: | | | 36 Credits |
| | Foreign Language Requirement: Complete 1010,1020, 2010, and 202G (one language) | | 12 |
| | Any courses numbered 1000 or higher. (9 credit hours must be upper division (3000-4000 level courses)) | | 24 |
| Emphasis Requirements: | | | 30 Credits |
| | PJST 3000 | Introduction to Peace and Justice Studies | 3 |
| | PJST 3400 | Conflict Transformation Resolution and Sustainable Peace | 3 |
| Complete 12 credits from the following courses: | | | 12 |
| | CNST 4795 | Civil Rights and Civil Liberties (3) | |
| | PJST 3020 | The Ethics of War and Peace (3) | |
| | PJST 3030 | The Scientific Study of War and Peace (3) | |
| | PJST 3040 | Peace in Historical Context (3) | |
| | PJST 3100 | Introduction to Human Security (3) | |
| | PJST 3200 | Global Poverty Facts Causes and Solutions (3) | |
| | PJST 3300 | Community Development (3) | |
| | PJST 4200 | Advanced Poverty Studies:Global Problems and Policies (3) | |
| | PJST 4300 | Race Gender and Class in Peace and Justice (3) | |
| | PJST 475R | Issues in Peace and Justice Studies (3) | |
| | POLS 3100 | Survey of International Terrorism (3) | |
| | POLS 3650 | Model United Nations (3) | |
| | POLS 4500 | International Conflict and Security (3) | |
| | SOC 3460 | Political Sociology (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division, and at least 3 credits must be a POLS Writing Enriched course) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade lower than a C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of coursework from one language to include 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.

# Political Science - Peace and Justice Studies Emphasis, B.S.

## *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 30 Credits |
| | POLS 1100 | American National Government | 3 |

| | | | |
|---|---|---|---|
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Quantitative Requirement | | | |
| | POLS 3010 | Political Analysis II | 3 |
| Complete 9 credits from the following courses: | | | 9 |
| | POLS 3020 | Public Program Analysis (3) | |
| | POLS 3040 | Survey Research and Design Methods (3) | |
| | POLS 3050 | Experimental Methods in Political Science (3) | |
| | POLS 3060 | Qualitative Analysis (3) | |
| | POLS 3070 | Policy Analysis (3) | |
| Elective Requirements: | | | 25 Credits |
| | Any courses numbered 1000 or higher. (3 credit hours must be upper division (3000-4000 level courses)) | | 25 |
| Emphasis Requirements: | | | 30 Credits |
| | PJST 3000 | Introduction to Peace and Justice Studies | 3 |
| | PJST 3400 | Conflict Transformation Resolution and Sustainable Peace | 3 |
| Complete 12 credits from the following courses: | | | 12 |
| | CNST 4795 | Civil Rights and Civil Liberties (3) | |
| | PJST 3020 | The Ethics of War and Peace (3) | |
| | PJST 3030 | The Scientific Study of War and Peace (3) | |
| | PJST 3040 | Peace in Historical Context (3) | |
| | PJST 3100 | Introduction to Human Security (3) | |
| | PJST 3200 | Global Poverty Facts Causes and Solutions (3) | |
| | PJST 3300 | Community Development (3) | |
| | PJST 4200 | Advanced Poverty Studies:Global Problems and Policies (3) | |
| | PJST 4300 | Race Gender and Class in Peace and Justice (3) | |
| | PJST 475R | Issues in Peace and Justice Studies (3) | |
| | POLS 3100 | Survey of International Terrorism (3) | |
| | POLS 3650 | Model United Nations (3) | |
| | POLS 4500 | International Conflict and Security (3) | |
| | SOC 3460 | Political Sociology (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division, and at least 3 credits must be a POLS WritingEnriched course) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade below C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## Political Science - Public Administration and Public Policy Emphasis, B.A.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |

| | | | |
|---|---|---|---|
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (fulfilled by completing any foreign language 202G/2020 course ) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE (3) | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Elective Requirements: | | | 36 Credits |
| | Foreign Language Requirement: Complete 1010,1020, 2010, and 202G (one language) | | 12 |
| | Any courses numbered 1000 or higher. (9 credit hours must be upper division (3000-4000 level courses)) | | 24 |
| Emphasis Requirements: | | | 30 Credits |
| | POLS 3300 | Introduction to Public Administration | 3 |
| | POLS 3310 | Introduction to Public Policy WE | 3 |
| Complete 12 credits from the followings courses: | | | 12 |
| | AIST 3590 | American Indian Law (3) | |
| | AIST 3600 | American Indian Policy and Tribal Government (3) | |
| | ECON 2010 | Principles of Economics I (3) | |
| | ECON 2020 | Principles of Economics II (3) | |
| | ECON 4150 | Public Finance (3) | |
| | HR 3430 | Introduction to Human Resource Management (3) | |
| | POLS 3020 | Public Program Analysis (3) | |
| | POLS 3030 | State and Local Government (3) | |
| | POLS 3070 | Policy Analysis (3) | |
| | POLS 3320 | Nonprofits and The Public Sector (3) | |
| | POLS 3340 | Public Innovation (3) | |
| | POLS 3370 | Leading Cities (3) | |
| | POLS 3380 | Local Economic Development (3) | |
| | POLS 3390 | Urban Planning (3) | |
| | POLS 420R | Issues and Topics in Political Science (3) | |
| | POLS 4250 | Public Health Organization and Policy WE (3) | |
| | POLS 490R | Independent Study (1) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade lower than a C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of coursework from one language to include 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.

## Political Science - Public Administration and Public Policy Emphasis, B.S.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |

| | | | |
|---|---|---|---|
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 30 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Quantitative Requirement | | | |
| | POLS 3010 | Political Analysis II | 3 |
| Complete 9 credits from the following courses: | | | 9 |
| | POLS 3020 | Public Program Analysis (3) | |
| | POLS 3040 | Survey Research and Design Methods (3) | |
| | POLS 3050 | Experimental Methods in Political Science (3) | |
| | POLS 3060 | Qualitative Analysis (3) | |
| | POLS 3070 | Policy Analysis (3) | |
| Elective Requirements: | | | 25 Credits |
| Any courses numbered 1000 or higher. (3 credit hours must be upper division (3000-4000 level courses)) | | | 25 |
| Emphasis Requirements: | | | 30 Credits |
| | POLS 3300 | Introduction to Public Administration | 3 |
| | POLS 3310 | Introduction to Public Policy WE | 3 |
| Complete 12 credits from the followings courses: | | | 12 |
| | AIST 3590 | American Indian Law (3) | |
| | AIST 3600 | American Indian Policy and Tribal Government (3) | |
| | ECON 2010 | Principles of Economics I (3) | |
| | ECON 2020 | Principles of Economics II (3) | |
| | ECON 4150 | Public Finance (3) | |
| | HR 3430 | Introduction to Human Resource Management (3) | |
| | POLS 3020 | Public Program Analysis (3) | |
| | POLS 3030 | State and Local Government (3) | |
| | POLS 3040 | Survey Research and Design Methods (3) | |
| | POLS 3070 | Policy Analysis (3) | |
| | POLS 3320 | Nonprofits and The Public Sector (3) | |
| | POLS 3340 | Public Innovation (3) | |
| | POLS 3370 | Leading Cities (3) | |
| | POLS 3380 | Local Economic Development (3) | |
| | POLS 3390 | Urban Planning (3) | |
| | POLS 420R | Issues and Topics in Political Science (3) | |
| | POLS 4250 | Public Health Organization and Policy WE (3) | |
| | POLS 490R | Independent Study (1) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade below C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## Political Science - Public Law and Political Philosophy Emphasis, B.A.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |

| | | | |
|---|---|---|---|
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities (fulfilled by completing any foreign language 202G/2020 course ) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Elective Requirements: | | | 36 Credits |
| | Foreign Language Requirement: Complete 1010,1020, 2010, and 202G (one language) | | 12 |
| | Any courses numbered 1000 or higher. (9 credit hours must be upper division (3000-4000 level courses)) | | 24 |
| Emphasis Requirements: | | | 30 Credits |
| | POLS 3250 | Introduction to Law and Politics | 3 |
| Complete 15 credits from the followings courses: | | | 15 |
| | AIST 3590 | American Indian Law (3) | |
| | AIST 3600 | American Indian Policy and Tribal Government (3) | |
| | CNST 2600 | Comparative Constitutionalism (3) | |
| | CNST 3870 | Constitutional History to Plessy 1896 (3) | |
| | CNST 3880 | Constitutional History Since Plessy 1896 (3) | |
| | CNST 4720 | Foundations of American Constitutionalism (3) | |
| | CNST 4730 | Framing of the US Constitution (3) | |
| | CNST 4790 | US Constitution (3) | |
| | CNST 4795 | Civil Rights and Civil Liberties (3) | |
| | CNST 490R | Issues and Topics in Constitutional Studies (3) | |
| | CNST 491R | Independent Study (1) | |
| | PJST 4300 | Race Gender and Class in Peace and Justice (3) | |
| | POLS 3480 | Race in Politics (3) | |
| | POLS 4500 | International Conflict and Security (3) | |
| | POLS 4610 | International Law (3) | |
| | ECON 4500 | US Economic Development and History (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division, and at least 3 credits must be a POLS Writing Enriched course) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade lower than a C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 16 credit hours of coursework from one language to include 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.

## Political Science - Public Law and Political Philosophy Emphasis, B.S.

### *Requirements*

Political science enjoys a central position among the social sciences. Aristotle characterized politics as the “queen of the sciences.” It is a broad discipline that encompasses philosophical, historical and analytical studies of governments, politics and policies. Political science students learn not only the concepts, theories and methods associated with the discipline, but also gain the cognitive and presentational skills required of tomorrow’s public and private leaders. At its core, politics is about building and maintaining communities at the local, state, national and international levels that enable citizens to live enriching and fulfilling lives. Political science students develop not only an understanding of those communities, but also the ability to influence them.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) (recommended) | |
| | STAT 1040 | Introduction to Statistics (3) | |

| | | | |
|---|---|---|---|
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 30 Credits |
| | POLS 1100 | American National Government | 3 |
| | POLS 2100 | Introduction to International Relations | 3 |
| | POLS 2200 | Introduction to Comparative Politics | 3 |
| | POLS 230G | Introduction to Political Theory | 3 |
| | POLS 3000 | Political Analysis | 3 |
| | POLS 4990 | Senior Seminar WE (3) | |
| or | POLS 480R | Internship WE | 3 |
| or | PJST 4900 | Peace and Justice Studies Capstone (3) | |
| Quantitative Requirement | | | |
| | POLS 3010 | Political Analysis II | 3 |
| Complete 9 credits from the following courses: | | | 9 |
| | POLS 3020 | Public Program Analysis (3) | |
| | POLS 3040 | Survey Research and Design Methods (3) | |
| | POLS 3050 | Experimental Methods in Political Science (3) | |
| | POLS 3060 | Qualitative Analysis (3) | |
| | POLS 3070 | Policy Analysis (3) | |
| Elective Requirements: | | | 25 Credits |
| | Any courses numbered 1000 or higher. (3 credit hours must be upper division (3000-4000 level courses)) | | 25 |
| Emphasis Requirements: | | | 30 Credits |
| | POLS 3250 | Introduction to Law and Politics | 3 |

| | | | |
|---|---|---|---|
| Complete 15 credits from the followings courses: | | | 15 |
| | AIST 3590 | American Indian Law (3) | |
| | AIST 3600 | American Indian Policy and Tribal Government | |
| | CNST 2600 | Comparative Constitutionalism (3) | |
| | CNST 3870 | Constitutional History to Plessy 1896 (3) | |
| | CNST 3880 | Constitutional History Since Plessy 1896 (3) | |
| | CNST 4720 | Foundations of American Constitutionalism (3) | |
| | CNST 4730 | Framing of the US Constitution (3) | |
| | CNST 4790 | US Constitution (3) | |
| | CNST 4795 | Civil Rights and Civil Liberties (3) | |
| | CNST 490R | Issues and Topics in Constitutional Studies (3) | |
| | CNST 491R | Independent Study (1) | |
| | PJST 4300 | Race Gender and Class in Peace and Justice (3) | |
| | POLS 3480 | Race in Politics (3) | |
| | POLS 4500 | International Conflict and Security (3) | |
| | POLS 4610 | International Law (3) | |
| | ECON 4500 | US Economic Development and History (3) | |
| | Complete any 12 elective credits (at least 4 credits must be upper division, and at least 3 credits must be a POLS Writing Enriched course) | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 or more semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above, with no POLS course grade below C-.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

# Honors

## Honors Program

The Honors Program is in the Academic Affairs Division. To find the most up-to-date information from the Honors Program, visit their website.

Honors Program

**FACULTY**

**MCPHERSON, Kathryn R.** *Professor*

## Course Descriptions

Honors.....666

# Information Systems and Technology

## Information Systems and Technology

The Information Systems and Technology department is in the College of Engineering & Technology. To find the most up-to-date information from the Information Systems and Technology department, visit their website.

Information Systems and Technology department

**DEPARTMENT CHAIR**

**MORREY, C. Paul** *Associate Professor*

**FACULTY**

**ANDERSON, John** *Professor*
**BALL, Nicholas L.** *Associate Professor*
**BENTLEY, Jan** *Associate Professor*
**CRANDALL, Kodey** *Assistant Professor*
**HAMDAN, Basil** *Associate Professor*
**HICKMAN, George D.** *Associate Professor*
**IVIE, Richard** *Lecturer*
**KREBS, Cynthia Olsen** *Professor*
**LOTFY, Mohammad** *Associate Professor*
**MCDONALD, Daniel** *Associate Professor*
**MORREY, C. Paul** *Associate Professor*
**NORTH, Matthew A.** *Assistant Professor*
**ORMOND, Pat R.** *Professor*
**SMITH, Doreen** *Lecturer*
**SMITH, Richard A.** *Lecturer*
**TAYSOM, Charles** *Lecturer*
**ZAHADAT, Nima** *Assistant Professor*

# Course Descriptions


Business/Marketing Education..... 517
Computing.....546
Information Management.....672
Information Systems and Technology..... 674
Information Technology.....682


# Degrees & Programs

## Administrative Information Management, A.S.

### *Requirements*

The two-year pre-major AS in Administrative Information Management program provides training for students seeking to complete general education requirements and develop their skills and knowledge in basic computer applications, written business communication, and financial accounting. Graduates of this program obtain temporary employment and pursue a Bachelor's degree for more advanced training in Information Management.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2020 | Principles of Economics II (fulfills Social/Behavioral Science) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 21 Credits |
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2300 | Information Management Principles | 3 |
| | IM 2500 | Graphic Applications | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | ACC 2010 | Financial Accounting | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| Elective Requirements: | | | 3 Credits |
| | Complete 3 credits from department pre-approved electives; see advisor for more information. | | 3 |
| | ACC 1150 | Fundamentals of Business Math (3) | |
| | IM 2100 | Document Processing Applications (3) | |
| | INFO 1120 | Information Systems and Technology Fundamentals (3) | |
| | INFO 1200 | Computer Programming I for IS IT (3) | |
| | MGMT 2110 | Interpersonal Communication (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 or above with a minimum 2.5 GPA in all discipline and elective courses with no grade lower than a C-.
3. Residency hours--minimum of 20 credit hours through attendance at UVU.

4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

## Administrative Information Support, A.A.S.

### *Requirements*

Every industry relies heavily on competent, qualified, and professional office staff. The two-year AAS in Administrative Information Support program provides training for students seeking to develop their skills and knowledge of office administration and office systems. The program core focuses on word processing, presentations, graphics, spreadsheet, and database applications, as well as written and oral business communication skills, office procedures, and basic accounting skills.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 18 Credits |
| ENGLISH | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| MATHEMATICS | | | |
| Complete one of the following | | | 4 |
| | MAT 1010 | Intermediate Algebra (4) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| HUMANITIES/FINE ARTS/FOREIGN LANGUAGE | | | |
| | Any approved Humanities/ Fine Arts/Foreign Language Distribution | | 3 |
| SOCIAL AND BEHAVIORAL SCIENCE | | | |
| | Any approved Social and Behavioral Science Distribution (ECON 2010 or ECON 2020 recommended for students who plan to pursue BS Information Management) | | 3 |
| BIOLOGY OR PHYSICAL SCIENCE | | | |
| | Any approved Biology or Physical Science Distribution | | 3 |
| PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT | | | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Discipline Core Requirements: | | | 36 Credits |
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2010 | Business Computer Proficiency | 3 |
| or | IM 2600 | Spreadsheet Applications (3) | |
| | IM 2100 | Document Processing Applications | 3 |
| | IM 2300 | Information Management Principles | 3 |
| | IM 2500 | Graphic Applications | 3 |
| | INFO 1200 | Computer Programming I for IS IT | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | ACC 2010 | Financial Accounting | 3 |
| | ACC 2020 | Managerial Accounting | 3 |
| | FIN 1060 | Personal Finance | 3 |
| | MGMT 2110 | Interpersonal Communication | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| Elective Requirements: | | | 9 Credits |
| Complete 9 credits from the following department pre-approved electives: | | | 9 |
| | ACC 1150 | Fundamentals of Business Math (3) | |
| | FIN 1060 | Personal Finance (3) | |
| | IM 2800 | Integrated Software Projects (3) | |
| | IT 1700 | Cybersecurity Essentials (3) | |
| | MGMT 1200 | Business English (3) | |
| | MGMT 2030 | Written Businss (3) | |

**Graduation Requirements:**

1. Minimum 63 credits to graduate.
2. Overall grade point average of 2.0 or above with a minimum 2.5 GPA in all discipline core and elective courses with no grade lower than a C-.
3. A minimum keyboarding skill of 40 net words per minute is required for graduation.
4. Residency hours--minimum of 20 credit hours through attendance at UVU.
5. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

Note: Potential 4-year students need to take MATH 1050 as their MATHEMATICS Distribution.

## Information Systems and Technology, A.A.S.

### *Requirements*

The two-year AAS in Information Systems and Technology is designed to help students develop job-ready computer skills to meet today's industry needs. Students complete a foundational core in programming, database, web application design, data communication, and networking. After that, students select a specialization in either Information Systems or Information Technology to complete a focused set of courses to obtain more in-depth knowledge and skills for a variety of computer-related jobs. If planned carefully with an advisor, this program provides a smooth, stackable pathway to the B.S. in Information Systems degree or the B.S. in Information Technology degree at UVU.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 21 Credits |
| ENGLISH | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| MATHEMATICS | | | |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| or | Any higher Mathematics Course | | |
| HUMANITIES/FINE ARTS/FOREIGN LANGUAGE | | | |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution course.[1] | | 3 |
| SOCIAL AND BEHAVIORAL SCIENCE [2] | | | 3 |
| | PHIL 2050 | Ethics and Value | 3 |
| BIOLOGY OR PHYSICAL SCIENCE | | | |
| | Any approved Biology or Physical Science Distribution Course for BS Information Systems degree future students.[3] | | 3 |
| PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT | | | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Discipline Core Requirements: | | | 21 Credits |
| Written Communication Requirement: | | | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Math Requirement: | | | 3 |
| | STAT 2050 | Introduction to Statistical Methods (4) | |
| or | MGMT 2340 | Business Statistics I (3) | |
| Core Requirements: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | INFO 2410 | Database Fundamentals | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |
| or | CS 2600 | Computer Networks I (3) | |
| | IT 2700 | Information Security Fundamentals | 3 |
| Elective Requirements: | | | 21 credits |
| Choose 21 credits from either the Information Systems group or the Information Technology group. See department advisor to select classes if plan to obtain BS in IT degree in the future. | | | 21 |
| INFORMATION SYSTEMS | | | |
| | ACC 2010 | Financial Accounting (3) | |
| | ACC 2020 | Managerial Accounting (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| | INFO 2200 | Computer Programming II for IS/IT (3) | |
| | INFO 2420 | Web Application Design (3) | |
| | IT 1200 | Scripting for Administrators (3) | |
| | MKTG 220G | Written Business Communication WE (3) | |
| INFORMATION TECHNOLOGY | | | |
| | INFO 2200 | Computer Programming II for IS/IT (3) | |

| | | | |
|---|---|---|---|
| | INFO 2420 | Web Application Design (3) | |
| | IT 1200 | Scripting for Administrators (3) | |
| | IT 1510 | Introduction to System Administration--Linux/UNIX (3) | |
| | IT 1600 | Computer Architecture and Systems Software (3) | |
| | IT 2400 | Voice and Data Cabling Fundamentals (3) | |
| | IT 2530 | Introduction to System Administration--Windows Client (3) | |
| | IT 2800 | Computer Forensic Fundamentals (3) | |
| | IT 290R | Current Topics in Information Technology (1) | |
| | IT students need to take 6 credits of 1000 or 2000 level IT courses, CJ 1330, or CJ 2350. It is recommended that students take 6 credits in the domain as electives if plan to complete BS in IT degree.[4] | | |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above with a minimum 2.5 GPA in all discipline core and elective courses with no grade lower than a "C-."
3. Residency hours: minimum of 20 credit hours through attendance at UVU.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

| |
|---|
| footnotes: |
| [1]ENGL 2310 recommended for BS in Information Technology degree future students. |
| [2]CJ 1010 recommended for BS Information Technology degree future students with the Computer Forensics and Security emphasis. ECON 2010recommended for BS Information Systems degree future students. |
| [3]PHYS 2010 and PHYS 2015 recommended for BS Information Technology degree future students. |
| [4]If plan to obtain BS in Information Technology with Computer Forensics & Security emphasis, take CJ 1330 Criminal Law and CJ 2350 Laws of Evidence as domain classes. |

# Information Systems and Technology, A.S.

## *Requirements*

The two-year pre-major AS in Information Systems and Technology program provides training for students seeking to complete general education requirements and develop foundational skills in programming, database, web application design, system administration, computer architecture, data communication, and security. Graduates of this program obtain temporary employment and pursue a Bachelor of Science in Information Systems or Information Technology for more advanced education.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Social/Behavioral Science Distribution | | 3 |
| | Biology Distribution | | 3 |
| | Physical Science Distribution | | 3 |
| | An Additional Biology or Physical Science Course | | 3 |
| | Fine Arts Distribution | | 3 |
| | Humanities Distribution | | 3 |
| Discipline Core Requirements: | | | 24 Credits |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming (3.0) | |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 1600 | Computer Architecture and Systems Software | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |

| | | | |
|---|---|---|---|
| or | CS 2600 | Computer Networks I (3.0) | |
| | IT 2700 | Information Security Fundamentals | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 or above with a minimum 2.5 GPA in all discipline core and elective courses with no grade lower than a "C-."
3. Residency hours: minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

## Administrative Support, Certificate of Completion

### *Requirements*

The one-year certificate in Administrative Support program provides training in basic computer literacy and applications, such as word processing, presentations, graphics, and spreadsheet applications. In addition, students build skills in interpersonal and written business communication.

**Total Program Credits: 30**

| Discipline Core Requirements: | | | 30 Credits |
|---|---|---|---|
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2100 | Document Processing Applications | 3 |
| | IM 2300 | Information Management Principles | 3 |
| | IM 2500 | Graphic Applications | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | ACC 1150 | Fundamentals of Business Math (3) | |
| or | ACC 2010 | Financial Accounting | 3 |
| | MGMT 2110 | Interpersonal Communication | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | FIN 1060 | Personal Finance | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 30 credits.
2. Overall GPA of 2.0 or higher with a minimum grade of "C-."
3. Residency hours -- minimum of 10 credit hours through course attendance at UVU.
4. A minimum keyboarding skill of 40 net words per minute is required for graduation.
5. Students are responsible for completing all prerequisite courses.

Note: Potential Administrative Information Support and BS in Information Management students need to take ACC 2010.

## Application Development, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Application Development allows employees who do not have a degree to obtain a credential to advance their career prospects. The certificate also allows those individuals who earned degrees outside the computing fields to obtain a credential in Application Development to increase their value to their current or future employers.

**Total Program Credits: 18**

| Matriculation Requirements: | | | |
|---|---|---|---|
| Programming Prerequisite:<br>• INFO 1200 Computer Programming I IS IT (3.0) or CS 1400 Fundamentals of Programming (3.0)<br><br>Web Design Recommended Prerequisite:<br>• INFO 2420 Web Application Design<br>• or DGM 2120 Web Essentials (3.0)<br>• Other INFO or IT Prerequisites (depending on elective) | | | |
| Discipline Core Requirements: | | | 15 Credits |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 3300 | Web Systems Development | 3 |
| | INFO 3330 | Client-Side Web Development | 3 |
| | INFO 3360 | Server-Side Web Frameworks | 3 |
| | INFO 4420 | Mobile Application Development | 3 |
| Elective Requirements: | | | 3 Credits |
| Choose 3 credits from the following courses: | | | 3 |
| | INFO 2200 | Computer Programming II for IS/IT (3.0) | |
| | INFO 4300 | Enterprise Web Development (3.0) | |
| | INFO 4425 | Web Application Security (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours: minimum of 9 credit hours through course attendance at UVU.

## Data Analytics, Certificate of Proficiency

### *Requirements*

A Certificate of Proficiency in Data Analytics allows employees who do not have a degree to obtain a credential to advance their career prospects. A certificate also allows those individuals who earned degrees outside the computing fields to obtain a credential in Data Analytics to increase their value to their current or future employers.

**Total Program Credits: 18**

| Matriculation Requirements: | |
|---|---|
| Prerequisites may be fulfilled through successful completion of courses listed or by successfully passing challenge exams in areas where challenge exams exist. Statistics Prerequisites:<br>• STAT 2050 Introduction to Statistical Methods (4.0) or<br>• MGMT 2340 Business Statistics I (3.0) or<br>• STAT 1040 Introduction to Statistics (3.0) or<br>• STAT 1045 Introduction to Statistics with Algebra (3.0) or<br>• STAT 2040 Principles of Statistics (3.0) or<br>• BESC 3010 Statistics for the Behavioral Sciences (4.0)<br>• Other CS, DGM, IT, or Marketing Prerequisites (depending on elective) | |
| Discipline Core Requirements: | 15 Credits |

| | | | |
|---|---|---|---|
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 3130 | Introduction to Applied Data Analytics | 3 |
| | INFO 3410 | Database Systems and Warehousing | 3 |
| | INFO 4120 | Business Intelligence Systems | 3 |
| | INFO 4130 | Data Science and Big Data Analytics | 3 |
| Elective Requirements: | | | 3 Credits |
| Choose 3 credits from the following courses: | | | 3 |
| | CS 4620 | Data Mining (3.0) | |
| | DGM 3750 | Media Analytics (3.0) | |
| | INFO 4135 | Data Security Analytics (3.0) | |
| | INFO 4410 | Database Administration (3.0) | |
| | MKTG 3690 | Web Analytics and Digital Advertising (3.0) | |
| | MKTG 4610 | Sales Operations (3.0) | |
| | STAT 4100 | Design of Experiment (3.0) | |
| | STAT 4200 | Survey Sampling (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours: minimum of 9 credit hours through course attendance at UVU.

## Database Administration and Data Warehousing, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Database Administration and Data Warehousing allows employees who do not have a degree to obtain a credential to advance their career prospects. It also allows those individuals who earned degrees outside the computing fields to obtain a credential in Database Administration and Data Warehousing to increase their value to their current or future employers.

**Total Program Credits: 18**

| Matriculation Requirements: | | | |
|---|---|---|---|
| Prerequisites may be fulfilled through successful completion of courses listed or by successfully passing challenge exams in areas where challenge exams exist. Statistics Prerequisite (if select INFO 3130 as elective)<br>• STAT 2050 Introduction to Statistical Methods (4) or<br>• MGMT 2340 Business Statistics I (3) or<br>• STAT 1040 Introduction to Statistics (3) or<br>• STAT 1045 Introduction to Statistics with Algebra (5) or<br>• STAT 2040 Principles of Statistics (4) or<br>• PSY 3110 Statistics for the Behavioral Sciences (4)<br>Database Prerequisite (if select CS 3720)<br>• CS 3520 Database Theory (3) or | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 3410 | Database Systems and Warehousing | 3 |
| | INFO 4410 | Database Administration | 3 |
| | INFO 4415 | Database Security and Auditing | 3 |
| Elective Requirements: | | | 6 Credits |
| Choose 6 credits from the following courses: | | | 6 |
| | INFO 3130 | Introduction to Applied Data Analytics (3) | |
| | INFO 4120 | Business Intelligence Systems (3) | |
| | CS 3720 | Database Programming (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours: minimum of 9 credit hours through course attendance at UVU.

## Digital Information Management CA, Certificate of Proficiency

### *Requirements*

The Digital Information Management CA is designed to prepare students to use public relations and communication skills in a business office and to oversee front office operations. Courses include instruction in digital literacy basics, word processing, spreadsheets, and information records management.

**Total Program Credits: 12**

| Discipline Core Requirements: | | | 12 Credits |
|---|---|---|---|
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2010 | Business Computer Proficiency | 3 |
| or | IM 2600 | Spreadsheet Applications (3) | |
| | IM 2100 | Document Processing Applications | 3 |
| | IM 2300 | Information Management Principles | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 12 credits.
2. Overall grade point average of 2.0 or higher with a minimum grade of C- or above.
3. All courses must be completed at UVU.

## Foundations of Application Development CA, Certificate of Proficiency

### *Requirements*

The CP in Foundations of Application Development CA is designed to prepare students for an entry-level job in application development. Courses include programming, database, and web application design.

**Total Program Credits: 12**

| Discipline Core Requirements: | | | 12 Credits |
|---|---|---|---|
| | INFO 1200 | Computer Programming I for IS IT | 3 |
| | INFO 2200 | Computer Programming II for IS IT | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 2420 | Web Application Design | 3 |

**Graduation Requirements:**

1. Overall GPA of 2.0 or higher with a minimum grade of "C- ".

2. All courses must be completed at UVU.

## Healthcare Information Technology, Certificate of Proficiency

### *Requirements*

A Certificate of Proficiency in Healthcare Information Technology allows non-students who do not have a degree to obtain a credential to advance their career prospects. A certificate also allows those individuals who earned degrees outside the computing fields to obtain a credential in healthcare information technology in order to increase their value to their current or future employers.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Prerequisites may be fulfilled through successful completion of courses listed or by successfully passing challenge exams in areas where challenge exams exist. Check with your advisor to ensure you have met the prerequisites for the elective course.<br><br>Statistics Prerequisite (if select INFO 3130 as elective)<br>• STAT 2050 Introduction to Statistical Methods (4.0) or<br>• MGMT 2340 Business Statistics I (3) or<br>• STAT 1040 Introduction to Statistics (3) or<br>• STAT 1045 Introduction to Statistics with Algebra (5.0) or<br>• STAT 2040 Principles of Statistics (3) or<br>• BESC 3010 Statistics for the Behavioral Sciences<br>• Other IT or Health courses (depending on elective) | | | |
| Discipline Core Requirements: | | | 15 Credits |
| Complete the following: | | | |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming | |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 3700 | Health Informatics Fundamentals | 3 |
| | INFO 3750 | Healthcare Information Systems Applications | 3 |
| | INFO 4700 | Healthcare Information Systems Management | 3 |
| Elective Requirements: | | | 3 Credits |
| Choose 3 credits from the following courses: | | | 3 |
| | HLTH 3200 | Principles of Community Health (3) | |
| | HLTH 4250 | Public Health Organization and Policy WE (3) | |
| | HLTH 482R | Community Health Internship (1) | |
| | INFO 3130 | Introduction to Applied Data Analytics (3) | |
| | INFO 4120 | Business Intelligence Systems (3) | |
| | INFO 3410 | Database Systems and Warehousing (3) | |
| | INFO 481R | Internship (1) | |
| | IT 2700 | Information Security Fundamentals (3) | |
| | CS 3270 | Python Software Development (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours: minimum of 9 credit hours through course attendance at UVU.

## Information Systems and Technology, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Information Systems and Technology is available to all UVU Students with a particular focus designed to provide high school students an opportunity to obtain a stackable certificate of proficiency with an emphasis in career and technical education while still enrolled in high school. This certificate will be available from the University for college students/adults looking for basic entry-level skills leading to further academic advancement. Students complete a foundational core in programming, database, web application design, data communication, and networking.

**Total Program Credits: 16**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 10 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| Elective Requirements: | | | 6 Credits |
| Choose 6 credits from one domain: | | | 6 |
| Information Systems Domain | | | |
| | INFO 1200 | Computer Programming I for IS IT (3) | |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | INFO 2420 | Web Application Design (3) | |
| Information Technology Domain | | | |
| | IT 1510 | Introduction to System Administration--Linux/UNIX (3) | |
| | IT 1600 | Computer Architecture and Systems Software (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 16 semester credits.
2. Minimum grade of C required in all courses.
3. Overall grade point average of 2.5 (C) or above.
4. Residency hours: minimum of 5 credit hours through course attendance at UVU

## Information Technology, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Information Technology provides students with training in basic computer applications and introductory coursework in the field of Information Technology. The program is designed to get people employed in entry-level IT positions. Students can select from a variety of introductory IT courses to build knowledge and skill in computer programming, database fundamentals, Linux

and Windows system administration, computer architecture, cabling, networking, and security.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 12 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | INFO 1120 | Information Systems and Technology Fundamentals (3.0) | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX (3.0) | 3 |
| | IT 1600 | Computer Architecture and Systems Software (3.0) | 3 |
| Elective Requirements: | | | 6 Credits |
| Complete 6 credits from the following: | | | 6 |
| | INFO 1200 | Computer Programming I for IS/IT (3.0) | |
| or | CS 1400 | Fundamentals of Programming (3.0) | |
| | INFO 2410 | Database Fundamentals (3.0) | |
| | IT 2400 | Voice and Data Cabling Fundamentals (3.0) | |
| | IT 2530 | Introduction to System Administration--Windows Client (3.0) | |
| | IT 2600 | Data Communication Fundamentals (3.0) | |
| or | CS 2600 | Computer Networks I (3.0) | |
| | IT 2700 | Information Security Fundamentals (3.0) | |
| | IT 2800 | Computer Forensic Fundamentals (3.0) | |
| | IT 290R | Current Topics in Information Technology (1.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours: minimum of 5 credit hours through course attendance at UVU.

## Network Administration, Certificate of Completion

### *Requirements*

The Certificate of Completion in Network Administration provides students with training in server administration, computer architecture, and networking. Students select from a variety of courses in cabling, Windows system administration, router management, information security, computer forensics, and Linux system administration.

**Total Program Credits: 31**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 25 Credits |
| Complete the following: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming (3.0) | |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 1600 | Computer Architecture and Systems Software | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |
| or | CS 2600 | Computer Networks I (3.0) | |
| Communication Requirement: | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts | |
| Computation Requirement: | | | |
| | MAT 1010 | Intermediate Algebra | 4 |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Elective Requirements: | | | 6 Credits |
| Choose 6 credits from the following courses : | | | 6 |
| | IT 2400 | Voice and Data Cabling Fundamentals (3.0) | |
| | IT 2530 | Introduction to System Administration--Windows Client (3.0) | |
| | IT 2700 | Information Security Fundamentals (3.0) | |
| | IT 2800 | Computer Forensic Fundamentals (3.0) | |
| | IT 3510 | Advanced System Administration--Linux/UNIX (3.0) | |
| | IT 3530 | Advanced System Administration--Windows Server (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 31 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours -- minimum of 10 credit hours through course attendance at UVU.

## Applied Data Analytics, Minor

### *Requirements*

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 6 Credits |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 3130 | Introduction to Applied Data Analytics | 3 |
| Elective Requirements: | | | 12 Credits |
| Choose 12 hours from the following: | | | 12 |
| | INFO 3410 | Database Systems and Warehousing (3) | |

| | | | |
|---|---|---|---|
| | INFO 4120 | Business Intelligence Systems (3) | |
| | INFO 4130 | Data Science and Big Data Analytics (3) | |
| | MKTG 3680 | Marketing with Social Media (3) | |
| | MKTG 3690 | Web Analytics and Digital Advertising (3) | |
| | MKTG 4610 | Sales Operations (3) | |
| | STAT 4100 | Design of Experiment (3) | |
| | STAT 4200 | Survey Sampling (3) | |
| | STAT 4400 | Multivariate Analysis WE (3) | |
| | STAT 4500 | Nonparametric Statistics (3) | |
| | DGM 3750 | Media Analytics (3) | |
| | CS 4620 | Data Mining (3) | |
| | Other advisor-approved elective. | | |

## Business Education - Basic Business Core Emphasis, Minor

### *Requirements*

This minor provides students or teachers who have an Educator License in the State of Utah with the coursework necessary to obtain a Business Education Basic Core endorsement. This endorsement enables recipients to teach Accounting, Banking and Finance, Business Communication, Business Law, Business Management, Business Math, Economic, Entrepreneurship, General Financial Literacy, and Leadership Principles.

**Total Program Credits: 24**

| | | | | |
|---|---|---|---|---|
| Matriculation Requirements: | | | | |
| 1. Minimum ACT scores.<br>2. GPA of 2.75 or higher.<br>3. A CAPP written exam.<br>4. An interview directed by the Secondary Teacher Education Selection and Retention Committee.<br>5. Must be accepted into a Secondary Education major program | | | | |
| Discipline Core Requirements: | | | | 3 Credits |
| | | BMED 4200 | Methods of Teaching Business/ Marketing/ Digital Technology | 3 |
| | or | BMED 4300 | Methods of Teaching Computer Science (3) | |
| Discipline Core Requirements: | | | | 3 Credits |
| Emphasis Requirements: | | | | 21 Credits |
| | | ACC 2010 | Financial Accounting | 3 |
| | | LEGL 3000 | Business Law | 3 |
| | | FIN 1060 | Personal Finance | 3 |
| | or | FIN 3100 | Principles of Finance (3) | |
| | | ECON 1010 | Economics as a Social Science | 3 |
| | or | ECON 2020 | Principles of Economics II (3) | 3 |
| | | MGMT 3000 | Organizational Behavior WE | 3 |
| | | MKTG 220G | Written Business Communication WE | 3 |
| | | MKTG 3600 | Principles of Marketing | 3 |

**Graduation Requirements:**

1. Overall grade point average 2.75 or above with no grade lower than a B- in all discipline and specialty core courses.
2. Students are responsible for completing all prerequisite courses.

Notes:

Students must pass a criminal background check at the beginning of the junior year.

Participation in Phi Beta Lambda (PBL) or Delta Epsilon Chi (DEX) is recommended for one semester.

Students will teach at least one computer technology course during the student teaching experience.

## Business Education - Business Information Technology Emphasis, Minor

### *Requirements*

This minor provides students or teachers who have an Educator License in the State of Utah with the coursework necessary to obtain an endorsement in the Business Information Technology core. This endorsement enables recipients to teach Business Web Page Design, Computer Technology, Desktop Publishing, Digital Business Applications, Social Media Marketing, Advertising and Promotion, and Word Processing.

**Total Program Credits: 24**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Minimum ACT scores.<br>2. GPA of 2.75 or higher.<br>3. A CAPP written exam.<br>4. An interview directed by the Secondary Teacher Education Selection and Retention Committee.<br>5. Must be accepted into a Secondary Education major program | | | |
| Discipline Core Requirements: | | | 3 Credits |
| | BMED 4200 | Methods of Teaching Business/ Marketing/Digital Technology | 3 |
| or | BMED 4300 | Methods of Teaching Computer Science (3) | |
| Emphasis Requirements: | | | 21 Credits |
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2100 | Document Processing Applications | 3 |
| | IM 2500 | Graphic Applications | 3 |

| | | | |
|---|---|---|---|
| | IM 2600 | Spreadsheet Applications | 3 |
| | IM 3700 | Database Applications | 3 |
| | INFO 1200 | Computer Programming I for IS IT | 3 |
| | INFO 2420 | Web Application Design | 3 |

Graduation Requirements:

1. Overall grade point average 2.75 or above with no grade lower than a B- in all discipline and specialty core courses.
2. Students are responsible for completing all prerequisite courses.

Notes:

Students must pass a criminal background check at the beginning of the junior year.

Students will teach at least one computer technology course during the student teaching experience.

## Business Education - Business and Marketing Education (6-8) Emphasis, Minor

### *Requirements*

This minor provides students or teachers who have an Educator License in the State of Utah with the coursework necessary to obtain a Business Education Marketing endorsement. This endorsement enables recipients to teach Customer Service, Fashion Merchandising, Marketing I and II, Real Estate, Retailing, Retailing Management, Sports and Entertainment Marketing, and Travel and Tourism.

**Total Program Credits: 24**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Minimum ACT scores.<br>2. GPA of 2.75 or higher.<br>3. A CAPP written exam.<br>4. An interview directed by the Secondary Teacher Education Selection and Retention Committee.<br>5. Must be accepted into a Secondary Education major program. | | | |
| Discipline Core Requirements: | | | 3 Credits |
| | BMED 4200 | Methods of Teaching Business/ Marketing/Digital Technology | 3 |
| or | BMED 4300 | Methods of Teaching Computer Science (3) | |
| Emphasis Requirements: | | | 21 Credits |
| | ACC 2010 | Financial Accounting | 3 |
| or | ECON 2010 | Principles of Economics I (3) | |
| or | LEGL 3000 | Business Law (3.0) | |
| or | MKTG 3600 | Principles of Marketing (3) | |
| | FIN 1060 | Personal Finance | 3 |
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2010 | Business Computer Proficiency | 3 |
| | IM 2100 | Document Processing Applications | 3 |
| | IM 2500 | Graphic Applications | 3 |
| | INFO 2420 | Web Application Design | 3 |
| or | INFO 1200 | Computer Programming I for IS/IT (3) | |

**Graduation Requirements:**

1. Overall grade point average 2.75 or above with no grade lower than a B- in all discipline and specialty core courses.
2. Students are responsible for completing all prerequisite courses.

Notes:

Students must pass a criminal background check at the beginning of the junior year.

Students will teach at least one computer technology course during the student teaching experience.

## Business Education - Information Technology, Minor

### *Requirements*

This minor provides students or teachers who have an Educator License in the State of Utah with the coursework necessary to obtain an endorsement in Information Technology Education—Multimedia. This endorsement enables recipients to teach Digital Media I, Digital Media II, and 3D Graphics and Animation. In addition to coursework there are other requirements imposed by the State, so students will need to complete additional work to receive this endorsement.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Minimum ACT scores.<br>2. GPA of 2.75 or higher.<br>3. A CAPP written exam.<br>4. An interview directed by the Secondary Teacher Education Selection and Retention Committee.<br>5. Must be accepted into a Secondary Education major program. | | | |
| Discipline Core Requirements: | | | 3 Credits |
| | BMED 4200 | Methods of Teaching Business/ Marketing/Digital Technology | 3 |
| or | BMED 4300 | Methods of Teaching Computer Science (3) | |
| Emphasis Requirements: | | | 15 Credits |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| Emphasis Elective Requirements: | | | 12 Credits |
| Complete 12 credits from the following courses: [1] | | | 12 |
| Computer Science | | | |
| | CS 1030 | Foundations of Computer Science (3) | |
| | CS 1400 | Fundamentals of Programming (3) | |
| | CS 1410 | Object-Oriented Programming (3) | |
| Exploring CS | | | |
| | CS 1030 | Foundations of Computer Science (3) | |
| | IT 290R | Current Topics in Information Technology Note: Prepare for and pass Certiport IC3 certification (1)[2] | |
| Introduction to Information Technology | | | |
| | DGM 1110 | Digital Media Essentials I (4) | |
| | CS 1030 | Foundations of Computer Science (3) | |
| | INFO 1200 | Computer Programming I for IS/It (3) | |
| Multimedia | | | |
| | DGM 1110 | Digital Media Essentials I (4) | |

| | | | |
|---|---|---|---|
| | DGM 2210 | 3D Modeling and Animation Essentials (4) | |
| | DGM 2110 | Digital Cinema Production II (3) | |
| or | DGM 2130 | Digital Audio Essentials (3) | |
| | DGM 2120 | Web Essentials (3) | |
| or | INFO 2420 | Web Application Design (3) | |
| Network+ | | | |
| | IT 2600 | Data Communication Fundamentals (3) | |
| | IT 290R | Current Topics in Information Technology (1)[3] | |
| Web Development | | | |
| | INFO 2420 | Web Application Design (3) | |

**Graduation Requirements:**

1. Overall grade point average 2.75 or above with no grade lower than a B- in all discipline and specialty core courses.
2. Students are responsible for completing all prerequisite courses.

Notes:

Students must pass a criminal background check at the beginning of the junior year.

Students will teach at least one computer technology course during the student teaching experience.

| Footnotes | |
|---|---|
| [1]To be eligible for an endorsement in any of these areas, include those courses and see adviser, as other requirements are required for USOE-CTE endorsement. | |
| [2]Prepare for and pass Certiport IC3 certification. | |
| [3]Prepare and pass CompTIA Network+ exam. | |

## Business Information Technology, Minor

### *Requirements*

The Minor in Business Information Technology gives students with a business or liberal arts major, the option of strengthening their general studies with technical coursework.

**Total Program Credits: 21**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 21 Credits |
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2100 | Document Processing Applications | 3 |
| | IM 2500 | Graphic Applications | 3 |
| or | IM 3500 | Desktop Publishing Applications (3.0) | |
| | IM 2600 | Spreadsheet Applications | 3 |
| | IM 2800 | Integrated Software Projects | 3 |
| | IM 3700 | Database Applications | 3 |
| | INFO 2420 | Web Application Design | 3 |

**Graduation Requirements:**

1. Overall grade point average of 2.5 GPA in all discipline core and elective courses with no grade lower than a C-.
2. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

## Information Systems and Technology, Minor

### *Requirements*

The Minor in Information Systems gives students with a business or liberal arts major, the option of strengthening their general studies with technical coursework.

**Total Program Credits: 21**

| Discipline Core Requirements: | | | 12 Credits |
|---|---|---|---|
| Prerequisite: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals (3) | |
| Complete the following: | | | |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | INFO 2410 | Database Fundamentals (3) | 3 |
| or | INFO 3410 | Database Systems and Warehousing | |
| | IT 1600 | Computer Architecture and Systems Software | 3 |
| or | CS 2810 | Computer Organization and Architecture (3) | |
| | IT 2600 | Data Communication Fundamentals | 3 |
| or | IT 3600 | Internetworking and Router Management (3) | |
| Elective Requirements: | | | 9 Credits |
| Complete 9.0 credits from the following, 6 credits of which must be upper division: | | | 9 |
| | INFO 2200 | Computer Programming II for IS/IT (3) | |
| | INFO 2420 | Web Application Design (3) | |
| | INFO 3120 | Management Information Systems (3) | |
| | INFO 3410 | Database Systems and Warehousing (3) | |
| | INFO 3300 | Web Systems Development (3) | |
| | INFO 3430 | Systems Analysis and Design WE (3) | |
| | INFO 3700 | Health Informatics Fundamentals (3) | |
| | INFO 4120 | Business Intelligence Systems (3) | |
| | IT 1510 | Introduction to System Administration--Linux/UNIX (3) | |
| | IT 2530 | Introduction to System Administration--Windows Client (3) | |
| | IT 2700 | Information Security Fundamentals (3) | |
| | IT 2800 | Computer Forensic Fundamentals (3) | |

| | | | |
|---|---|---|---|
| | IT 3510 | Advanced System Administration--Linux/UNIX (3) | |
| | IT 3530 | Advanced System Administration--Windows Server (3) | |
| | IT 3600 | Internetworking and Router Management (3) | |
| | IT 3700 | Information Security--Network Defense and Countermeasures (3) | |

**Graduation Requirements:**

1. To fill the requirements for an information systems and technology minor, students must have no course grade lower than C- in any of the INFO or IT courses required for the minor.
2. Courses may not be double-counted between the core and elective sections.

## Business/Marketing Education, B.S.

### *Requirements*

Students interested in teaching can pursue a Bachelor of Science in Business/Marketing Education and a secondary teaching license through a joint program offered by the Information Systems and Technology Department and the School of Education. The Business/Marketing Education curriculum prepares students to teach business, marketing, and information technology in secondary schools.

**Total Program Credits: 122**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check. | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses | | | |
| | ECON 2020 | Principles of Economics II (fulfills Social/Behavioral Science) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 83 Credits |
| Must be completed with a grade of B- or higher. | | | |
| | BMED 4200 | Methods of Teaching Business/Marketing/Digital Technology | 3 |
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2100 | Document Processing Applications | 3 |
| | IM 2500 | Graphic Applications | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | IM 3700 | Database Applications | 3 |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| | INFO 2200 | Computer Programming II for IS IT | 3 |

| | | | |
|---|---|---|---|
| | | | |
| | INFO 2420 | Web Application Design | 3 |
| | ACC 2010 | Financial Accounting | 3 |
| | ECON 2010 | Principles of Economics I | 3 |
| | FIN 1060 | Personal Finance | 3 |
| | LEGL 3000 | Business Law | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 4200 | Classroom Management I (Dance Education Majors take DANC 4430 in place of EDSC 4200) | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies (English Education Majors take ENGL 4210, 4420, and 4230 in place of EDSC 4440.) | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| Elective Requirements: | | | 3 Credits |

| | | | |
|---|---|---|---|
| Complete at least 3 credits from approved list of electives. See Department Advisor. | | | 3 |
| | BMED 4300 | Methods of Teaching Computer Science (3) | |
| | DGM 1110 | Digital Media Essentials I (4) | |
| | DGM 1660 | Introduction to 3D Modeling and Surfacing (3) | |
| | IM 2300 | Information Management Principles (3) | |
| | INFO 1120 | Information Systems and Technology Fundamentals (3) | |
| | INFO 2410 | Database Fundamentals(3) | |
| | IT 1510 | Introduction to System Administration--Linux/UNIX (3) | |
| | IT 1600 | Computer Architecture and Systems Software (3) | |
| | IT 1700 | Cybersecurity Essentials (3) | |
| | IT 2600 | Data Communication Fundamentals (3) | |
| | MKTG 3660 | Digital Marketing (3) | |

**Graduation Requirements:**

1. Completion of 122 semester credit hours with at least 40 credit hours in upper-division courses.
2. Overall Grade of 3.0 (B) or above with no grade lower than a C in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

## Information Management, B.S.

### *Requirements*

The Bachelor of Science in Information Management is designed to prepare students to supervise and manage the operations and personnel of business offices. Courses include instruction in employee supervision, budgeting, scheduling and coordination, office systems operation and maintenance, office records management, public

relations, project management, accounting, decision making, and human resources.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology Distribution | | 3 |
| | Physical Science Distribution | | 3 |
| | Additional Biology or Physical Science Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Humanities Distribution | | 3 |
| | ECON 2010 | Principles of Economics I (fulfills Social/Behavioral Science) | 3 |
| or | ECON 2020 | Principles of Economics II (3) (fulfills Social/Behavioral Science) | |
| Discipline Core Requirements: | | | 69 Credits |
| | IM 1010 | Basic Computer Applications | 3 |
| | IM 2100 | Document Processing Applications | 3 |
| | IM 2300 | Information Management Principles | 3 |
| | IM 2500 | Graphic Applications | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | IM 3700 | Database Applications | 3 |
| | IM 481R | Internship (1) | 3 |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| | INFO 2410 | Database Fundamentals (3) | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | INFO 3430 | Systems Analysis and Design WE | 3 |
| | INFO 405G | Global Ethical and Professional Perspectives in IS and IT | 3 |
| | INFO 4430 | Systems Design and Implementation | 3 |
| | ACC 2010 | Financial Accounting | 3 |
| | ACC 2020 | Managerial Accounting | 3 |
| | FIN 1060 | Personal Finance (3) | 3 |
| | HR 3430 | Introduction to Human Resource Management | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3210 | Event Venue and Convention Management | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | TECH 3400 | Project Management WE | 3 |
| | TECH 4400 | Advanced Project Management | 3 |
| Elective Requirements: | | | 15 Credits |
| Complete at least 9 upper-division credits from a selected domain: | | | 9 |
| Business Intelligence Domain | | | |
| | INFO 3120 | Management Information Systems (3) | |
| | INFO 3130 | Introduction to Applied Data Analytics (3) | |
| | INFO 4120 | Business Intelligence Systems (3) | |
| | INFO 4130 | Data Science and Big Data Analytics (3) | |
| Legal Domain | | | |
| | IT 3350 | Intellectual Property and Cyber Law (3) | |
| | LEGL 3000 | Business Law (3) | |
| | LEGL 3530 | Employment and Labor Law (3) | |
| | LEGL 4000 | Advanced Business Law and E-Commerce (3) | |
| Mobile Development Domain: | | | |
| | INFO 3300 | Web Systems Development (3) | |
| | INFO 3330 | Client-Side Web Development (3) | |
| | INFO 4420 | Mobile Application Development (3) | |
| Web Systems Development Domain | | | |
| | INFO 3300 | Web Systems Development (3) | |
| | INFO 3330 | Client-Side Web Development (3) | |
| | INFO 3360 | Server-Side Web Frameworks(3) | |
| | INFO 4425 | Web Application Security (3) | |
| | INFO 4300 | Enterprise Web Development (3) | |
| Complete at least 6 credits from the following electives or from courses in above domains. | | | 6 |
| | IM 2800 | Integrated Software Projects (3) | |
| | IM 3600 | Advanced Excel for Decision Making (3) | |
| | IM 490R | Advanced Topics in Information Management (1) | |
| | IM 496R | Information Management Seminar (1) | |
| | INFO 2200 | Computer Programming II for IS/IT (3) | |
| | INFO 3410 | Database Systems and Warehousing (3) | |

| | | | |
|---|---|---|---|
| | IT 1700 | Cybersecurity Essentials (3) | |
| | ACC 1150 | Fundamentals of Business Math (3) | |
| | MGMT 2110 | Interpersonal Communication (3) | |
| | TECH 3010 | Creativity Innovation and Change Management (3) | |
| | TECH 4400 | Advanced Project Management (3) | |
| | Other department approved IM, INFO, or IT classes | | |

**Graduation Requirements:**

1. Completion of the 120 semester credit hours required in the degree with at least 40 credit hours in upper-division courses.
2. Overall grade point average 2.75 or above with no grade lower than a "C-" in core, domain, and elective courses.
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: The UVU catalog contains the descriptions and prerequisites for all courses. Not all courses are offered every semester.

## Information Systems - Application Development Emphasis, B.S.

### *Requirements*

The BS in Information Systems program prepares students to be Information Systems professionals. Graduates develop and deploy enterprise-level systems to meet organizational needs.

**Total Program Credits: 123**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values (3) | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology Distribution | | 3 |
| | Physical Science Distribution | | 3 |
| | An Additional Biology or Physical Science Distribution Course | | 3 |
| | Fine Arts Distribution | | 3 |
| | Humanities Distribution | | 3 |
| | Social/Behavioral Science Distribution (ECON 2010 recommended) | | 3 |
| Discipline Core Requirements: | | | 63 Credits |
| Math Requirement: | | | 3 |
| | MGMT 2340 | Business Statistics I (3) | |
| IS Core Requirements: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | INFO 2200 | Computer Programming II for IS/IT | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |
| | IT 2700 | Information Security Fundamentals | 3 |
| | INFO 3130 | Introduction to Applied Data Analytics | 3 |
| | INFO 3300 | Web Systems Development | 3 |
| | INFO 3410 | Database Systems and Warehousing | 3 |
| | INFO 3430 | Systems Analysis and Design WE | 3 |
| | INFO 405G | Global Ethical and Professional Perspectives in IS and IT | 3 |
| | INFO 4430 | Systems Design and Implementation | 3 |
| IS Environment/Business Foundation Requirements: | | | |
| | ACC 2010 | Financial Accounting (3) | 3 |
| | ACC 2020 | Managerial Accounting (3) | 3 |
| | MKTG 220G | Written Business Communication WE (3) | 3 |
| | MGMT 3000 | Organizational Behavior WE (3) | 3 |
| | MKTG 3600 | Principles of Marketing (3) | 3 |
| Emphasis Requirements: | | | 15 Credits |
| | INFO 3330 | Client-Side Web Development | 3 |
| | INFO 3360 | Server-Side Web Frameworks | 3 |
| | INFO 4420 | Mobile Application Development | 3 |
| | INFO 4425 | Web Application Security | 3 |
| | INFO 4300 | Enterprise Web Development | 3 |
| Emphasis Elective Requirements: | | | 9 Credits |
| Complete 9 credit hours from the following: | | | 9 |
| | INFO 4120 | Business Intelligence Systems (3) | |
| | INFO 481R | Internship (3) | |
| | CS 2550 | Web Programming I (3) | |
| | CS 3270 | Python Software Development (3) | |

| | | | |
|---|---|---|---|
| | CS 3410 | Human Factors in Software Development (3) | |
| | CS 3660 | Web Programming II (3) | |
| | Other approved upper-division Information Systems courses | | |

**Graduation Requirements:**

1. Completion of at least 123 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all discipline core, specialty core, and elective courses with no grade lower than a "C-."
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

## Information Systems - Business Intelligence Systems Emphasis, B.S.

### *Requirements*

The BS in Information Systems program prepares students to be Information Systems professionals. Graduates develop and deploy enterprise-level systems to meet organizational needs. The Business Intelligence Systems (BIS) emphasis prepares graduates to become business intelligence analysts who produce financial and marketing intelligence by querying data repositories, generating reports, and devising methods for identifying data patterns and trends. Organizations store an enormous amount of data. People who are able to perform data mining and can analyze the data to detect trends and form predictions are highly sought by national and regional organizations.

**Total Program Credits: 123**

| General Education Requirements: | | | 36 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values (3) | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology Distribution | | 3 |
| | Physical Science Distribution | | 3 |
| | An Additional Biology or Physical Science Distribution Course | | 3 |
| | Fine Arts Distribution | | 3 |
| | Humanities Distribution | | 3 |
| | Social/Behavioral Science Distribution (ECON 2010 recommended) | | 3 |
| Discipline Core Requirements: | | | 63 Credits |
| Math Requirement: | | | 3 |
| | MGMT 2340 | Business Statistics I (3) | |
| IS Core Requirements: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | INFO 2200 | Computer Programming II for IS/IT | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |
| | IT 2700 | Information Security Fundamentals | 3 |
| | INFO 3130 | Introduction to Applied Data Analytics | 3 |
| | INFO 3300 | Web Systems Development | 3 |
| | INFO 3410 | Database Systems and Warehousing | 3 |
| | INFO 3430 | Systems Analysis and Design WE | 3 |
| | INFO 405G | Global Ethical and Professional Perspectives in IS and IT | 3 |
| | INFO 4430 | Systems Design and Implementation | 3 |
| IS Environment/Business Foundation Requirements: | | | |
| | ACC 2010 | Financial Accounting | 3 |
| | ACC 2020 | Managerial Accounting | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| Emphasis Requirements: | | | 12 Credits |
| | MGMT 3345 | Business Statistics II | 3 |
| | INFO 4120 | Business Intelligence Systems | 3 |
| | INFO 4130 | Data Science and Big Data Analytics | 3 |
| | INFO 4135 | Data Security Analytics | 3 |
| Emphasis Elective Requirements: | | | 12 Credits |
| Choose 12 credit hours from the following: | | | 12 |
| | IM 3600 | Advanced Excel for Decision Making (3) | |
| | INFO 3120 | Management Information Systems (3) | |
| | INFO 3330 | Client-Side Web Development (3) | |
| | INFO 3360 | Server-Side Web Frameworks (3) | |

| | | | |
|---|---|---|---|
| | INFO 4300 | Enterprise Web Development (3) | |
| | INFO 4410 | Database Administration (3) | |
| | INFO 4415 | Database Security and Auditing (3) | |
| | INFO 4420 | Mobile Application Development (3) | |
| | INFO 4425 | Web Application Security (3) | |
| | MKTG 4300 | Marketing Data Science (3) | |
| | Other approved upper-division Information Systems courses | | |

**Graduation Requirements:**

1. Completion of at least 123 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all discipline core, specialty core, and elective courses with no grade lower than a "C-."
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

## Information Systems - Healthcare Information Systems Emphasis, B.S.

### *Requirements*

The healthcare industry relies heavily on information systems to store patient information so that medical professionals can analyze the data. Information systems professionals who specialize in HIS find exciting careers. The BS in Information Systems program prepares students to be Information Systems professionals. Graduates develop and deploy enterprise-level systems to meet organizational needs. Students who graduate with the Healthcare Information Systems (HIS) emphasis will use their knowledge of information technology and records management to form the links among health-care professionals and administrations and information technology professionals.

**Total Program Credits: 123**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology Distribution | | 3 |
| | Physical Science Distribution | | 3 |
| | An Additional Biology or Physical Science Distribution Course | | 3 |
| | Fine Arts Distribution | | 3 |
| | Humanities Distribution | | 3 |
| | Social/Behavioral Science Distribution (ECON 2010 recommended) | | 3 |
| Discipline Core Requirements: | | | 63 Credits |
| Math Requirement: | | | 3 |
| | MGMT 2340 | Business Statistics I (3) | |
| IS Core Requirements: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | INFO 2200 | Computer Programming II for IS/IT | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |
| | IT 2700 | Information Security Fundamentals | 3 |
| | INFO 3130 | Introduction to Applied Data Analytics | 3 |
| | INFO 3300 | Web Systems Development | 3 |
| | INFO 3410 | Database Systems and Warehousing | 3 |
| | INFO 3430 | Systems Analysis and Design WE | 3 |
| | INFO 405G | Global Ethical and Professional Perspectives in IS and IT | 3 |
| | INFO 4430 | Systems Design and Implementation | 3 |
| IS Environment/Business Foundation Requirements: | | | |
| | ACC 2010 | Financial Accounting | 3 |
| | ACC 2020 | Managerial Accounting | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| Emphasis Requirements: | | | 12 Credits |
| | INFO 3750 | Healthcare Information Systems Applications | 3 |
| | INFO 4120 | Business Intelligence Systems | 3 |
| | INFO 4700 | Healthcare Information Systems Management | 3 |
| | HLTH 3200 | Principles of Community Health | 3 |
| Emphasis Elective Requirements: | | | 12 Credits |
| Choose 12 credit hours from the following list of upper-division courses: | | | 12 |

| | | | |
|---|---|---|---|
| | INFO 3120 | Management Information Systems (3) | |
| | INFO 4130 | Data Science and Big Data Analytics (3) | |
| | INFO 4135 | Data Security Analytics (3) | |
| | INFO 4420 | Mobile Application Development (3) | |
| | INFO 481R | Internship (3) | |
| | IT 3350 | Intellectual Property and Cyber Law (3) | |
| | IT 4700 | Enterprise Cybersecurity Management (3) | |
| Other approved upper-division Information Systems courses | | | |

**Graduation Requirements:**

1. Completion of at least 123 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all discipline core, specialty core, and elective courses with no grade lower than a "C-."
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

## Information Systems - Information Security Management Emphasis, B.S.

### *Requirements*

Managing the security of information systems is extremely important for all types of organizations to protect the systems from data breaches. The BS in Information Systems program prepares students to be Information Systems professionals. Graduates develop and deploy enterprise-level systems to meet organizational needs. The Information Security Management (ISM) emphasis prepares students for information technology management and information security analyst positions.

**Total Program Credits: 123**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra (4) | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| American Institutions: Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values (3) | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology Distribution | | 3 |
| | Physical Science Distribution | | 3 |
| | An Additional Biology or Physical Science Distribution Course | | 3 |
| | Fine Arts Distribution | | 3 |
| | Humanities Distribution | | 3 |
| | Social/Behavioral Science Distribution (ECON 2010 recommended) | | 3 |
| Discipline Core Requirements: | | | 63 Credits |
| Math Requirement: | | | 3 |
| | MGMT 2340 | Business Statistics I (3) | |
| IS Core Requirements: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| or | CS 1400 | Fundamentals of Programming (3) | |
| | INFO 2200 | Computer Programming II for IS/IT | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | INFO 2420 | Web Application Design | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |
| | IT 2700 | Information Security Fundamentals | 3 |
| | INFO 3130 | Introduction to Applied Data Analytics | 3 |
| | INFO 3300 | Web Systems Development | 3 |
| | INFO 3410 | Database Systems and Warehousing | 3 |
| | INFO 3430 | Systems Analysis and Design WE | 3 |
| | INFO 405G | Global Ethical and Professional Perspectives in IS and IT | 3 |
| | INFO 4430 | Systems Design and Implementation | 3 |
| IS Environment/Business Foundation Requirements: | | | |
| | ACC 2010 | Financial Accounting | 3 |
| | ACC 2020 | Managerial Accounting | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| Emphasis Requirements: | | | 15 Credits |
| | INFO 4410 | Database Administration | 3 |
| | INFO 4135 | Data Security Analytics | 3 |
| | INFO 4415 | Database Security and Auditing | 3 |
| | INFO 4425 | Web Application Security | 3 |
| | IT 4700 | Enterprise Cybersecurity Management | 3 |
| Emphasis Elective Requirements: | | | 9 Credits |
| Choose 9 credit hours from the following advanced upper-division courses: | | | 9 |

| | | | |
|---|---|---|---|
| | IT 3350 | Intellectual Property and Cyber Law (3) | |
| | IT 4750 | Network Security and Operations Capstone (3) | |
| | INFO 3330 | Client-Side Web Development (3) | |
| | INFO 3360 | Server-Side Web Framework(3) | |
| | INFO 4300 | Enterprise Web Development (3) | |
| | INFO 481R | Internship (3) | |
| | Other approved upper-division Information Systems courses | | |

**Graduation Requirements:**

1. Completion of at least 123 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all discipline core, specialty core, and elective courses with no grade lower than a "C-."
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

## Information Technology - Computer Forensics and Security Emphasis, B.S.

### *Requirements*

Electronic data is often used as evidence in court. Forensic specialists learn how to identify, preserve, and extract data from electronic devices, such as computers and smart phones. The Bachelor of Science in Information Technology (IT) degree prepares students to install, manage, and maintain the computing infrastructure on which organizational systems run. The Computer Forensics and Security emphasis provides students with a solid foundation for employment by government or corporate sector to work in a computer forensics lab as a forensic analyst or in information security.

**Total Program Credits: 122**

| General Education Requirements: | | | 38 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) (recommended) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology Distribution | | 3 |
| | Physical Science Distribution | | 3 |
| | PHYS 2010 | College Physics I (fulfills Additional Biology or Physical Science Distribution) | 4 |
| and | PHYS 2015 | College Physics I Lab | 1 |
| | Fine Arts Distribution | | 3 |
| | ENGL 2310 | Technical Communication (fulfills Humanities Distribution) | 3 |
| | CJ 1010 | Introduction to Criminal Justice (Social/ Behavioral Science Distribution) | 3 |
| Discipline Core Requirements: | | | 63 Credits |
| Math Requirement: | | | |
| | STAT 2050 | Introduction to Statistical Methods (4.0) | |
| or | MGMT 2340 | Business Statistics I | 3 |
| IT Core Requirements: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 1600 | Computer Architecture and Systems Software | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | IT 2530 | Introduction to System Administration--Windows Client | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |
| or | CS 2600 | Computer Networks I (3.0) | |
| | IT 2700 | Information Security Fundamentals | 3 |
| | INFO 3300 | Web Systems Development | 3 |
| | INFO 3430 | Systems Analysis and Design WE | 3 |
| | IT 3510 | Advanced System Administration--Linux/UNIX | 3 |
| | IT 3530 | Advanced System Administration--Windows Server | 3 |
| | IT 3600 | Internetworking and Router Management | 3 |
| | IT 3700 | Information Security--Network Defense and Countermeasures | 3 |
| | INFO 405G | Global Ethical and Professional Perspectives in IS and IT | 3 |
| | INFO 4430 | Systems Design and Implementation | 3 |
| | IT 4600 | Enterprise Architectures and Virtualization | 3 |
| | IT 4700 | Enterprise Cybersecurity Management | 3 |
| IT Application Domain Requirement: | | | 6 |

| | | | |
|---|---|---|---|
| Two specified courses to provide students with knowledge of an application domain of their choice and interest. (See department advisor for list of approved courses.) For the Computer Forensics and Security emphasis, the following 2 courses are required: CJ 1330 and CJ 1340. | | | |
| Some possible application domains are: | | | |
| | Accounting/IT Auditor | | |
| | Business | | |
| | Communications | | |
| | Computer Science | | |
| | Construction | | |
| | Criminal Justice (Choose this domain for Computer Forensics and Security emphasis) | | |
| | Forensics | | |
| | Geographic Information Systems | | |
| | Health professions | | |
| | Hospitality Management | | |
| | Manufacturing/Production | | |
| | Military Science | | |
| | Multimedia/Digital Media | | |
| | Physical Sciences | | |
| | Social Sciences | | |
| Emphasis Requirements: | | | 12 Credits |
| | IT 2800 | Computer Forensic Fundamentals | 3 |
| | IT 3350 | Intellectual Property and Cyber Law | 3 |
| | IT 4800 | Advanced Mobile Devices Forensics | 3 |
| | IT 4850 | Digital Forensics Investigations | 3 |
| Emphasis Elective Requirements: | | | 9 Credits |
| Select 9 credit hours from the following: | | | 9 |
| | INFO 2200 | Computer Programming II for IS IT (3.0) | |
| | INFO 3330 | Client-Side Web Development (3.0) | |
| | INFO 3360 | Server-Side Web Frameworks (3.0) | |
| | INFO 3410 | Database Systems and Warehousing (3.0) | |
| | INFO 4135 | Data Security Analytics (3.0) | |
| | INFO 4415 | Database Security and Auditing (3.0) | |
| | INFO 4425 | Web Application Security (3.0) | |
| | IT 1200 | Scripting for Administrators (3.0) | |
| | IT 3540 | Mac OS and Server Support (3.0) | |
| | IT 459R | Current Topics in Information Technology (3.0) | |
| | IT 4750 | Network Security and Operations Capstone (3.0) | |
| | IT 481R | Internship (1.0) | |
| | CS 3270 | Python Software Development (3.0) | |
| | Other approved upper-division Information Technology and Information Systems courses | | |

**Graduation Requirements:**

1. Completion of at least 122 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all discipline core, specialty core, and elective courses with no grade lower than a "C-."
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Completion of GE global intercultural requirement. INFO 405G satisfies this requirement.
6. Successful completion of at least one Global/Intercultural course.

## Information Technology - Network Administration and Security Emphasis, B.S.

### *Requirements*

Every organization uses some form of information technology to perform its operations. The Bachelor of Science in Information Technology (IT) degree prepares students to install, manage, and maintain the computing infrastructure on which organizational systems run. The Network Administration and Security emphasis prepares students to work as data communication consultants, information security analysts, and network administrators. The core of the BS IT program prepares students to have a strong foundation in computer architecture, data communication, information security, networks, and system administration.

**Total Program Credits: 122**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 38 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology Distribution | | 3 |
| | Physical Science Distribution | | 3 |
| | PHYS 2010 | College Physics I (fulfills Additional Biology or Physical Science Distribution) | 4 |
| and | PHYS 2015 | College Physics I Lab | 1 |

| | | | |
|---|---|---|---|
| | Fine Arts Distribution | | 3 |
| | ENGL 2310 | Technical Communication (fulfills Humanities Distribution) | 3 |
| | CJ 1010 | Introduction to Criminal Justice (Social/ Behavioral Science Distribution) | 3 |
| Discipline Core Requirements: | | | 63 Credits |
| Math Requirement: | | | |
| | STAT 2050 | Introduction to Statistical Methods (4) | |
| or | MGMT 2340 | Business Statistics I | 3 |
| IT Core Requirements: | | | |
| | INFO 1120 | Information Systems and Technology Fundamentals | 3 |
| | INFO 1200 | Computer Programming I for IS/IT | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | IT 1600 | Computer Architecture and Systems Software | 3 |
| | INFO 2410 | Database Fundamentals | 3 |
| | IT 2530 | Introduction to System Administration--Windows Client | 3 |
| | IT 2600 | Data Communication Fundamentals | 3 |
| or | CS 2600 | Computer Networks I (3.0) | |
| | IT 2700 | Information Security Fundamentals | 3 |
| | INFO 3300 | Web Systems Development | 3 |
| | INFO 3430 | Systems Analysis and Design WE | 3 |
| | IT 3510 | Advanced System Administration--Linux/UNIX | 3 |
| | IT 3530 | Advanced System Administration--Windows Server | 3 |
| | IT 3600 | Internetworking and Router Management | 3 |
| | IT 3700 | Information Security--Network Defense and Countermeasures | 3 |
| | INFO 405G | Global Ethical and Professional Perspectives in IS and IT | 3 |
| | INFO 4430 | Systems Design and Implementation | 3 |
| | IT 4600 | Enterprise Architectures and Virtualization | 3 |
| | IT 4700 | Enterprise Information Security Management | 3 |
| IT Application Domain Requirement: | | | 6 |
| Two specified courses to provide students with knowledge of an application domain of their choice and interest. (See department advisor for list of approved courses.) For the Computer Forensics and Security emphasis, the following 2 courses are required: CJ 1330 and CJ 1340. | | | |
| Some possible application domains are: | | | |
| | Accounting/IT Auditor | | |
| | Business | | |
| | Communications | | |
| | Computer Science | | |
| | Construction | | |
| | Criminal Justice (Choose this domain for Computer Forensics and Security emphasis) | | |
| | Forensics | | |
| | Geographic Information Systems | | |
| | Health professions | | |
| | Hospitality Management | | |
| | Manufacturing/Production | | |
| | Military Science | | |
| | Multimedia/Digital Media | | |
| | Physical Sciences | | |
| | Social Sciences | | |
| Emphasis Requirements: | | | 9 Credits |
| | IT 2400 | Voice and Data Cabling Fundamentals | 3 |
| | IT 4750 | Network Security and Operations Capstone | 3 |
| | INFO 4425 | Web Application Security | 3 |
| Emphasis Elective Requirements: | | | 12 Credits |
| Complete 12 credit hours from the following (6 credits must be 3000 or higher): | | | 12 |
| | INFO 2200 | Computer Programming II for IS/IT (3.0) | |
| | INFO 2420 | Web Application Design (3.0) | |
| | INFO 3330 | Client-Side Web Development (3.0) | |
| | INFO 3360 | Server-Side Web Frameworks (3.0) | |
| | INFO 3410 | Database Systems and Warehousing (3.0) | |
| | INFO 4135 | Data Security Analytics (3.0) | |
| | INFO 4410 | Database Administration (3.0) | |
| | INFO 4415 | Database Security and Auditing (3.0) | |
| | INFO 459R | Current Topics in Information Systems (3.0) | |
| | IT 1200 | Scripting for Administrators (3.0) | |
| | IT 2800 | Computer Forensic Fundamentals (3.0) | |
| | IT 3350 | Intellectual Property and Cyber Law (3.0) | |
| | IT 3540 | Mac OS and Server Support (3.0) | |
| | IT 459R | Current Topics in Information Technology (3.0) | |
| | IT 481R | Internship (1.0) | |
| | CS 3270 | Python Software Development (3.0) | |
| | Other approved upper-division Information Technology and Information Systems courses | | |

**Graduation Requirements:**

1. Completion of at least 122 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all discipline core, specialty core, and elective courses with no grade lower than a "C-."
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.

4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Completion of GE global intercultural requirement. INFO 405G satisfies this requirement.
6. Successful completion of at least one Global/Intercultural course.

# Integrated Studies

## Integrated Studies

The Integrated Studies department is in the College of Humanities & Social Sciences . To find the most up-to-date information from the Integrated Studies department, visit their website.

Integrated Studies department

**FACULTY**

**ABBOTT, Scott** *Professor*

**ABUNUWARA, Kim** *Associate Professor*

**JACKSON, Gregory Richard** *Assistant Professor*

## Course Descriptions

Integrated Studies.....682

## Degrees & Programs

### Integrated Studies, B.A.

#### *Requirements*

The individualized nature of the Integrated Studies degree is attractive to students with multiple interests. Students integrate course work in emphases such as biology, earth science, business, health, literature, languages, communication, philosophy, psychology, sociology, anthropology, and the arts. Emphases from computer science and information systems, accounting, technology management, and physical education are also offered as part of this degree.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| | Distribution Courses | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Any 202G/2020 Foreign Language course | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | IS 2000 | Knowledge Integrated | 3 |
| | IS 300R | Introductory Topics in Integrated Studies | 3 |
| | IS 350R | Topics in Integrated Studies | 3 |
| | One additional section of 300R or 350R | | 3 |
| | IS 4980 | Integrated Studies Capstone I | 3 |
| | IS 4990 | Integrated Studies Capstone II WE | 3 |
| Emphasis Requirements: | | | 36 Credits |
| | Complete 1 approved Minor | | 18 |
| | Complete a second, different, approved Minor | | 18 |
| | Some minors require more than 18 credits to complete. Any minor requirements beyond 18 credits may count toward electives | | |
| Elective Requirements: | | | 30 Credits |
| | One Foreign Language (Foreign Language 202G/2020 course fulfills Humanities Distribution) | | 12 |
| | Complete any 1000-level, or higher, courses | | 18 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits; a minimum of 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements; students must have "C-" or higher in the Discipline Core courses (except for the Foreign Language classes).
5. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.
7. Complete Integrated Studies graduating student survey.

**Available Minors:**

## A

- ACCOUNTING, MINOR
- AMERICAN INDIAN STUDIES, MINOR
- AMERICAN STUDIES, MINOR
- ANTHROPOLOGY, MINOR
- APPLIED COMMUNICATION, MINOR
- APPLIED DATA ANALYTICS, MINOR
- ART HISTORY, MINOR
- AUTISM STUDIES, MINOR

## B

- BIOLOGY, MINOR
- BUSINESS INFORMATION TECHNOLOGY, MINOR
- BUSINESS MANAGEMENT, MINOR

## C

- CHEMISTRY, MINOR
- CHINESE COMMERCE, MINOR
- CHINESE LANGUAGE, MINOR
- CHINESE STUDIES, MINOR
- CINEMA AND MEDIA STUDIES, MINOR
- CLASSICAL STUDIES, MINOR
- COMMUNITY HEALTH EDUCATION, MINOR
- COMPUTER SCIENCE, MINOR
- CONSTITUTIONAL STUDIES, MINOR
- CRIMINAL JUSTICE, MINOR

## D

- DEAF STUDIES, MINOR
- DIGITAL MEDIA, MINOR

## E

- EARTH SCIENCE, MINOR
- ECONOMICS, MINOR
- ENGLISH CREATIVE WRITING, MINOR
- ENGLISH LITERARY STUDIES, MINOR
- ENTREPRENEURSHIP, MINOR
- ENVIRONMENTAL STUDIES, MINOR
- ETHICS, MINOR
- EVENT PLANNING, MINOR
- EXERCISE SCIENCE, MINOR

## F

- FAMILY SCIENCE, MINOR
- FINANCE, MINOR
- FORENSIC SCIENCE, MINOR
- FRENCH, MINOR

## G

- GENDER STUDIES, MINOR
- GEOGRAPHY, MINOR
- GERMAN, MINOR

## H

- HISTORY, MINOR
- HUMAN RESOURCE MANAGEMENT, MINOR
- HUMANITIES, MINOR

## I

- INFORMATION SYSTEMS AND TECHNOLOGY, MINOR

## L

- LANGUAGES, MINOR
- LATIN AMERICAN STUDIES, MINOR

## M

- MARKETING, MINOR
- MATHEMATICS, MINOR
- MUSIC, MINOR

## N

- NATIONAL SECURITY STUDIES, MINOR

## O

- OUTDOOR RECREATION, MINOR

## P

- PEACE AND JUSTICE STUDIES, MINOR
- PHILOSOPHY, MINOR
- PHYSICS, MINOR
- POLITICAL SCIENCE, MINOR
- PORTUGUESE, MINOR
- PSYCHOLOGY, MINOR
- PUBLIC RELATIONS AND STRATEGIC COMMUNICATION, MINOR

## R

- RELIGIOUS STUDIES, MINOR
- RISK MANAGEMENT, MINOR
- RUSSIAN STUDIES, MINOR

## S

- SCHOOL HEALTH EDUCATION, MINOR
- SOCIOLOGY, MINOR
- SPANISH FOR THE PROFESSIONS--TRANSLATION/INTERPRETING, MINOR
- SPANISH, MINOR

## T

- TECHNICAL COMMUNICATION, MINOR
- TECHNOLOGY MANAGEMENT, MINOR
- THEATRE ARTS, MINOR

## W

- WRITING STUDIES, MINOR

# Integrated Studies, B.S.

### *Requirements*

The individualized nature of the Integrated Studies degree is attractive to students with multiple interests. Students integrate course work in emphases such as biology, earth science, business, health, literature, languages, communication, philosophy, psychology, sociology, anthropology, and the arts. Emphases from computer science and information systems, accounting, technology management, and physical education are also offered as part of this degree.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| Complete the following: | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |

| | | | |
|---|---|---|---|
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| | Distribution Courses | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | IS 2000 | Knowledge Integrated | 3 |
| | IS 300R | Introductory Topics in Integrated Studies | 3 |
| | IS 350R | Topics in Integrated Studies | 3 |
| | One additional section of 300R or 350R | | 3 |
| | IS 4980 | Integrated Studies Capstone I | 3 |
| | IS 4990 | Integrated Studies Capstone II WE | 3 |
| Emphasis Requirements: | | | 36 Credits |
| | Complete 1 approved Minor | | 18 |
| | Complete a second, different, approved Minor | | 18 |
| | Some minors require more than 18 credits to complete. Any minor requirements beyond 18 credits may count toward electives | | |
| Elective Requirements: | | | 31 Credits |
| | Complete any 1000-level, or higher, course | | 31 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits; a minimum of 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements; students must have "C-" or higher in the Discipline Core courses (except for the Foreign Language classes).
5. Successful completion of at least one Global/Intercultural course.
6. Complete Integrated Studies graduating student survey.

**Available Minors:**

## A

- ACCOUNTING, MINOR
- AMERICAN INDIAN STUDIES, MINOR
- AMERICAN STUDIES, MINOR
- ANTHROPOLOGY, MINOR
- APPLIED COMMUNICATION, MINOR
- APPLIED DATA ANALYTICS, MINOR
- ART HISTORY, MINOR
- AUTISM STUDIES, MINOR

## B

- BIOLOGY, MINOR
- BUSINESS INFORMATION TECHNOLOGY, MINOR
- BUSINESS MANAGEMENT, MINOR

## C

- CHEMISTRY, MINOR
- CHINESE COMMERCE, MINOR
- CHINESE LANGUAGE, MINOR
- CHINESE STUDIES, MINOR
- CINEMA AND MEDIA STUDIES, MINOR
- CLASSICAL STUDIES, MINOR
- COMMUNITY HEALTH EDUCATION, MINOR
- COMPUTER SCIENCE, MINOR
- CONSTITUTIONAL STUDIES, MINOR
- CRIMINAL JUSTICE, MINOR

## D

- DEAF STUDIES, MINOR
- DIGITAL MEDIA, MINOR

## E

- EARTH SCIENCE, MINOR
- ECONOMICS, MINOR
- ENGLISH CREATIVE WRITING, MINOR
- ENGLISH LITERARY STUDIES, MINOR
- ENTREPRENEURSHIP, MINOR
- ENVIRONMENTAL STUDIES, MINOR
- ETHICS, MINOR
- EVENT PLANNING, MINOR
- EXERCISE SCIENCE, MINOR

## F

- FAMILY SCIENCE, MINOR
- FINANCE, MINOR
- FORENSIC SCIENCE, MINOR
- FRENCH, MINOR

## G

- GENDER STUDIES, MINOR
- GEOGRAPHY, MINOR
- GERMAN, MINOR

## H

- HISTORY, MINOR
- HUMAN RESOURCE MANAGEMENT, MINOR
- HUMANITIES, MINOR

## I

- INFORMATION SYSTEMS AND TECHNOLOGY, MINOR

## L

- LANGUAGES, MINOR
- LATIN AMERICAN STUDIES, MINOR

## M

- MARKETING, MINOR
- MATHEMATICS, MINOR
- MUSIC, MINOR

## N

- NATIONAL SECURITY STUDIES, MINOR

## O

- OUTDOOR RECREATION, MINOR

## P

- PEACE AND JUSTICE STUDIES, MINOR
- PHILOSOPHY, MINOR
- PHYSICS, MINOR
- POLITICAL SCIENCE, MINOR
- PORTUGUESE, MINOR
- PSYCHOLOGY, MINOR
- PUBLIC RELATIONS AND STRATEGIC COMMUNICATION, MINOR
- R
- RELIGIOUS STUDIES, MINOR
- RISK MANAGEMENT, MINOR
- RUSSIAN STUDIES, MINOR

## S

- SCHOOL HEALTH EDUCATION, MINOR
- SOCIOLOGY, MINOR
- SPANISH FOR THE PROFESSIONS--TRANSLATION/INTERPRETING, MINOR
- SPANISH, MINOR

## T

- TECHNICAL COMMUNICATION, MINOR
- TECHNOLOGY MANAGEMENT, MINOR
- THEATRE ARTS, MINOR

## W

- WRITING STUDIES, MINOR

# Languages and Cultures

## Languages and Cultures

The Languages and Cultures department is in the College of Humanities & Social Sciences. To find the most up-to-date information from the Languages and Cultures department, visit their website.

Languages and Cultures department

**DEPARTMENT CHAIR**

**ULLOA, Sara** *Associate Professor*

**FACULTY**

**BALLARD, Michael B.** *Assistant Professor*
**BRISCOE, Gregory G.** *Associate Professor*
**CHRISTENSEN, Tammy** *Lecturer*
**DE DIOS, Mari** *Lecturer*
**EDWARDS, Daniel** *Lecturer - Placeholder*
**ELDREDGE, Bryan K.** *Professor*
**FERREIRA, Debora R.S.** *Professor*
**GILBERT, Devin** *Assistant Professor*
**HARDMAN, Jamie** *Lecturer*
**JENSEN, Douglas C.** *Associate Professor*
**LAWYER, Gloshanda** *Assistant Professor*
**LINDHEIMER, Rebeca** *Assistant Professor*
**LOUIS, Claudia** *Lecturer*
**NISGURITZER, Jorge** *Associate Professor*
**PACKER, Jeffrey** *Associate Professor*
**SAITO, Yasuko** *Lecturer*
**TEMPLE, Walter S.** *Assistant Professor*
**ULLOA, Sara** *Associate Professor*
**VILLALOBOS, Gina** *Lecturer*
**WHITE, Frederick H.** *Professor*
**WILBER, Jason** *Lecturer*
**YOUNG, Travas** *Lecturer*
**YUAN, Guofang** *Associate Professor*

# Course Descriptions


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# Degrees & Programs

## Chinese Language, Minor

### *Requirements*

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete lower division Chinese courses [1010, 1020, 2010, and 202G] or attain a similar level of language mastery through other means. Native speakers begin at the upper division level. | | | |
| Discipline Core Requirements: | | | 9 Credits |
| | CHIN 3050 | Advanced Chinese | 3 |
| | CHIN 351G | Chinese Culture and Civilization | 3 |
| | CHIN 4050 | Chinese Language and Culture | 3 |
| Elective Requirements: | | | 9 Credits |
| In addition to the 9 core requirements, students must complete 9 hours of upper division electives from the following: | | | 9 |
| | CHIN 3200 | Business Chinese I (3.0) | |
| | CHIN 4100 | Translation and Interpretation (3.0) | |
| | CHIN 4200 | Business Chinese II (3.0) | |
| | CHST 362G | Traditional Chinese History (3.0) | |
| | CHST 363G | Modern Chinese History (3.0) | |
| | CHST 373G | Classical Chinese Literature (3.0) | |
| | CHST 375G | Modern Chinese Literature (3.0) | |
| | CHST 416G | Chinese Culture and Film (3.0) | |
| | POLS 3600 | International Relations of East Asia (3.0) | |

## Chinese Studies, Minor

### *Requirements*

The Chinese Studies minor provides students with academic experiences, skills, and strategies to understand contemporary China, including its language, culture, ethics, politics, economy and history, within scholarly and applied contexts.

**Total Program Credits: 22**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of 30 hours of credit. | | | |
| Discipline Core Requirements: | | | 7 Credits |
| | CHST 200G | Introduction to Chinese Studies | 3 |
| | CHIN 2010 | Intermediate Chinese I | 4 |
| Elective Requirements: | | | 15 Credits |
| In addition to the 4 credit core requirement, students must complete 15 hours of advisor-approved upper division electives from the following: | | | 15 |
| | CHIN 202G | Intermediate Chinese II (4.0) | |
| | CHIN 351G | Chinese Culture and Civilization (3.0) | |
| | CHST 362G | Traditional Chinese History (3.0) | |
| | CHST 363G | Modern Chinese History (3.0) | |
| | CHST 373G | Classical Chinese Literature (3.0) | |
| | CHST 375G | Modern Chinese Literature (3.0) | |
| | CHST 416G | Chinese Culture and Film (3.0) | |
| | POLS 3600 | International Relations of East Asia (3.0) | |
| | other advisor-approved course | | |

## Deaf Studies, Minor

### *Requirements*

In the Deaf Studies minor, students will examine elements of what culturally-Deaf people in America have traditionally called "the Deaf-World" with special attention to the framework of meaning from within which culturally-Deaf people interpret what it means to be Deaf. This minor challenges students to approach cultural descriptions critically, and provides a historical, cultural, and linguistic foundation.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Declaration of a major in a bachelor degree program at UVU<br>2. Completion of ASL 202G or equivalent | | | |
| Discipline Core Requirements: | | | 21 Credits |
| Complete the following: | | | |
| | ASL 3050 | Advanced American Sign Language | 3 |
| | ASL 3530 | Modern Deaf Culture WE | 3 |
| | ASL 3610 | ASL Literature I | 3 |
| Complete additional 12 credits of upper-division ASL or LANG coursework | | | 12 |

**Graduation Requirements:**

1. Overall GPA of 2.0 or above.
2. Residency hours--minimum of 12 credits counting towards the minor through attendance at UVU.

## French, Minor

### *Requirements*

Earn this minor in conjunction with any UVU Bachelor Degree Major offered. The minor consists of 18 credits of Upper Division coursework (3050 required). For more information contact the Language Department advisor.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete ENGL 2010 and 30 hours of college-level courses other than French with a minimum GPA of 2.0<br>2. Complete lower division French courses (1010, 1020, 2010, and 202G) or receive the equivalent through experiential credit (does not apply to native speakers).<br>3. Students with significant residency abroad should register for French 3050 as a first course toward the minor.<br>4. Be admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 3 Credits |
| | FREN 3050 | Advanced French | 3 |
| Elective Requirements: | | | 15 Credits |
| Complete 15 credits from among the following: | | | 15 |
| | FREN 3030 | French Composition and Conversation (3) | |
| | FREN 3040 | Introduction to Literary Genres in French (3) | |
| | FREN 3200 | Business French (3) | |
| | FREN 351G | Culture and Civilization to 1700 (3) | |
| | FREN 352G | Culture and Civilization from 1700 (3) | |
| | FREN 3610 | French Literature to 1700 (3) | |
| | FREN 3620 | French Literature from 1700 (3) | |
| | FREN 4200 | Advanced Business French (3) | |
| | FREN 490R | Special Topics in French (3) | |
| | LANG 3000 | Language and Culture (3) | |
| or | LANG 481R | Language Internship (1) | |
| or | LANG 4200 | Methods of Teaching a Foreign Language (3) | |
| or | LANG 490R | Special Topics in Languages (1) | |

**Graduation Requirements:**

1. Completion of Baccalaureate Degree.
2. A minimum grade of "C" must be earned in all minor courses.

## German, Minor

### *Requirements*

Pair German with an additional language of your choosing. This minor can be earned in conjunction with any Bachelor degree major that UVU offers.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete ENGL 2010 and 30 hours of college-level courses other than German with a minimum GPA of 2.0<br>2. Complete lower division German courses [1010, 1020, 2010, and 202G] or attain a similar level of language mastery through other means. Native speakers begin at the upper division level.<br>3. Be admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 3 Credits |
| | GER 3050 | Advanced German | 3 |
| Elective Requirements: | | | 15 Credits |
| Complete 15 credits from among the following: | | | 15 |
| | GER 3030 | German Composition and Conversation (3.0) | |
| | GER 3200 | Business German (3.0) | |
| | GER 351G | German Culture and Civilization (3.0) | |
| | GER 380R | Topics in German Studies (3.0) | |
| | GER 4200 | Advanced Business German (3.0) | |
| | LANG 3000 | Language and Culture (3.0) | |
| or | LANG 3010 | Introduction to Linguistics (3.0) | |
| or | LANG 4200 | Methods of Teaching a Foreign Language (3.0) | |
| or | LANG 481R | Language Internship (1.0) | |
| | other advisor-approved course | | |

**Graduation Requirements:**

1. Completion of Baccalaureate Degree.
2. A minimum grade of "C" must be earned in all minor courses.

## Languages, Minor

### *Requirements*

The Minor in Languages requires 9 credits upper division course work in one language and 11 credits of intermediate level course work in another language (prerequisites will vary from student to student).

**Total Program Credits: 20**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete ENGL 2010 and 30 hours of college-level courses other than Language courses with a minimum GPA of 2.0<br>2. Complete lower-division courses (1010, 1020, 2010, and 202G/2020) in one foreign language or receive the equivalent through experiential credit (does not apply to native speakers).<br>3. Be admitted to a bachelor degree program at UVU.<br>4. Courses taken for credit in the Languages minor may not apply to any other program. See Advisor. | | | |
| Discipline Core Requirements: | | | 20 Credits |
| Complete the following two requirements: | | | |
| LANGUAGE 1 | | | |
| | A 3050 course in any foreign language | | 3 |
| | 6 credits numbered higher than 3050 in the same language | | 6 |
| or | LANG 3000 | Language and Culture (3.0) | |
| LANGUAGE 2 | | | |
| | 11 credits in courses numbered 2000 or higher in a SECOND foreign language. | | 11 |

**Graduation Requirements:**

1. Completion of Baccalaureate Degree.
2. Any grade below a "C" (2.0) in a Languages Minor course will not be accepted.

## Latin American Studies, Minor

### *Requirements*

The minor in Latin American Studies (LAS) provides a comprehensive and interdisciplinary understanding of Latin American and Latino culture, history, and language. This is particularly important for preparing UVU students to be fully competitive in the global marketplace since two of the top ten trading partners of the United States, Mexico and Brazil, are located in Latin America. Students learn to comprehend the unique geographical and historical complexities of Latin America and its place in the world, as well as the multifaceted cultural backgrounds of their fellow students whose families are from that vast area. A minor in LAS complements a diverse number of majors giving our students the opportunity to prepare for a future working with either Utah's growing Latino population or beyond the state pursuing opportunities abroad.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 9 Credits |
| | GEOG 2500 | Geography of Latin America and the Caribbean | 3 |
| | HIST 204G | Colonial Latin America | 3 |
| or | HIST 205G | Modern Latin America (3.0) | |
| Complete 3 credits from the following: | | | 3 |
| | PORT 202G | Intermediate Portuguese II (4.0) | |
| | SPAN 202G | Intermediate Spanish II (4.0) | |
| | Any PORT 3000 level or higher | | |
| | Any SPAN 3000 level or higher | | |
| Elective Requirements: | | | 9 Credits |
| Choose 9 credits from the following: | | | 9 |
| | ANTH 3340 | Peoples and Cultures of Mexico (3.0) | |
| | ANTH 3350 | Andean Prehistory (3.0) | |
| | ANTH 3370 | History and Ethnography of Andean Societies (3.0) | |
| | COMM 319G | Intercultural Communication Encounters (3.0) | |
| | ENGL 373R | Literature of Cultures and Places (3.0) | |
| | ENGL 476G | Multi-ethnic Literature in America (3.0) | |
| | HIST 430G | Violence and Social Conflict in Latin America (3.0) | |
| | MGMT 330G | Survey of International Business (3.0) | |
| | MGMT 332G | Cross-Cultural Communications for International Business (3.0) | |
| | MGMT 458R | Advanced Topics in International Business (1.0) | |
| | MGMT 4870 | International Management (3.0) | |
| | MKTG 259R | Current Topics in Marketing (1.0) | |
| | POLS 420R | Issues and Topics in Political Science (3.0) | |

| | | | |
|---|---|---|---|
| | PORT 3200 | Business Portuguese (3.0) | |
| | PORT 3430 | Masterpieces of Brazilian Film (3.0) | |
| | PORT 352G | Brazilian Culture and Civilization (3.0) | |
| | PORT 3610 | Brazil through Literature and Film--1500-1900 (3.0) | |
| | PORT 3620 | Modern Brazil through Literature/Music/ Film--1900-1945 (3.0) | |
| | PORT 3630 | Post-Modern Brazil through Literature/Music/ Film--1945-today (3.0) | |
| | PORT 490R | Special Topics in Brazilian Studies (3.0) | |
| | SPAN 3200 | Business Spanish (3.0) | |
| | SPAN 3630 | Spanish American Literature to 1880 (3.0) | |
| | SPAN 3640 | Spanish American Literature from 1880 (3.0) | |
| | SPAN 380R | Community Engagement in Spanish (1.0) | |
| | SPAN 412R | Spanish for the Professions (3.0) | |
| | SPAN 4200 | Advanced Business Spanish (3.0) | |
| | SPAN 460R | Topics in Hispanic Literature (3.0) | |
| | SPAN 4660 | Contemporary Spanish American Literature (3.0) | |
| | SPAN 484R | Special Topics in Hispanic Studies (1.0) | |
| | or other advisor-approved course. | | |

**Graduation Requirements:**

1. A minimum grade of "C" must be earned in all minor courses. *

| Footnote |
|---|
| * Completion of Baccalaureate Degree. |

## Portuguese, Minor

### *Requirements*

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. A minimum grade of "C" must be earned in all minor courses. * | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | PORT 3050 | Advanced Portuguese | 3 |
| | PORT 3610 | Brazil through Literature and Film--1500-1900 | 3 |
| | PORT 3620 | Modern Brazil through Literature/Music/ Film--1900-1945 | 3 |
| | PORT 3630 | Post-Modern Brazil through Literature/Music/ Film--1945-today | 3 |
| Elective Requirements: | | | 6 Credits |
| A total of 6 credits from the following: | | | 6 |
| | PORT 3200 | Business Portuguese (3.0) | |
| | PORT 3430 | Masterpieces of Brazilian Film (3.0) | |
| | PORT 352G | Brazilian Culture and Civilization (3.0) | |
| | PORT 490R | Special Topics in Brazilian Studies (3.0) | |
| | LANG 281R | Language Internship (1.0) | |
| or | LANG 3000 | Language and Culture (3.0) | |
| or | LANG 3010 | Introduction to Linguistics (3.0) | |
| or | LANG 481R | Language Internship (1.0) | |
| or | LANG 490R | Special Topics in Languages (1.0) | |
| or | LANG 4200 | Methods of Teaching a Foreign Language (3.0) | |
| | or other advisor-approved course. | | |

| Footnote |
|---|
| * Completion of Baccalaureate Degree. |

## Russian Studies, Minor

### *Requirements*

The Russian Studies minor will provide students with a foundational understanding of the language as well as an introduction to the social, political, historical, and economic factors that make Russia one of the leading international powers today. Students will attain a general knowledge and understanding of Russian culture, society and history from pre-historic times to the present, have a basic familiarity with Russia's position in and influence on world politics and economics, and demonstrate the ability to transcend the boundaries between national languages and disciplines by the use of comparative and collaborative approaches to scholarship.

**Total Program Credits: 22**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of 30 hours of credit. | | | |
| Discipline Core Requirements: | | | 4 Credits |
| | RUS 2010 | Intermediate Russian I | 4 |
| Elective Requirements: | | | 18 Credits |
| Complete 18 hours of advisor-approved electives from the following, 9 credits must be upper-division: | | | 18 |
| | HIST 3650 | Imperial Russia--Autocracy to Opposition 1696-1917 (3) | |
| | HIST 366G | The History of Modern Russia--1864 to Present (3) | |
| | POLS 3510 | Post Soviet Politics WE (3) | |
| | POLS 356G | Comparative Politics of Central Asia (3) | |
| | RUS 202G | Intermediate Russian II (4) | |
| | RUS 215R | Russian Conversation II (1) | |
| | RUS 266G | Introduction to Russian Culture (3) | |
| | RUS 3030 | Russian Conversation and Composition I (3) | |
| | RUS 3040 | Russian Conversation and Composition II (3) | |
| | RUS 3050 | Advanced Russian (3) | |
| | RUS 3200 | Business Russian (3) | |
| | RUS 3520 | Russian Culture and Civilization (3) | |
| | RUS 3620 | Nineteenth-Century Russian Literature and Its Film Adaptations (3) | |
| | RUS 366G | Twentieth Century Russian Culture (3) | |
| | RUS 367G | History of Russian Film (3) | |
| | RUS 4050 | Special Problems in Grammar Usage and Style (3) | |
| | RUS 4110 | Translation and Interpretation (3) | |
| | RUS 416G | Post Soviet Russian Media and Film (3) | |
| | RUS 490R | Special Topics in Russian Studies (3) | |

## Spanish for the Professions--Translation/ Interpreting, Minor

### *Requirements*

Students in the Minor in Spanish for the Professions, Translation, and Interpreting will become familiar with Spanish terminology and different oral and written documents in Spanish from a variety of professional fields. This minor will also provide students with the opportunity to acquire translation and interpreting skills between Spanish and English.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete ENGL 2010 and 30 hours of college-level courses other than Spanish with a minimum GPA of 2.0<br>2. Complete lower division Spanish courses (1010, 1020, 2010, and 202G) or receive the equivalent through experiential credit (does not apply to native speakers).<br>3. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 18 Credits |
| | SPAN 3040 | Spanish Conversation and Composition II WE (3) | |
| or | SPAN 3050 | Advanced Spanish WE | 3 |
| | SPAN 4110 | Introduction to Translation and Interpreting English and Spanish | 3 |
| Choose 6 credit hours from the following: | | | 6 |
| | SPAN 3200 | Business Spanish (3) | |
| | SPAN 3310 | Spanish for Healthcare Professionals (3) | |
| | SPAN 3320 | Spanish for Mental Health Professionals (3) | |
| | SPAN 3340 | Spanish for Tourism and Hospitality Management (3) | |
| | SPAN 3350 | Spanish for Legal Professions (3) | |
| | SPAN 4200 | Advanced Business Spanish (3) | |
| | SPAN 4310 | Advanced Spanish for Healthcare Professionals (3) | |
| Choose 3 credit hours from the following courses: | | | 3 |
| | SPAN 4120 | Advanced Translation English and Spanish (3) | |
| | SPAN 4130 | English Spanish Interpreting (3) | |
| Elective Requirements: | | | 3 |
| | Complete 3 credits from any upper-division SPAN or LANG courses not previously taken | | 3 |

**Graduation Requirements:**

1. Completion of Baccalaureate Degree.
2. Any grade below a "C" (2.0) in a Spanish Minor course will not be accepted.

## Spanish, Minor

### *Requirements*

This minor can be earned in conjunction with any Bachelor degree major that UVU offers. The minor consists of 18 credit hours of upper division coursework. There are some specific courses required and a number of electives so be sure to contact the advisor for more information.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Complete ENGL 2010 and 30 hours of college-level courses other than Spanish with a minimum GPA of 2.0<br>2. Complete lower division Spanish courses (1010, 1020, 2010, and 202G) or receive the equivalent through experiential credit (does not apply to native speakers).<br>3. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 18 Credits |
| | SPAN 3040 | Spanish Conversation and Composition II WE (3) | |
| or | SPAN 3050 | Advanced Spanish WE | 3 |
| | SPAN 351G | Culture and Civilization--Spain (3) | |
| or | SPAN 352G | Culture and Civilization--Spanish America | 3 |
| | SPAN 4050 | Special Topics in Grammar Usage and Style WE | 3 |
| Complete 9 credits from any upper-division SPAN or LANG courses not previously taken. | | | 9 |

**Graduation Requirements:**

1. Completion of Baccalaureate Degree.
2. Any grade below a "C" (2.0) in a Spanish Minor course will not be accepted.

## ASL and Deaf Studies Education, B.A.

### *Requirements*

This four-year degree prepares students to teach ASL & Deaf Studies in secondary education (grades 7-12) settings. Students take major courses from the Languages department and licensure courses through the School of Education. This degree requires separate application to the School of Education. Bachelor of Arts in ASL and Deaf Studies Education

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check. | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Choose one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Humanities Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| | Fine Arts Distribution | | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Biology or Physical Science | | 3 |
| Discipline Core Requirements: | | | 68 Credits |
| | Must be completed with a grade of B- or higher. | | |
| | ASL 3050 | Advanced American Sign Language * | 3 |
| | ASL 3310 | Foundations of Interpreting | 3 |
| or | ASL 4410 | ASL Linguistics (3.0) | |
| | ASL 3510 | History of Deaf People to 1817 | 3 |
| or | ASL 3520 | History of Deaf People after 1817 (3.0) | |
| | ASL 3530 | Modern Deaf Culture WE | 3 |
| | LANG 4200 | Methods of Teaching a Foreign Language | 3 |
| | ASL 3610 | ASL Literature I | 3 |
| | ASL 4610 | ASL Literature II | 3 |
| Any other 3000+ class with an ASL or LANG prefix. | | | 15 |
| Education Courses: | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I (Dance Education majors take 4430 in place of EDSC 4200.) | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies (English Education majors take ENGL 4210, 4220, 4230 in place of EDSC 4440) | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| Elective Requirements: | | | 16 Credits |

| | | |
|---|---|---|
| | Complete 16 credits of any courses 1000-level or higher. | 16 |

**Graduation Requirements:**

1. Complete a minimum of 120 credit hours with a minimum of 40 upper-division credits.
2. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Completion of General Education, ASL & Deaf Studies core, and elective requirements.
4. Meet residency and maximum years in program requirements and any other requirements stated in the University Catalog or established by the department.
5. Successful completion of at least one Global/Intercultural course.

NOTES:

| | |
|---|---|
| Students should frequently review their program with faculty or department advisor. | |

Any grade below a C (2.0) in an ASL & Deaf Studies core or elective course will not be accepted toward the major. Students must maintain an overall GPA of 3.0 or higher and meet all other graduation requirements stipulated in the university catalog. Post-BA/BS students must take 30 hours of education courses, fulfill the MATH 1050 or MATH 1055 requirement, and meet all stipulated deadlines.

| Footnote |
|---|
| * Requires ASL skills equivalent to those expected at the completion of ASL 202G. See advisor for more information. |

## Deaf Studies - General Deaf Studies Emphasis, B.A.

### *Requirements*

This four-year degree is a liberal arts degree that provides in-depth study into all facets of the Deaf-World. Students choose among two emphases. There is no special application process, but students should declare their major by contacting the academic advisor for the Languages Department.

This emphasis provides an opportunity for students to gain advanced ASL skills and thorough knowledge of the Deaf-World. Graduates with this emphasis will be prepared to work in various fields related to deafness. They will also work in fields that are not specifically tied to the Deaf-World but which require the skills and knowledge cultivated through the acquisition of any liberal arts degree. This emphasis is also terrific preparation for graduate school in any number of disciplines.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Choose one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Fine Arts Distribution[2] | | 3 |
| | Humanities Distribution[1] | | 3 |
| | Social/Cultural Anthropology Social Science[3] | | 3 |
| | Biology[4] | | 3 |
| | Physical Science[5] | | 3 |
| | Biology or Physical Science | | 3 |
| Discipline Core Requirements: | | | 35 Credits |
| | ASL 2030 | Advanced Fingerspelling | 1 |
| | ASL 2040 | ASL Numbers [6] | 1 |
| | ASL 3000 | Technology for Deaf Studies | 3 |
| | ASL 3050 | Advanced American Sign Language [7] | 3 |
| | ASL 3310 | Foundations of Interpreting | 3 |
| | ASL 3530 | Modern Deaf Culture WE | 3 |
| | ASL 3610 | ASL Literature | 3 |
| | ASL 385G | Audism/Linguicism/Oppression | 3 |
| | ASL 4410 | ASL Linguistics | 3 |
| | ASL 4550 | Multicultural Deaf Lives | 3 |
| | ASL 4560 | Deaf People and the Law | 3 |
| | ASL 4800 | Deaf Culture Studies WE | 3 |
| | LANG 3000 | Language and Culture | 3 |
| Emphasis Requirements: | | | 27 Credits |
| Complete the following courses: | | | |
| | ASL 3510 | History of Deaf People to 1817 | 3 |
| | ASL 3520 | History of Deaf People after 1817 | 3 |

| | | | |
|---|---|---|---|
| | ASL 3710 | Deaf View/Image Art--De'VIA | 3 |
| | ASL 3750 | Deaf Cinema | 3 |
| | ASL 4450 | Deaf World Discourse | 3 |
| | ASL 4520 | Deaf People and Disability Studies | 3 |
| | ASL 4530 | Deaf Peoples of the World | 3 |
| | ASL 4610 | ASL Literature II | 3 |
| | ASL 4890 | Deaf Studies Senior Capstone | 3 |
| Emphasis Elective Requirements: | | | 23 Credits |
| Complete 9 credits of any 3000- or 4000-level courses that are not part of the core nor emphasis requirements. | | | 9 |
| Complete 14 credits from any courses. ASL 3340 and ASL 3390 are strongly recommended. | | | 14 |

**Graduation Requirements** :

1. 120 credit hours (minimum of 40 upper division)
2. Minimum cumulative G.P.A. of 2.0, with no grade lower than a "C" for all core and ASL elective requirements.
3. Completion of General Education requirements
4. Completion of Deaf Studies major core and elective requirements
5. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
6. Successful completion of at least one Global/Intercultural course.

Note: Students should frequently review their program with faculty or department advisor.

| Footnote |
|---|
| 1 Highly recommend:( COMM 1020 Public Speaking and COMM 1025 Public Speaking Lab) or PHIL 1000 Intro to Philosophy or HUM 1010 Humanities Through the Arts |
| 2 Highly recommend: DANC 1010 Dance as an Art Form |
| 3 Highly recommend: ANTH 101G Social Cultural Anthropology, MGMT 1010 Introduction to Business, Or CJ 1010 Introduction to Criminal Justice, COMM 1050 Introduction to Communication |
| 4 Highly recommend: ZOOL 1090 Introduction to Human Anatomy and Physiology or ZOOL 2320 Human Anatomy. |
| 5 Highly recommend: CHEM 1010 Introduction to Chemistry or PHYS 1010 Elementary Physics. |
| 6 Requires ASL skills equivalent to those expected at the completion of ASL 1020 Beginning American Sign Language II LH. See advisor for more information. |
| 7 Requires ASL skills equivalent to those expected at the completion of ASL 202G Intermediate American Sign Language II HH GI. See advisor for more information. |

## Deaf Studies - Interpreting Emphasis, B.A.

### *Requirements*

This four-year degree is a liberal arts degree that provides in-depth study into all facets of the Deaf-World. Students choose among two emphases. There is no special application process, but students should declare their major by contacting the academic advisor for the Languages Department.

Emphasis #2: Interpreting:
This emphasis provides an opportunity for students and focuses on helping them to gain interpreting skills and certification. There is currently an intense shortage of interpreters for the Deaf across the United States. UVU offers two distinct programs to prepare students to enter the interpreting profession: The Novice-Level Interpreter Preparation Program (NLIPP) and the Advanced Certification Interpreter Preparation Program (ACIPP). These programs can accommodate students of any skill level and courses fit right into the Deaf Studies degree requirements.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Choose one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 1740 | US Economic History (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Fine Arts Distribution[2] | | 3 |
| | Humanities Distribution[1] | | 3 |
| | Social/Cultural Anthropology Social Science[3] | | 3 |
| | Biology[4] | | 3 |
| | Physical Science[5] | | 3 |
| | Biology or Physical Science | | 3 |
| Discipline Core Requirements: | | | 35 Credits |
| | ASL 2030 | Advanced Fingerspelling | 1 |
| | ASL 2040 | ASL Numbers [6] | 1 |
| | ASL 3000 | Technology for Deaf Studies | 3 |
| | ASL 3050 | Advanced American Sign Language [7] | 3 |
| | ASL 3310 | Foundations of Interpreting | 3 |
| | ASL 3530 | Modern Deaf Culture WE | 3 |

| | | | |
|---|---|---|---|
| | ASL 3610 | ASL Literature | 3 |
| | ASL 385G | Audism/Linguicism/Oppression | 3 |
| | ASL 4410 | ASL Linguistics | 3 |
| | ASL 4550 | Multicultural Deaf Lives | 3 |
| | ASL 4560 | Deaf People and the Law | 3 |
| | ASL 4800 | Deaf Culture Studies WE | 3 |
| | LANG 3000 | Language and Culture | 3 |
| Emphasis Requirements: | | | 39 Credits |
| Complete the following courses: | | | |
| | ASL 3320 | Physiology of Interpreting | 3 |
| | ASL 3330 | Cross-Cultural Communication and Interpreting | 3 |
| | ASL 3350 | Consecutive Interpreting | 3 |
| | ASL 3360 | Simultaneous Interpreting | 3 |
| | ASL 3370 | Sign to Voice Interpreting | 3 |
| | ASL 3380 | Transliteration | 3 |
| | ASL 3510 | History of Deaf People to 1817 | 3 |
| or | ASL 3520 | History of Deaf People after 1817 (3) | |
| | ASL 4330 | Visual Linguistic Analysis for Interpreters | 3 |
| | ASL 3340 | Interpreting as a Profession | 3 |
| or | ASL 3390 | Professional Issues in Interpreting (3) | |
| | ASL 4370 | Ethics for Interpreters | 3 |
| | LANG 481R | Language Internship | 3 |
| Complete 6 credits from the following: | | | 6 |
| | ASL 4380 | Applying Interpreting Skills to Coursework--Medical (3) | |
| | ASL 4381 | Applying Interpreting Skills to Coursework--Law (3) | |
| | ASL 4382 | Applying Interpreting Skills to Coursework--Education (3) | |
| | ASL 4383 | Applying Interpreting Skills to Coursework--Community (3) | |
| Emphasis Elective Requirements: | | | 11 Credits |
| Complete 6 credits; Any 3000- or 4000-level ASL & Deaf Studies courses that are not part of the core and are not emphasis requirements | | | 6 |
| Complete 5 credits, preferably from courses with the following prefixes: ACC, AIST, AMST, ANTH, ARCH, ARTH, ASTR, BESC, BIOL, BMED, BOT, BTEC, CA, CHEM, CJ, CNST, COMM, CS, ECE, ECFS, ECON, EDEC, EDEL, EDSC, EDUC, ENGL, ENGR, ESEC, ES, FAMS, FAMT, FIN, FSCI, GEOG, GEO, HIST, HLTH, HUM, IM, INFO, LEGL, MATH, METO, MGMT, MICR, MKTG, NURS, NUTR, PHIL, PHYS, PJST, POLS, PSY, SOC, SOSC, STAT, SUDC, SW, TECH, THEA, ZOOL | | | 5 |

**Graduation Requirements:**

1. 120 credit hours (minimum of 40 upper division)
2. Minimum cumulative G.P.A. of 2.0, with no grade lower than a "C" for all core and ASL elective requirements.
3. Completion of General Education requirements
4. Completion of Deaf Studies major core and elective requirements
5. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
6. Successful completion of at least one Global/Intercultural course.

Note: Students should frequently review their program with faculty or department advisor.

| | |
|---|---|
| 1 | Highly recommend:( COMM 1020 Public Speaking and COMM 1025 Public Speaking Lab). PHIL 1000 Intro to Philosophy or HUM 1010 Humanities Through the Arts |
| 2 | Highly recommend: DANC 1010 Dance as an Art Form |
| 3 | Highly recommend ANTH 101G Soc/Cult Anth or MGMT 1010 Intro to Business or CJ 1010 Intro to Criminal Justice or COMM 1050 Introduction to Communication |
| 4 | Highly recommend: ZOOL 1090 Intro to Human Anatomy and Physiology or ZOOL 2320 Human Anatomy |
| 5 | Highly recommend: CHEM 1010 Intro to Chemistry or PHYS 1010 Elem Physics |
| 6 | Requires ASL skills equivalent to those expected at the completion of ASL 1020 Beginning American Sign Language II. See advisor for more information. |
| 7 | Requires ASL skills equivalent to those expected at the completion of ASL 202G Intermediate American Sign Language II. See advisor for more information. |

## French Education, B.A.

### *Requirements*

This four-year degree prepares students to teach French in secondary education settings. It also prepares students to qualify for the Dual Language Immersion (DLI) Endorsement. Students take major courses from the Department of Languages and Cultures and licensure and endorsement courses through the School of Education. This degree requires separate application to the School of Education.

**Total Program Credits: 120**

| Matriculation Requirements: | |
|---|---|
| 1. ACT exam required (re-take required if score is 7 years or older); composite score of 21 or higher, English 20 or higher, and Math 19 or higher.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check.<br>5. Exit interview with French Program Director.<br>6. Other requirements as determined by the Department of Languages and Cultures | |
| General Education Requirements: | 35 Credits |

| | | | |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Choose one of the following: | | | 4 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business | |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Choose one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| | HIST 1740 | US Economic History (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Social/Behavioral Science | | 3 |
| | Humanities Distribution [non-language courses only] | | 3 |
| | Physical Science | | 3 |
| | Biology or Physical Science | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 56 Credits |
| | FREN 3050 | Advanced French | 3 |
| | FREN 4050 | Special Topics in Grammar Usage and Style | 3 |
| | FREN 3610 | French Literature to 1700 | 3 |
| | FREN 351G | Culture and Civilization to 1700 | 3 |
| or | FREN 352G | Culture and Civilization from 1700 (3) | |
| | FREN 3620 | French Literature from 1700 WE | 3 |
| | FREN 4900 | French Capstone Seminar | 3 |
| | FREN 4100 | Teaching French Grammar | 3 |
| | LANG 4200 | Methods of Teaching a Foreign Language | 3 |
| Education Courses: | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSP 4990 | Teacher Performance Assessment Project WE | 2 |
| Elective Requirements: | | | 29 Credits |
| 14 credits --Any course numbered 1000 or higher | | | 14 |
| Complete 15 credits of upper division (3000-4000 level) French course above 3050 | | | 15 |

**Graduation Requirements:**

1. Complete a minimum of 120 credit hours with a minimum of 40 upper-division credits.
2. Overall grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Completion of General Education, French core, and elective requirements.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Successful completion of at least one Global / Intercultural course.

## Spanish Education, B.A.

### *Requirements*

This four-year degree prepares students to teach Spanish in Secondary education (grades 7-12) settings. Students take major courses from the Languages and Cultures department and licensure courses through the School of Education. This degree requires separate application to the School of Education.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check.<br>5. Requirements by the Department of Languages: a) Complete theSpanish controlled writing sample, b) Complete a video of you teaching a lesson in Spanish, c) ACTFL OPItest with a score of Advanced Low or higher. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |

| | | | |
|---|---|---|---|
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Choose one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Humanities Distribution [non-language courses only] | | 3 |
| | Social/Behavioral Science | | 3 |
| | Fine Arts Distribution | | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Biology or Physical Science | | 3 |
| Discipline Core Requirements: | | | 56 Credits |
| | SPAN 3040 | Spanish Conversation and Composition II WE | 3 |
| or | SPAN 3050 | Advanced Spanish WE (3.0) | |
| | SPAN 351G | Culture and Civilization--Spain | 3 |
| or | SPAN 352G | Culture and Civilization--Spanish America (3.0) | |
| | ACTFL Oral Proficiency Interview (OPI) Score of Advanced Low or higher. | | |
| | SPAN 4050 | Special Topics in Grammar Usage and Style WE | 3 |
| Any two upper division Spanish Literature courses | | | 6 |
| | SPAN 4100 | Teaching Spanish Grammar | 3 |
| | SPAN 4900 | Capstone Seminar | 3 |
| | LANG 4200 | Methods of Teaching a Foreign Language | 3 |
| Education Courses: | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| Elective Requirements: | | | 29 Credits |
| Complete 18 credits of any upper-division SPAN or LANG courses not previously taken. | | | 18 |
| Complete 11 credits of any courses 1000-level or higher. | | | 11 |

**Graduation Requirements:**

1. Complete a minimum of 120 credit hours with a minimum of 40 upper-division credits.
2. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Completion of General Education, Spanish core, and elective requirements.
4. Meet residency and maximum years in program requirements and any other requirements stated in the College Catalog or established by the department.
5. Successful completion of at least one Global/Intercultural course.

NOTES: Students should frequently review their program with faculty or department advisor.
Post-BA/BS students must take 30 hours of education courses, fulfill the Math 1050 requirement, and meet all stipulated deadlines.

## Spanish, B.A.

### *Requirements*

This four-year degree is a liberal arts degree that provides in-depth study into all facets of the Spanish language and culture. There is no special application process, but students should declare their major by contacting the academic advisor for the Languages department.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |

| | | | |
|---|---|---|---|
| | MATH 1090 | College Algebra for Business (3.0) | |
| Choose one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses | | | |
| | Humanities Distribution [non-language courses only] | | 3 |
| | Social/Behavioral Science | | 3 |
| | Fine Arts Distribution | | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Biology or Physical Science | | 3 |
| Discipline Core Requirements: | | | 18 Credits |
| | SPAN 3030 | Spanish Conversation and Composition I | 3 |
| and | SPAN 3040 | Spanish Conversation and Composition II WE (6) | |
| or | SPAN 3050 | Advanced Spanish WE (3) | |
| | SPAN 351G | Culture and Civilization--Spain | 3 |
| or | SPAN 352G | Culture and Civilization--Spanish America (3.0) | |
| | SPAN 3060 | Oral Proficiency (1.0) | |
| or | Oral Proficiency Interview (OPI) | | |
| | SPAN 4050 | Special Topics in Grammar Usage and Style WE | 3 |
| | SPAN 4900 | Capstone Seminar | 3 |
| | Any two upper division Spanish literature courses | | 6 |
| Elective Requirements: | | | 67 Credits |
| | Complete 18 credits of any upper-division SPAN or LANG courses not previously taken. | | 21 |
| | Any course 1000 level or higher (includes SPAN 1010-SPAN 1020-SPAN 2010-SPAN 202G) | | 49 |

**Graduation Requirements:**

1. 120 credit hours (minimum of 40 upper division)
2. Minimum cumulative G.P.A. of 2.0, with no grade lower than a "C" for all core and SPAN elective requirements.
3. Completion of General Education requirements.
4. Completion of Spanish major core and elective requirements.
5. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
6. Successful completion of at least one Global/Intercultural course.
7. Students should frequently review their program with faculty or department advisor.

# Literacies and Composition

## Literacies and Composition

The Literacies and Composition department is in the Univeristy College. To find the most up-to-date information from the Literacies and Composition department, visit their website.

Literacies and Composition department

**FACULTY**

**BENDER, Melinda A.** *Professor*

**DUTTAGUPTA, Chitralekha** *Associate Professor*

**GARCIA, Elena G.** *Associate Professor*

**GOODWIN, Benjamin G.** *Professional in Residence*

**HENRY, Thomas** *Associate Professor*

**HILST, Joshua** *Associate Professor*

**HIXON-BOWLES, Kelsey** *Assistant Professor*

**JOHNSON, Erika T.** *Assistant Professor*

**MAROTTA, Calley** *Assistant Professor*

**PRESTON, Jacqueline** *Associate Professor*

## Course Descriptions

Literacies and Composition..... 609

# Marketing

## Business Marketing

The Business Marketing department is in the Woodbury School of Business. To find the most up-to-date information from the Business Marketing department, visit their website.

Business Marketing department

**DEPARTMENT CHAIR**

**HUFF, Steven** *Associate Professor*

**FACULTY**

**ALVARADO-KARSTE, Diego** *Assistant Professor*
**ANDERSEN, Richelle** *Lecturer*
**BENSON, David M.** *Lecturer*
**BETTRIDGE, Amy** *Lecturer*
**BOTT, Laurie** *Professional in Residence*
**FARNWORTH, Xanthe** *Lecturer*
**GARDINER, S. Paige** *Assistant Professor*
**GRIFFIN, Brigham K.** *Professional in Residence*
**HARDING, R. Dustin** *Assistant Professor*
**HARRISON, Mark** *Lecturer*
**HAWKES, Joshua** *Lecturer*
**HUFF, Steven** *Associate Professor*
**JOHNSON, Gary** *Professional In Residence*
**JOLLEY, A. Dale** *Professional in Residence*
**LAWSON, Kimberli** *Lecturer*
**MAXFIELD, Neal** *Lecturer*
**MCPHERSON, Michelle** *Lecturer*
**MILLER, Duane B.** *Professor*
**MURDOCK, Mitchel R.** *Assistant Professor*
**PRZBYLA, David** *Professional in Residence*
**SCHILL, Ryan** *Visiting Assistant Professor*
**SKOUSEN, Bret** *Professional in Residence*
**STUDEBAKER, Matt J.** *Lecturer*
**WORKMAN, Letty** *Associate Professor*

# Course Descriptions

Marketing..... 711

# Degrees & Programs

## Digital Marketing, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Digital Marketing includes courses that teach social media marketing, digital advertising, web anaylics, content and email marketing, and conversion optimization. Certification signals digital marketing capability to current employers. The certificate provides an opportunity for professionals to retool and stay current with ever-changing industry trends.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals[1] | 3 |
| | MKTG 3170 | Digital Advertising | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3660 | Digital Marketing | 3 |
| | MKTG 3680 | Marketing with Social Media | 3 |
| | MKTG 3690 | Fundamentals of Product Management | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Overall grade point average of 2.0 (C-) or above.
3. Residency hours-- minimum of 3 credit hours through course attendance at UVU.

| Footnote: | |
|---|---|
| [1] Can be taken simultaneously with MKTG 3600. | |

## Product Management, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Product Management includes courses that teach product management, marketing research, data collection and analysis, marketing fundamentals, customer behavior, and services marketing including SaaS marketing. Certification signals product management capability to current employers. The certificate provides an opportunity for professionals to retool and stay current with ever-changing industry trends.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals[1] | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3620 | Consumer Behavior | 3 |
| | MKTG 3630 | Services Marketing | 3 |
| | MKTG 3700 | Fundamentals of Product Management | 3 |
| | MKTG 4600 | Customer Experience | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Overall grade point average of 2.0 (C-) or above.
3. Residency hours-- minimum of 6 credit hours through course attendance at UVU.

| Footnote: | |
|---|---|
| [1] Can be taken simultaneously with MKTG 3600. | |

## Professional Sales, Certificate of Proficiency

### *Requirements*

A Certificate of Proficiency in Professional Sales at UVU offers an applied approach to professional sales. The certificate focuses on developing the knowledge and skills necessary to be able to be successful in a professional sales environment with a focus on business to business sales. Courses specialize in personal selling skills, sales coaching and sales management, sales analytics and sales strategy, along with a sales-centered internship.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals[1] | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3650 | Professional Selling | 3 |
| | MKTG 3640 | Sales Management | 3 |
| | MKTG 4610 | Sales Operations | 3 |
| | MKTG 4620 | Advanced Professional Selling | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Overall grade point average of 2.0 (C-) or above.
3. Residency hours-- minimum of 6 credit hours through course attendance at UVU.

| Footnote: | |
|---|---|
| [1] Can be taken simultaneously with MKTG 3600. | |

## Marketing, Minor

### *Requirements*

The Marketing Department offers students three different tracks in the marketing minor, each providing a theoretical and in-depth professional preparation in the field. The first is the Marketing Management track, which provides a broad base of experiential classes and the most flexibility in scheduling for employed students. The second is the Digital Marketing track, which provides courses in internet marketing, social media, and web analytics. The newest track is Professional Selling, which prepares students for a career in sales with courses in personal selling, sales management, and sales analytics. Whichever track is chosen, a professional internship is highly encouraged.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3650 | Professional Selling | 3 |
| | MKTG 3660 | Digital Marketing | 3 |
| | MKTG 3700 | Fundamentals of Product Management | 3 |
| | MKTG 4600 | Customer Experience | 3 |

## Digital Marketing, B.S.

### *Requirements*

The Digital Marketing major at UVU offers an analytical, applied, engaged-learning approach to digital marketing. Students learn a balance of marketing strategy, content creation, graphic design, and website/social media analytics for marketing campaigns. The digital marketing major offers an expanding menu of beginning and advanced courses that allow students to use their digital marketing skills for live engaged-learning clients.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Students will be limited to 9 hours of upper-division credit until matriculation is completed.<br>2. Students must complete the following courses in order to matriculate: ACC 2110, ECON 2010, MyEducator or IM 2010 or IM 2600,MKTG 220G, MKTG 2390, MGMT 2340, MGMT 2400<br>3. Students cannot take the following courses until they have matriculated:<br>FIN 3100, MGMT 3450, MKTG 3695, MGMT 4860 | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 70 Credits |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | My Educator[2] | | |
| or | IM 2010 | Business Computer Proficiency (3) | |
| or | IM 2600 | Spreadsheet Applications (3) | |
| Complete the following: | | | |
| | MKTG 220G | Written Business Communication WE (Complete with B- grade or higher) | 3 |
| | MGMT 2340 | Business Statistics I | 3 |

| | | | |
|---|---|---|---|
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance [1] | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management [1] | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation [1] | 3 |
| | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| or | MGMT 495R | Executive Lecture Series | 1 |
| Digital Marketing Core: | | | |
| | MKTG 1890 | Introduction to Careers in Business | 1 |
| | MKTG 3170 | Digital Advertising | 3 |
| | MKTG 3300 | Marketing Analytics | 3 |
| | MKTG 3660 | Digital Marketing | 3 |
| | MKTG 3680 | Marketing with Social Media | 3 |
| | MKTG 3690 | Digital Marketing Analytics | 3 |
| | MKTG 3695 | Digital Marketing Capstone[1] | 3 |
| | MKTG 3890 | Business Career Preparation | 2 |
| | MKTG 483R | Digital Marketing Internship | 3 |
| | Marketing Electives: Select from approved list; see advisors (15 credits needed) | | 15 |
| Elective Requirements: | | | 15 Credits |
| Any course numbered 1000 or higher (15 credits needed) | | | 15 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until MATRICULATION is completed.

| Footnote |
|---|
| [1] Cannot be taken until student is matriculated. |
| [2] Students are required to complete My Educator, IM 2010, or IM 2600 with a grade of B- or higher. |

# Marketing, B.A.

## *Requirements*

The Marketing Department offers students three different tracks each providing a theoretical and in-depth professional preparation in the field. The first is the Marketing Management track which provides a broad base of experiential classes and the most flexibility in scheduling for employed students. The second is the Digital Marketing track which provides courses in internet marketing, social media, and web analytics. The newest track is Sales which prepares students for a career in sales with courses in personal selling, sales management, and sales analytics. Whichever track is chosen, a professional internship is highly encouraged.

**Total Program Credits: 120**

| Matriculation Requirements | | | |
|---|---|---|---|
| 1. Students will be limited to 9 hours of upper-division credit until matriculation is completed.<br>2. Students must complete the following courses in order to matriculate: ACC 2110, ECON 2010, MyEducator or IM 2010 or IM 2600, MKTG 220G, MKTG 2390, MGMT 2340, MGMT 2400.<br>3. Students cannot take the following courses until they have matriculated: FIN 3100, MGMT 3450, MGMT 4860, MKTG 4650. | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (Any Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 52 Credits |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |

| | | | |
|---|---|---|---|
| | My Educator[2] | | |
| or | IM 2010 | Business Computer Proficiency (3)[2] | |
| or | IM 2600 | Spreadsheet Applications (3)[2] | |
| Complete the following: | | | |
| | MKTG 220G | Written Business Communication WE (Complete with a B- grade or higher) | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance [1] | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management [1] | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| or | MGMT 495R | Executive Lecture Series | 1 |
| | MGMT 4860 | Business Strategy Formulation and Implementation [1] | 3 |
| Marketing Core Courses: | | | |
| | MKTG 1890 | Introduction to Careers in Business | 1 |
| | MKTG 3300 | Marketing Analytics | 3 |
| | MKTG 3650 | Professional Selling | 3 |
| | MKTG 3660 | Digital Marketing | 3 |
| | MKTG 3700 | Fundamentals of Product Management | 3 |
| | MKTG 3890 | Business Career Preparation | 2 |
| | MKTG 4600 | Customer Experience | 3 |
| | MKTG 4650 | Marketing Management Capstone[1] | 3 |
| Elective Requirements: | | | 32 Credits |
| Complete 15 credits of marketing electives from the following list: | | | 15 |
| | MKTG 3170 | Digital Advertising (3) | |
| | MKTG 3220 | Retail Management (3) | |
| | MKTG 335G | International Marketing (3) | |
| | MKTG 3460 | Internal Marketing and Corporate Imaging (3) | |
| | MKTG 3620 | Consumer Behavior (3) | |
| | MKTG 3630 | Services Marketing (3) | |
| | MKTG 3640 | Sales Management (3) | |
| | MKTG 3670 | Advertising and Promotion (3) | |
| | MKTG 3680 | Marketing with Social Media (3) | |
| | MKTG 3685 | Content Marketing (3) | |
| | MKTG 3690 | Digital Marketing Analytics (3) | |
| | MKTG 4300 | Marketing Data Science (3) | |
| | MKTG 4400 | Competitive Intelligence (3) | |
| | MKTG 4610 | Sales Operations (3) | |
| | MKTG 4620 | Advanced Professional Selling (3) | |
| | MKTG 459R | Advanced Topics in Marketing (3) | |
| Complete 3 credits of internship: | | | 3 |
| | MKTG 481R | Marketing Internship (1)[3] | |
| | MKTG 482R | Sales Internship (must be taken three times) (1)[3] | |
| | MKTG 483R | Digital Marketing Internship (1)[3] | |
| Complete 12 credits of any foreign language course 1010, 1020, 2010 sequence | | | 12 |
| Complete 2 elective credits 1000 or higher. | | | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BA degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until matriculation is completed.

| Footnote |
|---|
| [1]Cannot be taken until student is matriculated. |
| [2]Students are required to complete My Educator, IM 2010, or IM 2600 with a grade of B- or higher |
| [3]Maximum of 3 credits of internship count toward marketing electives. |

## Marketing, B.S.

### *Requirements*

The Marketing Department offers students three different tracks each providing a theoretical and in-depth professional preparation in the field. The first is the Marketing Management track which provides a broad base of experiential classes and the most flexibility in scheduling for employed students. The second is the Digital Marketing track which provides courses in internet marketing, social media, and web analytics. The newest track is Sales which prepares students for a career in sales with courses in personal selling, sales management, and sales analytics. Whichever track is chosen, a professional internship is highly encouraged.

**Total Program Credits: 120**

| Matriculation Requirements | | | |
|---|---|---|---|
| 1. Students will be limited to 9 hours of upper-division credit until matriculation is completed.<br>2. Students must complete the following courses in order to matriculate: ACC 2110, ECON 2010, MyEducator or IM 2010 or IM 2600,MKTG 220G, MKTG 2390, MGMT 2340, MGMT 2400<br>3. Students cannot take the following courses until they have matriculated: FIN 3100, MGMT 3450, MGMT 4860, MKTG 4650. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |

| | | | |
|---|---|---|---|
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 52 Credits |
| Business Foundation Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | My Educator[2] | | |
| or | IM 2010 | Business Computer Proficiency (3)[2] | |
| or | IM 2600 | Spreadsheet Applications (3)[2] | |
| Complete the following: | | | |
| | MKTG 220G | Written Business Communication WE[5] | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance [1] | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management [1] | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| or | MGMT 495R | Executive Lecture Series | 1 |
| | MGMT 4860 | Business Strategy Formulation and Implementation [1] | 3 |
| Marketing Core Courses: | | | |
| | MKTG 1890 | Introduction to Careers in Business | 1 |
| | MKTG 3300 | Marketing Analytics | 3 |
| | MKTG 3650 | Professional Selling | 3 |
| | MKTG 3660 | Digital Marketing | 3 |
| | MKTG 3700 | Fundamentals of Product Management | 3 |
| | MKTG 3890 | Business Career Preparation | 2 |
| | MKTG 4600 | Customer Experience | 3 |
| | MKTG 4650 | Marketing Management Capstone[1] | 3 |
| Elective Requirements: | | | 33 Credits |
| Complete 15 credits of marketing electives from the following list:[4] | | | 15 |
| | MKTG 3170 | Digital Advertising (3) | |
| | MKTG 3220 | Retail Management (3) | |
| | MKTG 335G | International Marketing (3) | |
| | MKTG 3460 | Internal Marketing and Corporate Imaging (3) | |
| | MKTG 3620 | Consumer Behavior (3) | |
| | MKTG 3630 | Services Marketing (3) | |
| | MKTG 3640 | Sales Management (3) | |
| | MKTG 3670 | Advertising and Promotion (3) | |
| | MKTG 3680 | Marketing with Social Media (3) | |
| | MKTG 3685 | Content Marketing (3) | |
| | MKTG 3690 | Digital Marketing Analytics (3) | |
| | MKTG 4300 | Marketing Data Science (3) | |
| | MKTG 4400 | Competitive Intelligence (3) | |
| | MKTG 4610 | Sales Operations (3) | |
| | MKTG 4620 | Advanced Professional Selling (3) | |
| | MKTG 459R | Advanced Topics in Marketing (1) | |
| Complete 3 credits of internship: | | | 3 |
| | MKTG 481R | Marketing Internship (1)[3] | |
| | MKTG 482R | Sales Internship (must be taken three times) (1)[3] | |
| | MKTG 483R | Digital Marketing Internship (1)[3] | |
| Select 15 elective credits 1000 or higher. | | | 15 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until matriculation is completed.

| Footnote |
| --- |
| [1]Cannot be taken until student is matriculated. |
| [2]Students will be required to complete My Educator, IM 2010, or IM 2060 with a grade of B- or higher |
| [3]Maximum of 3 credit hours of internship count toward marketing electives. |
| [4]It is encouraged that students use these 15 credits of marketing electives to earn a marketing certificate in professional selling, productmanagement, or digital marketing. |
| [5]Students will be required to complete MKTG 220G with a grade of B- or higher. |

# Master of Arts in Marriage and Family Therapy Graduate Programs

## Marriage and Family Therapy Graduate Program

The Master of Arts in Marriage and Family Therapy Graduate Program is in the College of Humanities and Social Sciences. To find the most up-to-date information on the Marriage and Family Therapy Graduate Program, visit their website.

Marriage and Family Therapy Graduate Program

## Course Descriptions

Marriage and Family Therapy..... 702

## Degrees & Programs

### Marriage and Family Therapy, M.A.

#### *Requirements*

The Master in Marriage and Family Therapy (MFT) trains students to be professionally competent in the field of marriage and family therapy. Through the application of systemic theories, skills, and ethics, students are prepared to serve a diverse client population. Students who successfully complete the program, including academic course work and supervised clinical practica, will be eligible for employment and licensure as an Associate Marriage and Family Therapist in the state of Utah. This program is offered in collaboration with the Behavioral Science Department and the family science undergraduate degree.

**Total Program Credits: 54**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of a bachelor's degree from a regionally-accredited college/university, a nationally accredited program, or an international college or university recognized by a Ministry of Education.<br>2. Admission to the Marriage and Family Therapy, M.A. program. | | | |
| Discipline Core Requirements: | | | 54 Credits |
| Complete the following courses: | | | |
| | MFT 6000 | Systemic Foundations of Marriage and Family Therapy | 3 |
| | MFT 6010 | Contemporary Approaches to MFT | 3 |
| | MFT 6100 | Ethical Issues in Marriage and Family Therapy | 3 |
| Complete the following therapy classes: | | | |
| | MFT 6200 | Systemic Assessment and Diagnosis | 3 |
| | MFT 6210 | Couples Therapy | 3 |
| | MFT 6220 | Group Therapy | 2 |
| | MFT 6230 | Family Therapy | 3 |
| | MFT 6240 | Individual Therapy | 2 |
| Complete the following developmental courses: | | | |
| | MFT 6300 | Working with Diversity in MFT | 3 |
| | MFT 6310 | Child and Adolescent Development | 3 |
| | MFT 6320 | Adult Issues in Human Development | 3 |
| Complete the following specialty courses: | | | |
| | MFT 6400 | Research in Marriage and Family Therapy | 3 |
| | MFT 6500 | Community Intervention | 1 |
| | MFT 6510 | Contemporary Issues in MFT | 1 |
| | MFT 6520 | Clinical Business Development and Practice | 2 |
| | MFT 6600 | Capstone in MFT | 1 |
| Complete the practicum series: | | | |
| | MFT 6900 | Pre-Practicum | 3 |
| | MFT 6910 | Practicum I | 3 |
| | MFT 6920 | Practicum II | 3 |
| | MFT 6930 | Practicum III | 3 |
| | MFT 6940 | Practicum IV | 3 |

**Graduation Requirements:**

1. Complete 54 credits with a minimum GPA of 3.0 with a B- or higher in every class
2. Complete program clinical and supervision hour requirements.
3. Complete program capstone requirements demonstrating achievement of student learning outcomes.
4. 42 credits must be taken at UVU.No more than 12 transfer credits will be accepted.

# Mathematics

## Mathematics

The Mathematics department is in the College of Science. To find the most up-to-date information from the Math department, visit their website.

Mathematics department

**DEPARTMENT CHAIR**

**PALAIS, Bob** *Professor*

**FACULTY**

**ABRAMSON, Mark A.** *Associate Professor*
**ANDRIST, Kathryn** *Professor*
**BHATT, Harish** *Assistant Professor*
**BHATTACHARJEE, Debanjan** *Associate Professor*
**FAUROT, Vivienne** *Associate Professor*
**FEARNLEY, David** *Professor*
**FRANZ, Reinhard O.W.** *Associate Professor*
**HEINY, Erik** *Professor*
**HURDLE, Zachariah** *Assistant Professor*
**ISLAM, Mohammad** *Assistant Professor*
**JI, Xiao** *Associate Professor*
**KIDD, John** *Assistant Professor*
**LEE, KC** *Lecturer*
**LEWIS, Scott C.** *Professor*
**LI, Ya** *Professor*
**LING, Chen** *Assistant Professor*
**LING, Jun (Michael)** *Professor*
**MERRIN, Christine Rossi** *Professor*
**MERRIN, Stephen D.** *Professor*
**MOGILSKI, Wiktor** *Assistant Professor*
**PALAIS, Bob** *Professor*
**PARRY, Alan** *Assistant Professor*
**SIMMONS, Skyler C.** *Assistant Professor*
**SIMONS, Joe M.** *Lectuer*
**TAYLOR, Matthew** *Lecturer - Placeholder*
**VAN FRANKENHUIJSEN, Machiel** *Professor*
**VASILEVSKA, Violeta** *Professor*
**WALKER, Christine** *Professor*
**ZHU, Yingxian** *Associate Professor*

## Course Descriptions

Mathematics.....691
Statistics.....777

## Degrees & Programs

### Mathematics, A.A.

#### *Requirements*

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 37 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| or | MATH 121H | Calculus I (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 11 Credits |
| | MATH 1220 | Calculus II | 5 |
| or | MATH 122H | Calculus II (5.0) | |
| Complete 6 credits from the following: | | | 6 |
| | MATH 2210 | Calculus III (3.0) | |
| or | MATH 221H | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra (3.0) | |
| | MATH 2280 | Ordinary Differential Equations (3.0) | |
| | MATH 290R | Topics in Mathematics (3.0) | |
| | STAT 2050 | Introduction to Statistical Methods (5.0) | |
| Elective Requirements: | | | 12 Credits |
| | Same Foreign Language | | 8 |
| | Any course 1000 or higher* | | 4 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 20 credit hours through course attendance at UVU
4. Completion of GE and specified departmental requirements

| Footnote: |
|---|
| * MATH 1050 and MATH 1060 are required as prerequisites for MATH 1210. |

## Mathematics, A.S.

### *Requirements*

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 37 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| or | MATH 121H | Calculus I (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 11 Credits |
| | MATH 1220 | Calculus II | 5 |
| or | MATH 122H | Calculus II (5.0) | |
| Complete 6 credits from the following: | | | 6 |
| | MATH 2210 | Calculus III (3.0) | |
| or | MATH 221H | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra (3.0) | |
| | MATH 2280 | Ordinary Differential Equations (3.0) | |
| | MATH 290R | Topics in Mathematic (3.0) | |
| | STAT 2050 | Introduction to Statistical Methods (5.0) | |
| Elective Requirements: | | | 12 Credits |
| | Any course 1000 or higher* | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

| Footnote: |
|---|
| * MATH 1050 and MATH 1060 are required as prerequisites for MATH 1210. |

## Mathematics, Minor

### *Requirements*

**Total Program Credits: 25**

| Matriculation Requirements: |
|---|
| 1. Admitted to a bachelor degree program at UVU. |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 25 Credits |
| | MATH 1210 | Calculus I | 5 |
| or | MATH 121H | Calculus I (5.0) | |
| | MATH 1220 | Calculus II | 5 |
| or | MATH 122H | Calculus II (5.0) | |
| | MATH 2210 | Calculus III | 3 |
| or | MATH 221H | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra | 3 |
| | MATH 2280 | Ordinary Differential Equations | 3 |
| | Choose at least two mathematics courses from the mathematics courses numbered 3210 and above [1] | | 6 |

| Graduation Requirements |
|---|
| To fulfill the requirements for a mathematics minor, students must achieve a minimum GPA of 2.4 for all attempted work in the seven mathematics courses required for the mathematics minor and have no course grade lower than "C" in any of the seven mathematics courses required for the mathematics minor (substitutions may be granted for some elective courses). |

NOTE: The 6-credit pairs of courses, MATH 3210 and MATH 3400, or MATH 4610 and MATH 4620, are recommended for students pursuing majors in the physical sciences, engineering, or computer science. Another recommended pair for computer science majors is MATH 3300 and MATH 4340

| Footnotes: |
|---|
| [1]Elective courses may NOT include MATH 4030, MATH 4040, or MATH 481R. |

## Mathematics - Actuarial Science Emphasis, B.S.

### *Requirements*

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| 1. Completion of MATH 1210 and MATH 1220 (or equivalent) with an overall GPA of 2.5 or better<br>2. Student must meet with the Math Department advisor and declare an intent to major in Mathematics |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |

| | | | |
|---|---|---|---|
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| or | MATH 121H | Calculus I (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II (4.0) (Required for Mathematics and Applied Mathematics Emphasis) | |
| and | PHYS 2225 | Physics for Scientists and Engineers II Lab (1.0) (Required for Mathematics and Applied Mathematics Emphasis) | |
| or | One other Biology or Physical Science Distribution (Required for Applied Mathematics Emphasis) | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 31 Credits |
| Complete the following: | | | |
| | CS 1400 | Fundamentals of Programming | 3 |
| | STAT 2050 | Introduction to Statistical Methods | 4 |
| | STAT 2060 | Introduction to Statistical Computing | 1 |
| | MATH 1220 | Calculus II | 5 |
| or | MATH 122H | Calculus II (5.0) | |
| | MATH 2210 | Calculus III | 3 |
| or | MATH 221H | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra | 3 |
| | MATH 2280 | Ordinary Differential Equations | 3 |
| | MATH 3250 | Introduction to Advanced Calculus WE | 3 |
| | MATH 3300 | Foundations of Abstract Algebra | 3 |
| | MATH 4210 | Advanced Calculus I * | 3 |
| Elective Requirements: | | | 20 Credits |
| | Complete 11 credits of upper division electives** | | 11 |
| | Complete 9 credits of upper or lower division electives** | | 9 |
| Emphasis Requirements: | | | 27 Credits |
| | ECON 2010 | Principles of Economics I | 3 |
| | ECON 2020 | Principles of Economics II | 3 |
| | ACC 2010 | Financial Accounting (3.0) | |
| and | ACC 2020 | Managerial Accounting (3.0) | |
| or | ACC 3000 | Financial Managerial and Cost Accounting Concepts | 3 |
| | FIN 3100 | Principles of Finance | 3 |
| | MATH 3750 | Financial Mathematics | 3 |
| | MATH 4750 | Life Contingencies | 3 |
| | STAT 4000 | Applied Regression and Time Series WE | 3 |
| | STAT 4710 | Mathematical Statistics-Probability and Statistics | 3 |
| | STAT 4720 | Mathematical Statistics-Statistical Inference | 3 |
| Emphasis Elective Requirements: | | | 3 Credits |
| Complete 3 credits chosen from the following: | | | 3 |
| | MATH 3210 | Complex Variables (3.0) | |
| | MATH 3320 | Graph Theory and its Applications (3.0) | |
| | MATH 3400 | Partial Differential Equations (3.0) | |
| | MATH 3640 | Introduction to Optimization (3.0) | |
| | MATH 4100 | Differential Geometry of Curves and Surfaces (3.0) | |
| | MATH 4220 | Advanced Calculus II (3.0) | |
| | MATH 4250 | Introduction to Dynamical Systems (3.0) | |
| | MATH 4310 | Introduction to Modern Algebra I (3.0) | |
| | MATH 4320 | Introduction to Modern Algebra II (3.0)*** | |
| | MATH 4330 | Theory of Linear Algebra (3.0) | |
| | MATH 4340 | Introduction to Number Theory (3.0) | |
| | MATH 4510 | Foundations of Topology (3.0) | |
| | MATH 4610 | Introduction to Numerical Analysis I (3.0) | |
| | MATH 4620 | Introduction to Numerical Analysis II (3.0)*** | |
| | MATH 481R | Internship in Mathematics (1.0) | |
| | MATH 489R | Undergraduate Research in Mathematics (1.0) | |
| | MATH 490R | Topics in Mathematics (2.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with at least 40 credit hours in upper-division courses.
2. Overall grade point average of 2.0 (C) or above, a minimum GPA of 2.4 in all MATH and STAT courses listed above, with no grade lower than a "C" in all listed PHYS, STAT, and MATH courses (substitutions may be granted for some elective courses).

3. Residency hours-- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of general education and specified departmental requirements.
5. Complete an exit survey administered by the Mathematics Department Advisor.
6. Successful completion of at least one Global/Intercultural course.

Footnotes:

* Students planning to do graduate work in mathematics should take both of the year-long sequences MATH 4210, 4220, and MATH 4310, 4320, and acquire a reading knowledge of at least one foreign language chosen from French, German, or Russian.

** Elective courses may NOT include MATH 3100, MATH 3200, MATH 3010, MATH 3030, MATH 4030, or MATH 4040.

***Requires completion of a prerequisite course, which fulfills elective requirements.

## Mathematics - Applied Mathematics Emphasis, B.S.

### *Requirements*

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of MATH 1210 and MATH 1220 (or equivalent) with an overall GPA of 2.5 or better<br>2. Student must meet with the Math Department advisor and declare an intent to major in Mathematics | | | |
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| or | MATH 121H | Calculus I (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II (4.0) (Required for Mathematics and Applied Mathematics Emphasis) | |
| and | PHYS 2225 | Physics for Scientists and Engineers II Lab (1.0) (Required for Mathematics and Applied Mathematics Emphasis) | |
| or | One other Biology or Physical Science Distribution (Required for Applied Mathematics Emphasis) | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral | | 3 |
| Discipline Core Requirements: | | | 31 Credits |
| Complete the following: | | | |
| | CS 1400 | Fundamentals of Programming | 3 |
| | STAT 2050 | Introduction to Statistical Methods | 4 |
| | STAT 2060 | Introduction to Statistical Computing | 1 |
| | MATH 1220 | Calculus II | 5 |
| or | MATH 122H | Calculus III (5.0) | |
| | MATH 2210 | Calculus III | 3 |
| or | MATH 221H | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra | 3 |
| | MATH 2280 | Ordinary Differential Equations | 3 |
| | MATH 3250 | Introduction to Advanced Calculus WE | 3 |
| | MATH 3300 | Foundations of Abstract Algebra | 3 |
| | MATH 4210 | Advanced Calculus I * | 3 |
| Elective Requirements: | | | 20 Credits |
| | Complete 11 credits of upper division electives** | | 11 |
| | Complete 9 credits of upper or lower division electives** | | 9 |
| Emphasis Requirements: | | | 20 Credits |
| Complete all of the following: | | | |
| | CS 1410 | Object Oriented Programming | 3 |
| | STAT 3040 | Probability and Statistics for Engineering and the Sciences | 3 |
| | MATH 3210 | Complex Variables | 3 |
| | MATH 3400 | Partial Differential Equations | 3 |
| | MATH 4610 | Introduction to Numerical Analysis I | 3 |
| | MATH 4620 | Introduction to Numerical Analysis II | 3 |
| | MATH 4999 | Mathematics Capstone WE | 2 |
| Emphasis Elective Requirements: | | | 10 Credits |
| Complete 10 credits chosen from the following: | | | 10 |
| | MATH 3320 | Graph Theory and its Applications (3.0) | |
| | MATH 3640 | Introduction to Optimization (3.0) | |
| | MATH 3750 | Financial Mathematics (3.0) | |
| | MATH 4100 | Differential Geometry of Curves and Surfaces (3.0) | |
| | MATH 4220 | Advanced Calculus II (3.0) | |
| | MATH 4250 | Introduction to Dynamical Systems (3.0) | |

| | | | |
|---|---|---|---|
| | MATH 4310 | Introduction to Modern Algebra I (3.0) | |
| | MATH 4320 | Introduction to Modern Algebra II (3.0)*** | |
| | MATH 4330 | Theory of Linear Algebra (3.0) | |
| | MATH 4340 | Introduction to Number Theory (3.0) | |
| | MATH 4510 | Foundations of Topology (3.0) | |
| | MATH 4750 | Life Contingencies (3.0) | |
| | MATH 481R | Internship in Mathematics (1.0) | |
| | MATH 489R | Undergraduate Research in Mathematics (1.0) | |
| | MATH 490R | Topics in Mathematics (2.0) | |
| | MATH 5510 | General Topology (3.0) | |
| | PHYS 3300 | Mathematical Physics (3.0) | |
| | PHYS 3310 | Advanced Mathematical Physics (3)*** | |
| | PHYS 3330 | Computational Physics (3.0)*** | |
| | STAT 4000 | Applied Regression and Time Series WE (3.0) | |
| | STAT 4710 | Mathematical Statistics-Probability and Statistics (3.0) | |
| | STAT 4720 | Mathematical Statistics-Statistical Inference (3.0)*** | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with at least 40 credit hours in upper-division courses.
2. Overall grade point average of 2.0 (C) or above, a minimum GPA of 2.4 in all MATH and STAT courses listed above, with no grade lower than a "C" in all listed PHYS, STAT, and MATH courses (substitutions may be granted for some elective courses).
3. Residency hours-- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of general education and specified departmental requirements.
5. Complete an exit survey administered by the Mathematics Department Advisor.
6. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| * Students planning to do graduate work in mathematics should take both of the year-long sequences MATH 4210, 4220, and MATH 4310, 4320, and acquire a reading knowledge of at least one foreign language chosen from French, German, or Russian. |
| **Elective courses may NOT include MATH 3100, MATH 3200, MATH 3010, MATH 3030, MATH 4030, or MATH 4040. |
| *** Requires completion of a prerequisite course, which fulfills elective requirements. |

## Mathematics - Mathematics Emphasis, B.S.

### *Requirements*

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| 1. Completion of MATH 1210 and MATH 1220 (or equivalent) with an overall GPA of 2.5 or better<br>2. Student must meet with the Math Department advisor and declare an intent to major in Mathematics |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing--Humanities/ Social Sciences | 3 |
| | MATH 1210 | Calculus I | 5 |
| or | MATH 121H | Calculus I (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses | | | |
| | Biology | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II (4.0) (Required for Mathematics and Applied Mathematics Emphasis) | |
| and | PHYS 2225 | Physics for Scientists and Engineers II Lab (1.0) (Required for Mathematics and Applied Mathematics Emphasis) | |
| or | One other Biology or Physical Science Distribution (Required for Applied Mathematics Emphasis) | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 31 Credits |
| Complete the following: | | | |
| | CS 1400 | Fundamentals of Programming | 3 |
| | STAT 2050 | Introduction to Statistical Methods | 4 |
| | STAT 2060 | Introduction to Statistical Computing | 1 |
| | MATH 1220 | Calculus II | 5 |
| or | MATH 122H | Calculus II (5.0) | |
| | MATH 2210 | Calculus III | 3 |
| or | MATH 221H | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra | 3 |
| | MATH 2280 | Ordinary Differential Equations | 3 |
| | MATH 3250 | Introduction to Advanced Calculus WE | 3 |
| | MATH 3300 | Foundations of Abstract Algebra | 3 |
| | MATH 4210 | Advanced Calculus I * | 3 |

| Elective Requirements: | | 20 Credits |
|---|---|---|
| | Complete 11 credits of upper division electives ** | 11 |
| | Complete 9 credits of upper or lower division electives ** | 9 |

| Emphasis Requirements: | | | 14 Credits |
|---|---|---|---|
| | MATH 3210 | Complex Variables | 3 |
| | MATH 4220 | Advanced Calculus II | 3 |
| | MATH 4310 | Introduction to Modern Algebra I | 3 |
| | MATH 4330 | Theory of Linear Algebra | 3 |
| | MATH 4999 | Mathematics Capstone WE | 2 |
| Emphasis Elective Requirements: | | | 16 Credits |
| Complete 12 credits chosen from the following. At least one course must be from MATH 3400, MATH 4320, or MATH 4510 | | | 12 |
| | MATH 3310 | Discrete Mathematics (3.0) | |
| | MATH 3320 | Graph Theory and its Applications (3.0) | |
| | MATH 3400 | Partial Differential Equations (3.0) | |
| | MATH 3640 | Introduction to Optimization (3.0) | |
| | MATH 4100 | Differential Geometry of Curves and Surfaces (3.0) | |
| | MATH 4250 | Introduction to Dynamical Systems (3.0) | |
| | MATH 4320 | Introduction to Modern Algebra II (3.0) | |
| | MATH 4340 | Introduction to Number Theory (3.0) | |
| | MATH 4510 | Foundations of Topology (3.0) | |
| | MATH 4610 | Introduction to Numerical Analysis I (3.0) | |
| | MATH 4620 | Introduction to Numerical Analysis II (3.0) *** | |
| | MATH 481R | Internship in Mathematics (1.0) | |
| | MATH 489R | Undergraduate Research in Mathematics (1.0) | |
| | MATH 490R | Topics in Mathematics (2.0) | |
| | MATH 5510 | General Topology (3.0) | |
| | STAT 4300 | Stochastic Processes (3.0) | |
| | STAT 4710 | Mathematical Statistics-Probability and Statistics (3.0) | |
| | STAT 4720 | Mathematical Statistics-Statistical Inference (3.0)*** | |
| | Complete 4 additional credits of general electives | | 4 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with at least 40 credit hours in upper-division courses.
2. Overall grade point average of 2.0 (C) or above, a minimum GPA of 2.4 in all MATH and STAT courses listed above, with no grade lower than a "C" in all listed PHYS, STAT, and MATH courses (substitutions may be granted for some elective courses).
3. Residency hours-- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of general education and specified departmental requirements.
5. Complete an exit survey administered by the Mathematics Department Advisor.
6. Successful completion of at least one Global/Intercultural course.

| Footnotes: |
|---|
| * Students planning to do graduate work in mathematics should take both of the year-long sequences MATH 4210, 4220, and MATH 4310, 4320, and acquire a reading knowledge of at least one foreign language chosen from French, German, or Russian. |
| **Elective courses may NOT include MATH 3100, MATH 3200, MATH 3010, MATH 3030, MATH 4030, or MATH 4040. |
| ***Requires completion of a prerequisite course, which fulfills elective requirements. |

## Mathematics Education, B.S.

### *Requirements*

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| 1. Completion of MATH 1210, 1220, and 2210 with a 3.0 GPA.<br>2. Completion of STAT 2040 with a grade of "B-" or higher.<br>3. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>4. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>5. Completion of all General Education requirements and the majority of content area courses.<br>6. Pass LiveScan Criminal Background Check. |

| General Education Requirements: | | | 38 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |

| | | | |
|---|---|---|---|
| | STAT 2040 | Principles of Statistics * | 4 |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses | | | |
| | Biology Distribution | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | Additional Biology or Physical Science ** | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 82 Credits |
| | MATH 1210 | Calculus I * | 5 |
| or | MATH 121H | Calculus I (5.0) | |
| | MATH 1220 | Calculus II | 5 |
| or | MATH 122H | Calculus II (5.0) | |
| | MATH 2210 | Calculus III | 3 |
| or | MATH 221H | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra | 3 |
| | MATH 2280 | Ordinary Differential Equations | 3 |
| | MATH 3000 | History of Mathematics WE | 3 |
| | MATH 3010 | Methods of Secondary School Mathematics Teaching | 3 |
| | MATH 3030 | Algebra for Secondary Mathematics Teaching | 3 |
| | MATH 3100 | Foundations of Geometry | 3 |
| | MATH 3200 | Foundations of Analysis | 3 |
| | MATH 3300 | Foundations of Abstract Algebra | 3 |
| | MATH 4030 | Geometry for Secondary Mathematics Teaching | 3 |
| | MATH 4040 | Statistics and Probability for Secondary Mathematics Teaching | 3 |
| | STAT 3040 | Probability and Statistics for Engineering and the Sciences | 3 |
| | Complete 4 credits of any courses 1000 or higher | | 4 |
| Professional Education Core Requirements*** | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with at least 40 credit hours in upper-division courses.
2. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in MATH or STAT courses and no grade lower than a B- in EDSC or EDSP courses.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of Math Department Exit Survey.
6. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| * According to student placement, pre-requisites may be required |
| ** PHYS 2220 recommended |
| *** Must be completed with a grade of B- or higher |

## Statistics, B.S.

### *Requirements*

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| 1. Completion of MATH 1210 and MATH 1220 (or equivalent) with an overall GPA of 2.5 or better<br>2. Student must meet with the math department advisor and declare an intent to major in statistics. |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| or | MATH 121H | Calculus I (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |

| | | | |
|---|---|---|---|
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I (co-requisite lab required) (4.0) | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | One other Biology or Physical Science Distribution | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 49 Credits |
| | MATH 1220 | Calculus II | 5 |
| or | MATH 122H | Calculus II (5.0) | |
| | MATH 2210 | Calculus III | 3 |
| or | MATH 221H | Calculus III (3.0) | |
| | MATH 2270 | Linear Algebra | 3 |
| | STAT 2050 | Introduction to Statistical Methods | 4 |
| | STAT 2060 | Introduction to Statistical Computing | 1 |
| | STAT 4000 | Applied Regression and Time Series WE | 3 |
| | STAT 4100 | Design of Experiment | 3 |
| | STAT 4400 | Multivariate Analysis WE | 3 |
| | STAT 4710 | Mathematical Statistics-Probability and Statistics | 3 |
| | STAT 4720 | Mathematical Statistics-Statistical Inference | 3 |
| Complete three of the following: | | | 9 |
| | STAT 4200 | Survey Sampling (3.0) | |
| | STAT 4300 | Stochastic Processes (3.0) | |
| | STAT 4500 | Nonparametric Statistics (3.0) | |
| | STAT 4600 | Statistical Process Control (3.0) | |
| | Complete 9 hours of upper level MATH or STAT courses | | 9 |
| Elective Requirements: | | | 32 Credits |
| | Complete 9 credits of upper division electives[1] | | 9 |
| | Complete 23 credits of upper or lower division electives[1] | | 23 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with at least 40 credit hours in upper-division courses.
2. Overall grade point average of 2.0 (C) or above, a minimum GPA of 2.4 in all MATH and STAT courses listed above, with no grade lower than a "C" in all listed MATH and STAT courses (substitutions may be granted for some elective courses).
3. Residency hours- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Complete an exit survey administered by the Mathematics Department Advisor.
6. Successful completion of at least one Global/Intercultural course.

Footnotes:

[1] Elective courses may NOT include MATH 3100, MATH 3200, MATH 3010, MATH 3030, MATH 4030, or MATH 4040.

# Mathematics Graduate Programs

## Mathematics Graduate Programs

The Mathematics Graduate Programs are in the College of Science. To find the most up-to-date information on the Mathematics Graduate Programs, visit their website.

Mathematics Graduate Programs

## Course Descriptions

Statistics.....

Mathematics.....691

## Degrees & Programs

### Master of Science - Mathematics Education, M.S.

#### *Requirements*

The Master of Science in Mathematics Education (MS-MEd) is designed for individuals interested in strengthening their understanding of mathematics, statistics, and educational theory and practice in order to enrich their own teaching of mathematics and statistics. Completion of the program will also qualify individuals to teach concurrent enrollment courses and to teach at some community colleges and universities. For college-level academic concurrent enrollment (dual-credit) courses, the Utah Valley University Mathematics Department requires that instructors have a master's or doctoral degree with 18 graduate hours in mathematics or statistics. However, the MS-MEd does not lead to a teaching license. The program is flexible to serve the needs of in-service teachers.

**Total Program Credits: 30**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Admission to the Graduate Program.<br>2. A bachelor's degree from a regionally accredited institution, equivalent undergraduate coursework to the Mathematics Endorsement 4, and at leasttwo years of teaching experience.<br>3. A passing score on the Entrance Exam or MATH 6000 Mathematics Core Review. | | | |
| Discipline Core Requirements: | | | 30 Credits |
| | MATH 6100 | Topics in Geometry and Topology | 3 |
| | MATH 6210 | Real Analysis | 3 |
| | MATH 6310 | Modern Algebra | 3 |
| | MATH 6330 | Advanced Linear Algebra | 3 |
| | EDUC 6100 | Research Methodology | 3 |
| | EDUC 6200 | Masters Project | 3 |
| | EDUC 6320 | 21st Century Instruction and Assessment | 3 |
| | EDUC 691R | Project I | 1 |
| | EDUC 692R | Project II | 1 |
| | EDUC 693R | Project III | 1 |
| | STAT 6010 | Theory of Statistics I | 3 |
| | Complete One of the following courses for a total of 3 credits | | 3 |
| | STAT 6020 | Theory of Statistics II (3) | |
| | MATH 6410 | Topics in Ordinary Differential Equations (3) | |
| | MATH 6610 | Numerical Methods and Modeling (3) | |
| | MATH 6620 | Topics in Numerical Analysis (3) | |
| | MATH 6700 | Applications of Mathematics (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 30 credits.
2. Overall grade point average of 3.0 (B) or above.
3. Residency hours -- minimum of 21 credit hours through course attendance at UVU.
4. Courses and project requirements must be finished within a five-year period. No courses will apply toward graduation which are older than five years.
5. Individual grade of C or higher in all coursework applied toward the degree.

### Mathematics, Graduate Certificate

#### *Requirements*

The Graduate Certificate in Mathematics aims to improve mathematics education and student achievement by focusing on two specific research-supported areas. First, by delivering high-quality content-based knowledge critical to student achievement, and second, by targeting in-service teachers who desire to teach dual credit in high school, given that dual-credit/dual-enrollment students are more likely to persist in college and are more likely to complete a bachelor's degree in less time than those who did not attempt college credits in high school. Graduate courses for this program will be available to match in-service teacher's schedules—evenings and during summer sessions—taught on the main campus and live-interactive by Utah Valley University's full-time faculty.

**Total Program Credits: 18**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Application for admission to the program.<br>2. Bachelor's degree required, Mathematics Endorsement 4, from an accredited institution. | | | |
| Discipline Core Requirements: | | | 18 Credits |
| Complete Six of the following courses for a total of 18 credits | | | 18 |
| | MATH 6100 | Topics in Geometry and Topology (3.0) | |
| | MATH 6310 | Modern Algebra (3) | |
| | MATH 6350 | Introduction to Combinatorics (3) | |
| | MATH 6410 | Topics in Ordinary Differential Equations (3.0) | |
| | MATH 6610 | Numerical Methods and Modeling (3.0) | |
| | MATH 6620 | Topics in Numerical Analysis (3.0) | |
| | MATH 6700 | Applications of Mathematics (3.0) | |
| | STAT 6010 | Theory of Statistics I (3.0) | |
| | STAT 6020 | Theory of Statistics II (3.0) | |
| | or other approved courses | | |

**Graduation Requirements:**

1. Completion of a minimum of 18 credits.
2. Overall grade point average of 3.0 (B) or above.
3. Residency hours -- minimum of 12 credit hours through course attendance at UVU.

4. Courses and project requirements must be finished within a five-year period. No courses will apply toward graduation which are older than five years.

# Music

## Music

The Music department is in the School of the Arts. To find the most up-to-date information from the Music department, visit their website.

Music department

**DEPARTMENT CHAIR**

**KECK, Thomas** *Associate Professor*

**FACULTY**

**BAKER, David** *Assistant Professor*
**CHAU, Cheung** *Associate Professor*
**CRIDDLE, Reed** *Associate Professor*
**DEMSKE, Hilary** *Associate Professor*
**FAIRBANKS, Donna** *Professor*
**GUTER, Gerhard** *Lecturer*
**HAGEN, W. Ross** *Assistant Professor*
**HEATH, Melissa** *Assistant Professor*
**HOFHEINS, Nathan** *Artist in Residence*
**HURTADO, Isaac** *Assistant Professor*
**JONES, Shane** *Assistant Professor*
**KECK, Thomas** *Associate Professor*
**NIELSEN, Ryan** *Associate Professor*
**O'FLYNN, Jeffrey E.** *Assistant Professor*
**RYTTING, Bryce** *Professor*
**SORENSEN, D. Todd** *Artist in Residence*
**WORTHEN, Cherilyn** *Associate Professor*

# Course Descriptions

Music.....716

# Degrees & Programs

## Music, A.S.

### *Requirements*

The Associate in Science in Music is a two-year program that offers foundational studies in musicianship and performance. Prepares students for continuation in a four-year degree program in music.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Pass performance audition and interview with music faculty.<br>2. Complete music theory diagnostic exam. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 28 Credits |
| | MUSC 1110 | Music Theory I | 3 |
| | MUSC 1120 | Music Theory II | 3 |
| | MUSC 1130 | Aural Skills I | 1 |
| | MUSC 1140 | Aural Skills II | 1 |
| | MUSC 2110 | Music Theory III | 3 |
| | MUSC 2125 | Music Theory IV | 3 |
| | MUSC 2130 | Aural Skills III | 1 |
| | MUSC 2140 | Aural Skills IV | 1 |
| Complete 4 credits from the following: | | | 4 |
| | MUSC 124R | UVU Concert Choir (1) | |
| | MUSC 125R | University Band (1) | |
| | MUSC 320R | Masterworks Chorale (1) | |
| | MUSC 322R | Chamber Choir (1) | |
| | MUSC 327R | Men's Choir (1) | |
| | MUSC 328R | Women's Choir (1) | |
| | MUSC 330R | Wind Symphony (1) | |
| | MUSC 332R | Jazz Orchestra (1) | |
| | MUSC 370R | Symphony Orchestra (1) | |
| Complete 4 credits of the following on major instrument or voice: | | | 4 |
| | MUSC 250R | Private Lessons for Music Majors (1) | |
| Complete 4 credits of the following on major instrument or voice: | | | 4 |
| | MUSC 251R | Performance Class (1) | |

| |
|---|
| Student must pass the Departmental Keyboard Proficiency Examination or complete MUSC 1150, MUSC 1160, MUSC 2150 and MUSC 2160 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above. MUSC 1150, MUSC 1160, MUSC 2150, MUSC 2160, and MUSC 250R courses require a grade B or higher. All other MUSC courses require a C grade or higher.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements including concert attendance requirements..

## Music Technology, Certificate of Proficiency

### *Requirements*

The Music Technology Certificate of Proficiency prepares students for work in the commercial music industry. Coursework includes completion of the Avid Pro Tools User Certification and Sibelius Certification.

**Total Program Credits: 17**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 17 Credits |
| | MUSC 1110 | Music Theory I | 3 |
| | MUSC 1120 | Music Theory II | 3 |
| | MUSC 1130 | Aural Skills I | 1 |
| | MUSC 1140 | Aural Skills Ii | 1 |
| | MUSC 1400 | Music Technology I | 2 |
| | MUSC 1402 | Music Technology II | 2 |
| | MUSC 2400 | Digital Audio Workstation | 2 |
| | MUSC 2420 | Music Production Basics | 2 |
| | MUSC 379R | Studio Recording Workshop | 1 |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above.
2. Residency hours-- minimum of 5 credit hours through course attendance at UVU.

## Music, Minor

### *Requirements*

A Minor in Music offers introductory studies in musicianship and performance, including theory, aural skills, private instruction, and ensemble participation.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU.<br>2. Pass performance audition and interview with music faculty.<br>3. Complete music theory diagnostic exam. | | | |
| Discipline Core Requirements: | | | 18 Credits |
| Complete the following: | | | |
| | MUSC 1110 | Music Theory I | 3 |
| | MUSC 1130 | Aural Skills I | 1 |
| Complete 4 credits from the following: | | | 4 |
| | MUSC 145R | Private Lessons I (1) | |
| | MUSC 245R | Private Lessons II (1) | |
| | MUSC 250R | Private Lessons for Music Majors (1) | |
| | Six additional credit hours of music courses | | 6 |
| Complete 4 credits from the following: | | | 4 |
| | MUSC 124R | UVU Concert Choir (1) | |
| | MUSC 125R | University Band (1) | |
| | MUSC 306R | Advanced Keyboard Skills (1) | |
| | MUSC 320R | Masterworks Chorale (1) | |
| | MUSC 322R | Chamber Choir (1) | |
| | MUSC 327R | Men's Choir (1) | |
| | MUSC 328R | Women's Choir (1) | |
| | MUSC 330R | Wind Symphony (1) | |
| | MUSC 331R | Percussion Ensemble (1) | |
| | MUSC 332R | Jazz Orchestra (1) | |
| | MUSC 333R | Small Jazz and Commercial Ensembles (1) | |
| | MUSC 334R | Pep Band (1) | |
| | MUSC 370R | Symphony Orchestra (1) | |
| | MUSC 372R | Chamber Orchestra (1) | |
| | MUSC 373R | Advanced Small Ensembles (1) | |
| | MUSC 423R | Opera Workshop (1) | |

**Graduation Requirements:**

1. All MUSC courses require a C grade or higher.

## Commercial Music, B.M.

### *Requirements*

The Bachelor of Music in Commercial Music prepares students for professional work in the music media industry. Students may select from two tracks, one in media composition and the second in music technology and production.

**Total Program Credits: 121**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |

| | | | |
|---|---|---|---|
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social science majors) (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3) | |
| Choose one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | MUSC 1030 | American Popular Music (Fine Arts Distribution) | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 86 Credits |
| Musicianship Courses: | | | |
| | MUSC 1110 | Music Theory I | 3 |
| | MUSC 1120 | Music Theory II | 3 |
| | MUSC 1130 | Aural Skills I | 1 |
| | MUSC 1140 | Aural Skills II | 1 |
| | MUSC 2110 | Music Theory III | 3 |
| | MUSC 2125 | Music Theory IV | 3 |
| | MUSC 2130 | Aural Skills III | 1 |
| | MUSC 2140 | Aural Skills IV | 1 |
| | MUSC 2350 | Fundamentals of Conducting | 2 |
| | MUSC 3120 | Form and Analysis | 3 |
| | MUSC 3450 | Music History and Literature I | 3 |
| | MUSC 3451 | Music History and Literature II | 3 |
| Individual Musicianship Studies: | | | |
| | MUSC 250R | Private Lessons for Music Majors (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1) | 4 |
| | MUSC 251R | Performance Class (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1) | 4 |
| | MUSC 360R | Commercial Music Private Lessons (1) | 4 |
| | Student must pass the Departmental Keyboard Proficiency Examination for Commercial Music or complete MUSC 1150, MUSC 1160, MUSC 2170, and MUSC 2180 | | |
| Large Ensembles: | | | |
| Complete 4 credits from the following: | | | 4 |
| | MUSC 320R | Masterworks Chorale (1) | |
| | MUSC 322R | Chamber Choir (1) | |
| | MUSC 327R | Men's Choir (1) | |
| | MUSC 328R | Women's Choir (1) | |
| | MUSC 330R | Wind Symphony (1) | |
| | MUSC 332R | Jazz Orchestra (1) | |
| | MUSC 370R | Symphony Orchestra (1) | |
| Complete 4 credits from the following: | | | 4 |
| | MUSC 320R | Masterworks Chorale (1) | |
| | MUSC 322R | Chamber Choir (1) | |
| | MUSC 327R | Men's Choir (1) | |
| | MUSC 328R | Women's Choir (1) | |
| | MUSC 331R | Percussion Ensemble (1) | |
| | MUSC 333R | Small Jazz and Commercial Ensembles (1) | |
| | MUSC 373R | Advanced Small Ensembles (1) | |
| Complete the following: | | | |
| | MUSC 1400 | Music Technology I | 2 |
| | MUSC 1402 | Music Technology II | 2 |
| | MUSC 1410 | Survey of Commercial Music Careers | 1 |
| | MUSC 1810 | Contemporary Theory and Improvisation I | 3 |
| | MUSC 2210 | Contemporary Theory and Improvisation II | 2 |
| | MUSC 2400 | Digital Audio Workstation | 2 |
| | MUSC 2420 | Music Production Basics | 2 |
| | MUSC 3025 | Songwriting I | 2 |
| | MUSC 3030 | Jazz and Contemporary Arranging I | 2 |
| | MUSC 3412 | Music Career Development | 3 |
| | MUSC 379R | Studio Recording Workshop | 1 |
| | MUSC 410R | Music Composition (2) | 2 |
| | MUSC 420R | Film Scoring (2) | 2 |
| | MUSC 4130 | Scoring and Arranging | 2 |

| | | | |
|---|---|---|---|
| | MUSC 470R | Studio Arranging and Producing (Repeated 2 times) (3) | 6 |
| | MUSC 481R | Internship in Music II | 1 |
| | MUSC 492R | Advanced Topics in Music (Repeated 2 times, 2 credits each) (1) | 4 |

**Graduation Requirements:**

1. Completion of a minimum of 121 semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. MUSC 1150, MUSC 1160, MUSC 2170, MUSC 2180, 250R, and 360R courses require a grade B or higher. All other MUSC courses require a C grade or higher.
3. Residency hours- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Completion of GE and specified departmental requirements, including a sophomore review and concert attendance requirements.
5. Successful completion of at least one Global/Intercultural course.

## Music Education, B.S.

### *Requirements*

The Bachelor of Science in Music Education degree provides students with the competencies essential for a professional career in music secondary education.

**Total Program Credits: 129**

| Matriculation Requirements: | | | |
|---|---|---|---|
| Students will apply for formal admission to the Secondary Ed program in the semester prior to the beginning of their junior year. Admission criteria include:<br><br>1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social Science majors) (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra(recommended for Business, Education, Science, and Health Professions majors) (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3) | |
| Choose one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 94 Credits |
| Music Skills Development Courses | | | |
| | MUSC 1110 | Music Theory I | 3 |
| | MUSC 1120 | Music Theory II | 3 |
| | MUSC 1130 | Aural Skills I | 1 |
| | MUSC 1140 | Aural Skills II | 1 |
| | MUSC 1400 | Music Technology I | 2 |
| | MUSC 2110 | Music Theory III | 3 |
| | MUSC 2125 | Music Theory IV | 3 |
| | MUSC 2130 | Aural Skills III | 1 |
| | MUSC 2140 | Aural Skills IV | 1 |
| | MUSC 2350 | Fundamentals of Conducting | 2 |
| | MUSC 3120 | Form and Analysis | 3 |
| | MUSC 3450 | Music History and Literature I | 3 |
| | MUSC 3451 | Music History and Literature II | 3 |
| | MUSC 4130 | Scoring and Arranging | 2 |
| Prescribed Music Education Courses | | | |
| | MUSC 1800 | Introduction to Music Education | 3 |
| | MUSC 4780 | Pre-Service Student Teaching | 2 |
| | MUSC 4785 | Student Teaching Seminar | 2 |
| Complete either of these choral/instrumental tracks | | | 12 |
| | Choral students complete these 12 credits: | | |
| | MUSC 2001 | Diction for Singers I (1) | |

| | | | |
|---|---|---|---|
| | MUSC 2002 | Diction for Singers II (1) | |
| | MUSC 3620 | Percussion Techniques I (1) | |
| | MUSC 3630 | Vocal Techniques (1) | |
| | MUSC 4150 | Advanced Choral Conducting (2) | |
| | MUSC 4220 | Choral Literature and Methods (2) | |
| | MUSC 4221 | Advanced Choral Literature and Methods (2) | |
| | MUSC 4240 | Vocal Pedagogy (2) | |
| | Instrumental students complete these 12 credits: | | |
| | MUSC 3150 | Advanced Instrumental Conducting (2) | |
| | MUSC 3620 | Percussion Techniques I (1) | |
| | MUSC 3630 | Vocal Techniques (1) | |
| | MUSC 3649 | String Techniques I (1) | |
| | MUSC 3659 | Woodwind Techniques I (1) | |
| | MUSC 3679 | Brass Techniques I (1) | |
| | MUSC 4340 | Marching Band Techniques (1) | |
| | MUSC 4360 | Instrumental Literature and Methods (2) | |
| | MUSC 4370 | Advanced Instrumental Literature and Methods (2) | |
| Performance Skills Development Courses | | | |
| | MUSC 250R | Private Lessons for Music Majors (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1) | 4 |
| | MUSC 251R | Performance Class (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1) | 4 |
| | MUSC 450R | Advanced Private Lessons for Music Majors (Repeated 2 times on major instrument or voice) (Includes completion of 30-minute senior recital) (1) | 2 |
| | MUSC 451R | Performance Class (Repeated 2 times) (1) | 2 |
| | Student must pass the Departmental Keyboard Proficiency Examination or complete MUSC 1150, MUSC 1160, MUSC 2150, and MUSC 2160 | | |
| Complete 6 credits from the following (as assigned): | | | 6 |
| | MUSC 320R | Masterworks Chorale (1) | |
| | MUSC 322R | Chamber Choir (1) | |
| | MUSC 327R | Men's Choir (1) | |
| | MUSC 328R | Women's Choir (1) | |
| | MUSC 330R | Wind Symphony (1) | |
| | MUSC 332R | Jazz Orchestra (1) | |
| | MUSC 370R | Symphony Orchestra (1) | |
| Secondary Education Courses | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 6 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 129 semester credits.
2. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses. MUSC 1150, MUSC 1160, MUSC 2150, MUSC 2160, MUSC 250R and MUSC 450R courses require a grade B or higher. MUSC 4220, MUSC 4221, MUSC 4360, and MUSC 4370 require a grade B- or higher.
3. Residency hours- minimum of 34 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Completion of GE and specified departmental requirements, including a sophomore review, 30-minute senior recital, and concert attendance requirements.
5. Successful completion of at least one Global/Intercultural course.

# Music, B.A.

## *Requirements*

The Bachelor of Arts/Science in Music is a liberal arts degree with a significant component of electives designed for students who desire a broad base of knowledge. The Bachelor of Arts in Music includes foreign language requirements.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social science majors) (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3.0) | |
| Choose one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3.0) | |

| | | | |
|---|---|---|---|
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (Fulfilled by completing Foreign Language Course 202G/2020) | | 4 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 56 Credits |
| Musicianship Courses | | | |
| | MUSC 1110 | Music Theory I | 3 |
| | MUSC 1120 | Music Theory II | 3 |
| | MUSC 1130 | Aural Skills I | 1 |
| | MUSC 1140 | Aural Skills II | 1 |
| | MUSC 2110 | Music Theory III | 3 |
| | MUSC 2125 | Music Theory IV | 3 |
| | MUSC 2130 | Aural Skills III | 1 |
| | MUSC 2140 | Aural Skills IV | 1 |
| | MUSC 3120 | Form and Analysis | 3 |
| | MUSC 3450 | Music History and Literature I | 3 |
| | MUSC 3451 | Music History and Literature II | 3 |
| | Complete 7 credits of MUSC courses not already required for the degree (at least 3 credits must be upper-division) | | 7 |
| Individual Musicianship Studies | | | |
| | MUSC 250R | Private Lessons for Music Majors (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1.0) | 4 |
| | MUSC 251R | Performance Class (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1.0) | 4 |
| | MUSC 450R | Private Lessons for Music Majors (Repeated 4 times on major instrument or voice) (1.0) | 4 |
| | MUSC 451R | Performance Class (Repeated 4 times on major instrument or voice) (1.0) | 4 |
| | Student must pass the Departmental Keyboard Proficiency Examination or complete MUSC 1150, MUSC 1160, MUSC 2150, and MUSC 2160 | | |
| Ensembles | | | |
| Complete 8 credits from the following: | | | 8 |
| | MUSC 320R | Masterworks Chorale (1.0) | |
| | MUSC 322R | Chamber Choir (1.0) | |
| | MUSC 327R | Men's Choir (1.0) | |
| | MUSC 328R | Women's Choir (1.0) | |
| | MUSC 330R | Wind Symphony (1.0) | |
| | MUSC 332R | Jazz Orchestra (1.0) | |
| | MUSC 370R | Symphony Orchestra (1.0) | |
| Elective Requirements: | | | 28 Credits |
| | One Foreign Language | | 12 |
| | Complete any courses 1000 level or higher (may not include MUSC courses) (at least 12 credits must be upper-division, see graduation requirements) | | 16 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. MUSC 1150, MUSC 1160, MUSC 2150, MUSC 2160, MUSC 250R and MUSC 450R courses require a grade B or higher. All other MUSC courses require a C grade or higher.
3. Residency hours- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Completion of GE and specified departmental requirements, including a sophomore review and concert attendance requirements.
5. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
6. Successful completion of at least one Global/Intercultural course.

## Music, B.S.

### *Requirements*

The Bachelor of Arts/Science in Music is a liberal arts degree with a significant component of electives designed for students who desire a broad base of knowledge. The Bachelor of Arts in Music includes foreign language requirements.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social science majors) (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |

| | | | |
|---|---|---|---|
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3.0) | |
| Choose one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 56 Credits |
| Musicianship Courses | | | |
| | MUSC 1110 | Music Theory I | 3 |
| | MUSC 1120 | Music Theory II | 3 |
| | MUSC 1130 | Aural Skills I | 1 |
| | MUSC 1140 | Aural Skills II | 1 |
| | MUSC 2110 | Music Theory III | 3 |
| | MUSC 2125 | Music Theory IV | 3 |
| | MUSC 2130 | Aural Skills III | 1 |
| | MUSC 2140 | Aural Skills IV | 1 |
| | MUSC 3120 | Form and Analysis | 3 |
| | MUSC 3450 | Music History and Literature I | 3 |
| | MUSC 3451 | Music History and Literature II | 3 |
| | Complete 7 credits of MUSC courses not already required for the degree (at least 3 credits must be upper-division) | | 7 |
| Individual Musicianship Studies | | | |
| | MUSC 250R | Private Lessons for Music Majors (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1.0) | 4 |
| | MUSC 251R | Performance Class (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1.0) | 4 |
| | MUSC 450R | Private Lessons for Music Majors (Repeated 4 times on major instrument or voice) (1.0) | 4 |
| | MUSC 451R | Performance Class (Repeated 4 times on major instrument or voice) (1.0) | 4 |
| | Student must pass the Departmental Keyboard Proficiency Examination or complete MUSC 1150, MUSC 1160, MUSC 2150, and MUSC 2160 | | |
| Ensembles | | | |
| Complete 8 credits from the following: | | | 8 |
| | MUSC 320R | Masterworks Chorale (1.0) | |
| | MUSC 322R | Chamber Choir (1.0) | |
| | MUSC 327R | Men's Choir (1.0) | |
| | MUSC 328R | Women's Choir (1.0) | |
| | MUSC 330R | Wind Symphony (1.0) | |
| | MUSC 332R | Jazz Orchestra (1.0) | |
| | MUSC 370R | Symphony Orchestra (1.0) | |
| Elective Requirements: | | | 29 Credits |
| | Complete any courses 1000 level or higher (may not include MUSC courses) (at least 12 credits must be upper-division, see graduation requirements) | | 29 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. MUSC 1150, MUSC 1160, MUSC 2150, MUSC 2160, MUSC 250R and MUSC 450R courses require a grade B or higher. All other MUSC courses require a C grade or higher.
3. Residency hours- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Completion of GE and specified departmental requirements, including a sophomore review and concert attendance requirements.
5. Successful completion of at least one Global/Intercultural course.

## Performance, B.M.

### *Requirements*

The Bachelor of Music in Performance degree prepares students for performance-related work and studio teaching. In addition to standard courses that focus on performance skills, it includes courses relevant to the music industry such as entrepreneurship, music technology, and studio recording.

**Total Program Credits: 121**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Choose one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3.0) | |

| | | | |
|---|---|---|---|
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social science majors) (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3.0) | |
| Choose one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 86 Credits |
| Musicianship Courses: | | | |
| | MUSC 1110 | Music Theory I | 3 |
| | MUSC 1120 | Music Theory II | 3 |
| | MUSC 1130 | Aural Skills I | 1 |
| | MUSC 1140 | Aural Skills II | 1 |
| | MUSC 2110 | Music Theory III | 3 |
| | MUSC 2125 | Music Theory IV | 3 |
| | MUSC 2130 | Aural Skills III | 1 |
| | MUSC 2140 | Aural Skills IV | 1 |
| | MUSC 2350 | Fundamentals of Conducting | 2 |
| | MUSC 3120 | Form and Analysis | 3 |
| | MUSC 3450 | Music History and Literature I | 3 |
| | MUSC 3451 | Music History and Literature II | 3 |
| Music Industry and Technology | | | |
| | MUSC 1400 | Music Technology I | 2 |
| | MUSC 3412 | Music Career Development | 3 |

| | | | |
|---|---|---|---|
| Choose at least two credits from the following: | | | 2 |
| | MUSC 1402 | Music Technology II (2.0) | |
| | MUSC 1810 | Contemporary Theory and Improvisation I (3.0) | |
| | MUSC 2400 | Digital Audio Workstation (2.0) | |
| | MUSC 2420 | Music Production Basics (2.0) | |
| | MUSC 3025 | Songwriting I (2.0) | |
| | MUSC 379R | Studio Recording Workshop (1.0) | |
| | MUSC 470R | Studio Arranging and Producing (3.0) | |
| Individual Musicianship Studies: | | | |
| | MUSC 250R | Private Lessons for Music Majors (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1.0) | 4 |
| | MUSC 251R | Performance Class (Repeated 4 times on major instrument or voice) (Includes completion of sophomore review) (1.0) | 4 |
| | MUSC 455R | Private Lessons for Music Performance Majors (Repeated 4 times on major instrument or voice) (2.0) | 8 |
| | MUSC 451R | Performance Class (Repeated 4 times on major instrument or voice) (1.0) | 4 |
| | MUSC 3800 | Junior Recital (1.0) | 1 |
| | MUSC 4800 | Senior Recital (1.0) | 1 |
| | Student must pass the Departmental Keyboard Proficiency Examination or complete MUSC 1150, MUSC 1160, MUSC 2150, and MUSC 2160 | | |
| Large Ensembles: | | | |
| Complete 8 credits from the following: | | | 8 |
| | MUSC 320R | Masterworks Chorale (1.0) | |
| | MUSC 322R | Chamber Choir (1.0) | |
| | MUSC 327R | Men's Choir (1.0) | |
| | MUSC 328R | Women's Choir (1.0) | |
| | MUSC 330R | Wind Symphony (1.0) | |
| | MUSC 332R | Jazz Orchestra (1.0) | |
| | MUSC 370R | Symphony Orchestra (1.0) | |
| Choose from one of the following performance areas: | | | 22 |
| Instrumental Performance/Piano Performance | | | |
| | MUSC 306R | Advanced Keyboard Skills (For Piano Performance area only) (Repeated 4 times) (1.0) | |
| | MUSC 3415 | Instrumental Pedagogy and Literature I (2.0) | |
| | MUSC 3416 | Instrumental Pedagogy and Literature II (2.0) | |
| | MUSC 373R | Small Ensembles (Repeated 4 times) (1.0) | |
| | 8 credits of music electives for Piano Performance area and 14 credits of music electives for Instrumental Performance area. | | |
| Vocal Performance | | | |
| | MUSC 2001 | Diction for Singers I (1.0) | |

| | | | |
|---|---|---|---|
| | MUSC 2002 | Diction for Singers II (1.0) | |
| | MUSC 3005 | Vocal Literature I (1.0) | |
| | MUSC 3006 | Vocal Literature II (1.0) | |
| | MUSC 423R | Opera Workshop (Repeated 4 times) (1.0) | |
| | MUSC 4240 | Vocal Pedagogy (2.0) | |
| | FREN 1010 | Beginning French I (4.0) | |
| | GER 1010 | Beginning German I (4.0) | |
| | FREN 1020 | Beginning French II (4.0) | |
| or | GER 1020 | Beginning German II (4.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 121 semester credits, 40 credits must be upper-division.
2. Overall grade point average of 2.0 (C) or above. MUSC 1150, MUSC 1160, MUSC 2150, MUSC 2160, MUSC 250R and MUSC 455R courses require a grade B or higher. All other MUSC courses require a C grade or higher.
3. Residency hours- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Completion of GE and specified departmental requirements, including a sophomore review and concert attendance requirements.
5. Successful completion of at least one Global/Intercultural course.

# Nursing

## Nursing

The Nursing department is in the College of Health and Public Services. To find the most up-to-date information from the Nursing department, visit their website.

Nursing department

**DEPARTMENT CHAIR**

**MAUGHAN, Dale** *Associate Professor*

**FACULTY**

**BAGLEY, Katie** *Associate Professor*
**BENNETT, Sean** *Associate Professor*
**BRUNGER, Candice** *Assistant Professor*
**CHEN, Hsiu-Chin** *Professor*
**COLE, Joy** *Assistant Professor*
**CRAVEN, Marianne** *Professor*
**ENSIGN, Allison** *Assistant Professor*
**GAUL, Raiden** *Assistant Professor*
**HIGBEE, Mykin** *Assistant Professor*
**JENSEN, Francine B.** *Assistant Professor*
**KELLER, David C.** *Associate Professor*
**KLEINMAN, Phillip** *Assistant Professor*
**MAUGHAN, Dale** *Associate Professor*
**MCADAMS-JONES, Dianne** *Professor*
**MEASOM, Gary** *Professor*
**MONSON, Natalie** *Assistant Professor*
**MUELLER, Katherine D.** *Associate Professor*
**NELSON, Troy** *Associate Professor*
**NICHOLS, Nyree-Dawn** *Associate Professor*
**PRICE, Jared** *Assistant Professor*
**RUSSELL, Jamie** *Assistant Professor*
**SEAGROVE, Frey** *Assistant Professor*
**SWENSON, Allison** *Associate Professor*
**TAYLOR, Noelle** *Assistant Professor*
**WAYMAN, Mina** *Associate Professor*

# Course Descriptions

Nursing.....725

# Degrees & Programs

## Nursing, ASN

### *Requirements*

The UVU Nursing Program is a student-centered engaged learning experience where faculty facilitates learning nursing care through simulation and patient care. The Associate in Science in Nursing w/ BSN Completion (ASN) program prepares the graduate to function individually as a member of the healthcare team in structured healthcare settings in which clients have common health problems. Acceptance into the ASN program is by a competitive, point-based application process. Prerequisite courses must be completed before applying to the program. For more information on applying to the ASN program see our website at www.uvu.edu/nursing or contact the Pre-Nursing advisors in LC 404 at 863-6484. After completing the 4 semesters of the ASN program, students would be eligible to graduate with an ASN and apply to take the NCLEX-RN exam. Graduates of the ASN program would be eligible to remain in the program, and seamlessly transition to the Bachelor of Science in Nursing (BSN) portion of the program. BSN completion takes an additional 2 full time semesters if students have also completed all the GE requirements, ZOOL 4400, and MATH 1040 or MATH 2040.

**Total Program Credits: 70**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Acceptance into Nursing program (see Advisor) | | | |
| General Education Requirements: | | | 27 Credits |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences | 4 |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete the following: | | | |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | PHIL 2050 | Ethics and Values | 3 |
| | PSY 1100 | Human Development Life Span | 3 |
| | ZOOL 2320 | Human Anatomy | 3 |
| | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| Discipline Core Requirements: | | | 43 Credits |
| Complete the following with a minimum B- or higher: | | | |
| | MICR 2060 | Microbiology for Health Professions | 3 |
| | MICR 2065 | Microbiology for Health Professions Laboratory | 1 |
| | NURS 2300 | Nursing Health Assessment | 1 |
| | NURS 2305 | Nursing Health Assessment Laboratory | 1 |
| | NURS 2310 | Nursing Pharmacology | 3 |
| | NURS 2320 | Fundamentals of Nursing Care | 2 |
| | NURS 2325 | Nursing Practice Simulation and Skills Lab I | 2 |
| | NURS 2410 | Nursing Care of Adults with Common Health Needs | 3 |
| | NURS 2415 | Nursing Care of Adults with Common Health Needs Clinical | 2 |
| | NURS 2420 | Nursing Care of the Aging Population | 2 |
| | NURS 2430 | Mental Health Nursing | 2 |
| | NURS 2435 | Mental Health Nursing Clinical | 1 |

| | | | |
|---|---|---|---|
| | NURS 2445 | Nursing Practice Simulation and Skills Lab II | 1 |
| | NURS 3330 | Nursing Care of Individuals with Complex Health Needs | 2 |
| | NURS 3335 | Nursing Care of Individuals with Complex Health Needs Clinical | 2 |
| | NURS 3340 | Nursing Care of Women, Children, and Developing Families | 3 |
| | NURS 3345 | Nursing Care of Women, Children, and Developing Families Clinical | 1 |
| | NURS 3355 | Nursing Practice Simulation and Skills Lab III | 1 |
| | NURS 3400 | Patient Care Coordination and Management | 1 |
| | NURS 3405 | Patient Care Coordination and Management Preceptorship | 2 |
| | NURS 3440 | Pharmacology for the Practicing Nurse | 2 |
| | NURS 3445 | Nursing Practice Simulation and Skills Lab IV | 1 |
| | ZOOL 2420 | Human Physiology | 3 |
| | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | ZOOL 4400 | Pathophysiology (4.0) (highly recommended) | |
| | NURS 2210 | Practical Nurse to Registered Nurse (1, for PN-to-ASN students only) | |

**Graduation Requirements:**

1. Completion of a minimum of 70 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of specified departmental requirements

## Nursing, B.S.

### *Requirements*

A bachelor of science in nursing degree prepares students to practice across all types of health care settings. A BSN provides the greatest opportunity for advancement in the nursing field. A BSN is also required for entry into most graduate nursing programs including nurse practitioner, certified nurse anesthetist, nursing educator, or nurse researcher. Students interested in the BSN would first need to complete the ASN program. Acceptance into the ASN program is by a competitive, point-based application process. Prerequisite courses must be completed before applying to the program. For more information on applying to the ASN program see ou website at www.uvu.edu/nursing or contact the Pre-Nursing advisors in LC 404 at 863-6484. After completing the 4 semesters of the ASN program, students would be eligible to graduate with an ASN and apply to take the NCLEX-RN exam. Graduates of the ASN program would be eligible to remain in the program, and seamlessly transition to the Bachelor of Science in Nursing (BSN) portion of the program. The BSN at UVU is a completion program and students who are not entering directly from the UVU ASN program must be licensed RNs prior to admission. For more information on entering the program if you are already an RN see the RN to BSN program at www.uvu.edu/nursing.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Associate of Science in Nursing<br>2. RN licensure complete - Prerequisite coursework: ENGL 1010 or ENGH 1005; Math Quantitative Literacy Course: PSY 1100: CHEM 1110: NUTR 1020: ZOOL 2320; MICR 2060 with lab, ZOOL 2420 with lab.<br>3. All prerequisite courses must be completed prior to application. A final grade of C or higher is necessary in all classes except Math Quantitative Literacy<br>4. Course work must be on an official transcript and articulation into the UVU system by the end of the application period or the application will be considered incomplete<br>5. Pass/Fail or Credit/No credit grades and ACT scores are not accepted for prerequisite course work. (see Advisor for details)<br>6. Each application for acceptance into the program is for a specific semester only | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| Distribution Courses | | | |
| | BIOL 1610 | College Biology I | 4 |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences | 4 |
| | PSY 1100 | Human Development Life Span | 3 |
| | ZOOL 2320 | Human Anatomy | 3 |
| and | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 84 Credits |
| Complete the following with a minimum C or higher: | | | |
| | NURS 2300 | Nursing Health Assessment | 1 |

| | | | |
|---|---|---|---|
| | NURS 2305 | Nursing Health Assessment Laboratory | 1 |
| | NURS 2310 | Nursing Pharmacology | 3 |
| | NURS 2320 | Fundamentals of Nursing Care | 2 |
| | NURS 2325 | Nursing Practice Simulation and Skills Lab I | 2 |
| | NURS 2410 | Nursing Care of Adults with Common Health Needs | 3 |
| | NURS 2415 | Nursing Care of Adults with Common Health Needs Clinical | 2 |
| | NURS 2420 | Nursing Care of the Aging Population | 2 |
| | NURS 2430 | Mental Health Nursing | 2 |
| | NURS 2435 | Mental Health Nursing Clinical | 1 |
| | NURS 2445 | Nursing Practice Simulation and Skills Lab II | 1 |
| | NURS 3330 | Nursing Care of Individuals with Complex Health Needs | 2 |
| | NURS 3335 | Nursing Care of Individuals with Complex Health Needs Clinical | 2 |
| | NURS 3340 | Nursing Care of Women Children and Developing Families | 3 |
| | NURS 3345 | Nursing Care of Women Children and Developing Families Clinical | 1 |
| | NURS 3355 | Nursing Practice Simulation and Skills Lab III | 1 |
| | NURS 3400 | Patient Care Coordination and Management | 1 |
| | NURS 3405 | Patient Care Coordination and Management Preceptorship | 2 |
| | NURS 3440 | Pharmacology for the Practicing Nurse | 2 |
| | NURS 3445 | Nursing Practice Simulation and Skills Lab IV | 1 |
| | NURS 4230 | Palliative Care in Nursing | 3 |
| | NURS 4320 | Nursing in the Community | 2 |
| | NURS 4325 | Nursing in the Community Clinical | 1 |
| | NURS 4340 | Genomics in Nursing and Health | 2 |
| | NURS 441G | Nursing in Global Perspective | 3 |
| | NURS 4500 | Nursing Leadership | 3 |
| | NURS 4510 | Clinical Assessment and Reasoning | 2 |
| | NURS 4520 | Navigating Health Systems | 3 |
| | NURS 4540 | Research and Theory in Nursing Practice WE | 4 |
| | NURS 4550 | Quality and Safety in Nursing WE | 3 |
| | MICR 2060 | Microbiology for Health Professions | 3 |
| | MICR 2065 | Microbiology for Health Professions Laboratory | 1 |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | ZOOL 2420 | Human Physiology | 3 |
| | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | ZOOL 4400 | Pathophysiology | 4 |
| | University-level statistics course | | 3 |
| | MGMT 2340 | Business Statistics I (3) | |
| | PSY 3110 | Statistics for the Behavioral Sciences (4) | |
| | STAT 1040 | Introduction to Statistics QL (3) | |
| | STAT 1040 and STAT 1045 can be used only if not used for GE. | | |
| | Complete a minimum of 5 credits of adviser approved electives, a minimum of 2 from any upper-division nursing courses, not otherwise required for the Bachelor of Science degree. | | 5 |
| | RNs returning to complete BS in Nursing should contact the nursing advisor for requirements. | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Completion of GE and specified departmental requirements.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU.
5. Successful completion of at least one Global/Intercultural course.

# Nursing Graduate Programs

## Nursing Graduate Program

The Master of Science in Nursing Graduate Program is in the College of Health and Public Service. To find the most up-to-date information on the Nursing Graduate Program, visit their website.

Master of Science in Nursing Graduate Program

**FACULTY**

**CHEN, Hsiu-Chin** *Professor*

**CRAVEN, Marianne** *Professor*

**MAUGHAN, Dale** *Associate Professor*

**MCADAMS-JONES, Dianne** *Professor*

**MEASOM, Gary** *Professor*

## Course Descriptions

Nursing.....725

## Degrees & Programs

### Nursing, M.S.N

#### *Requirements*

The Master of Science in Nursing program prepares post-baccalaureate nursing students for advanced practice roles as nurse educators in academic settings and/or clinical nurse educators in healthcare institutions. The program includes core courses essential to master-level nursing programs as well as courses designed to prepare nurses to assume roles as academic nurse educators and/or clinical nurse educators. Program content focuses on theoretical foundations of nursing education and leadership; tests and measurements of learning outcomes; curriculum development, implementation and evaluation; and academic and clinical teaching. Program courses provide skills and strategies for facilitation of learning in a variety of settings.

**Total Program Credits: 34**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Baccalaureate degree in nursing from a program accredited by a recognized nursing accreditation agency.<br>2. Current licensure as an RN in Utah or eligible for RN licensure in Utah.<br>3. Completion of an undergraduate course in statistics to include descriptive and inferential statistics.<br>4. Application for admission to the MSN program.<br>5. Overall undergraduate GPA of 3.2 or higher, or GPA of 3.2 or higher in last 60 semester hours of undergraduate coursework. | | | |
| Discipline Core Requirements: | | | 34 Credits |
| | NURS 6000 | Leadership Development | 2 |
| | NURS 6050 | Nursing Informatics | 2 |
| | NURS 6200 | Advanced Nursing Theory | 2 |
| | NURS 6250 | Advanced Nursing Research | 3 |
| | NURS 6300 | Advanced Nursing in Health Systems and Policy | 2 |
| | NURS 6350 | Advanced Nursing Pathophysiology/ Pharmacology | 3 |
| | NURS 6450 | Advanced Nursing Assessment | 3 |
| | NURS 6500 | Curriculum Design and Development | 3 |
| | NURS 6600 | Teaching Nursing in the Classroom Setting | 2 |
| | NURS 6605 | Teaching Nursing in the Classroom Setting Practicum | 2 |
| | NURS 6650 | Teaching Nursing in the Clinical Setting | 2 |
| | NURS 6655 | Teaching Nursing in the Clinical Setting Practicum | 2 |
| | NURS 6700 | Evaluation of Learning Outcomes | 3 |
| | NURS 6795 | Synthesis of Teaching Practice Practicum | 3 |

**Graduation Requirements:**

1. Complete all discipline core courses with no grade lower than a B
2. Project or thesis completed and accepted by Department of Nursing Graduate Committee

# Organizational Leadership

## Organizational Leadership

The Organizational Leadership department is in the Woodbury School of Business. To find the most up-to-date information from the Organizational Leadership department, visit their website.

Organizational Leadership department

**DEPARTMENT CHAIR**

**PETERSON, Jeffrey** *Associate Professor*

**FACULTY**

**ANDRADE, Maureen** *Professor*
**BROWN, Marc Nathaniel** *Professional in Residence*
**CHAPMAN, Jared** *Associate Professor*
**HARVEY, Jaron** *Assistant Professor*
**HUO, Yang Hwae** *Associate Professor*
**JOHNSON, Russ** *Professional In Residence*
**KUPKA, Bernd** *Associate Professor*
**MILLER, Douglas** *Professor*
**MOON, Matthew** *Lecturer*
**PETERSON, Jeffrey** *Associate Professor*
**SCHILL, Angela** *Visiting Assistant Professor*
**WESTOVER, Jonathan** *Associate Professor*

## Course Descriptions

Hospitality Management..... 664
Human Resource Management.....667
Legal Studies..... 689
Paralegal Studies.....755

## Degrees & Programs

### Hospitality Management, A.A.S.

#### *Requirements*

The Hospitality Management program in the Woodbury School of Business offers a Bachelor of Science degree in Hospitality Management (as well as supporting a Bachelor of Science degree in Business Management, with an Emphasis in Hospitality Management – listed elsewhere). Associate in Science and Associate in Applied Science degrees are also offered.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 20 Credits |
| | ENGLISH | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATHEMATICS | | |
| | MAT 1010 | Intermediate Algebra | 4 |
| or | Any higher Mathematics Course | | |
| or | Any approved Departmental Mathematics Course | | |
| | HUMANITIES/FINE ARTS/FOREIGN LANGUAGE | | |
| | Ethics and Values[1] | | 3 |
| or | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | |
| | SOCIAL BEHAVIORAL SCIENCE | | |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 3 |
| | BIOLOGY OR PHYSICAL SCIENCE | | |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT | | |
| | Any approved Physical Education, Health, Safety or Environment Course | | 1 |
| Discipline Core Requirements: | | | 28 Credits |
| | CA 1000 | Culinary Basics | 3 |
| | HM 1010 | Introduction to Hospitality Industry | 3 |
| | HM 1130 | Hotel Operations I | 3 |
| | HM 1180 | Food and Beverage Management | 3 |
| | HM 281R | Cooperative Work Experience | 4 |
| | ACC 2110 | Principles of Accounting I | 3 |
| | IM 2600 | Spreadsheet Applications[2] | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| Elective Requirements: | | | 15 Credits |
| Complete 15 hours of Electives numbered 1000 or higher | | | 15 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a "C-" in hospitality or other Woodbury School of Business Courses.
3. Residency hours--minimum of 20 credit hours through course attendance at UVU; at least 16 credits must be in Woodbury School of Business courses.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

| Footnote |
|---|
| [1] PHIL 2050 recommended. |
| [2] Grade of B- or higher is required for IM 2600. |

### Hospitality Management, A.S.

#### *Requirements*

The Hospitality Management program in the Woodbury School of Business offers a Bachelor of Science degree in Hospitality Management (as well as supporting a Bachelor of Science degree in Business Management, with an Emphasis in Hospitality Management – listed elsewhere). Associate in Science and Associate in Applied Science degrees are also offered.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution[1] (COMM 1020 and COMM 1025 recommended) | | 3 |
| | Fine Arts Distribution | | 3 |
| | ECON 1010 or ECON 2010 | Economics as a Social Science or Principles of Principles of Economics I (3.0) | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| | ACC 2110 | Principles of Accounting I | 3 |
| | HM 1010 | Introduction to Hospitality Industry | 3 |
| | HM 1130 | Hotel Operations I | 3 |
| | HM 1180 | Food and Beverage Management | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| Complete one of the following: | | | |
| | Business Computer Proficiency Exam [2] | | |
| | IM 2010 | Business Computer Proficiency (3) | |

| | | | |
|---|---|---|---|
| Elective Requirements: | | | 10 Credits |
| Complete ten hours of elective credits from HM, ACC, DGM, ECON, FIN, INFO, LEGL, MGMT, or MKTG courses. | | | 10 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade below a "C-" in hospitality or other Woodbury School of Business courses.
3. Residency hours-- a minimum of 20 credit hours through course attendance at UVU: at least 16 credits must be in Woodbury School of Business
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

| Footnote |
|---|
| [1] COMM 1020 recommended |
| [2] Students are required to complete the Business Computer Proficiency exam with a score of 80 percent or higher or IM 2010 with a score of 80 percent or higher. |

## Event Planning, Minor

### *Requirements*

The Minor in Event Planning will require eighteen credit hours of courses currently being offered. The minor provides undergraduate Woodbury Business students an official designation on their transcript, highlighting their specific qualifications in this area. The courses in the minor offer students the opportunity to learn event planning management techniques needed to successfully plan, manage, and execute events. Students who complete these classes will have a clear designation highlighting their preparation for this particular set of skills.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 15 Credits |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | HM 1180 | Food and Beverage Management | 3 |
| | HM 3210 | Event Venue and Convention Management | 3 |
| | HM 4200 | Event Planning | 3 |
| | HM 4250 | Advanced Event Production | 3 |
| Elective Requirements: | | | 3 Credits |
| Choose 3 credits from the Following | | | 3 |
| | CA 1000 | Culinary Basics (3.0) | |
| | MKTG 3650 | Professional Selling (3.0) | |
| | ART 1400 | Graphic Computer Applications (3) | |
| | COMM 3560 | Public Relations Event and Media Coordination (3) | |
| | THEA 1513 | Stagecraft I (2) | |
| and | THEA 1514 | Stagecraft I Lab (1) | |
| | TECH 3400 | Project Management WE (3) | |

**Graduation Requirements:**

1. A minimum of 2.5 GPA

## Human Resource Management, Minor

### *Requirements*

The Department of Management in the Woodbury School of Business at Utah Valley University currently has a Bachelor of Science in Business Management with a track in HRM (within the General Business emphasis). The proposed BS/BA and Minor in Human Resource Management would strengthen the program offerings of the Woodbury School of Business. By structuring the degree requirements to enhance the curriculum, it would add rigor to the program and greater professional competence to graduates.

**Total Program Credits:18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 18 Credits |
| | HR 3430 | Introduction to Human Resource Management | 3 |
| | HR 3530 | Employment and Labor Law | 3 |
| | HR 3550 | Organization Development | 3 |
| | HR 3570 | Training and Development | 3 |
| | HR 4610 | Strategic Staffing Performance Evaluation | 3 |
| | Choose 3 Credits from the Following | | 3 |
| | HR 4000 | Total Compensation I--Pay and Incentives (3) | |
| | HR 4010 | Total Compensation II--Benefits (3) | |
| | HR 4050 | Human Resource Information Systems (3) | |
| | HR 4060 | HR Analytics (3) | |
| | HR 495R | Advanced Topics in Strategic Human Resource Management (1) | |

**Graduation Requirements:**

1. Overall grade point average of 2.5 in all Woodbury School of Business courses and no grade lower than a C- in business courses.

## Hospitality Management, B.S.

### *Requirements*

The Bachelor of Science in Hospitality Management degree offers the possibility for a student to choose one of four specializations: General Operations; Revenue Management; Food and Beverage Management (designed mainly for Culinary Arts AAS graduates); and Foreign Language Track (which provides 12-15 hours of language credit).

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | HM 1010 | Introduction to Hospitality Industry | 3 |
| | HM 2500 | Statistics for the Hospitality Industry | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | IM 2010 | Business Computer Proficiency (3) | |
| or | IM 2600 | Spreadsheet Applications (3) | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | ECON 1010 | Economics as a Social Science (fulfills Social/Behavioral Science requirement) | 3 |
| or | ECON 2010 | Principles of Economics I (3) (fulfills Social/Behavioral Science requirement) | |
| Discipline Core Requirements: | | | 59 Credits |
| | ACC 2110 | Principles of Accounting I | 3 |
| | HM 1010 | Introduction to Hospitality Industry | 3 |
| | HM 2500 | Statistics for the Hospitality Industry | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| Complete one of the following:[1] | | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| | My Educator | | |

| | | | |
|---|---|---|---|
| | HM 1130 | Hotel Operations I | 3 |
| | HM 1180 | Food and Beverage Management | 3 |
| | HM 3020 | Hospitality Managerial Accounting I | 3 |
| | HM 3030 | Hospitality Managerial Accounting II | 3 |
| | HM 3100 | Hospitality Law | 3 |
| | HM 3150 | Hospitality Finance | 3 |
| | HM 3210 | Event Venue and Convention Management | 3 |
| | HM 3400 | Hotel Industry Analytics | 2 |
| | HM 3710 | Marketing of Hospitality Services | 3 |
| | HM 4400 | Advanced Hotel and Tourism Analytics | 3 |
| | HM 4550 | Hospitality Strategic Management | 3 |
| | HM 481R | Internship | 6 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| or | HR 3430 | Introduction to Human Resource Management (3) | |
| | MGMT 332G | Cross-Cultural Communications for International Business | 3 |
| or | HM 320G | Global Tourism (3) | |
| Elective Requirements: | | | 26 Credits |
| Complete 14 hours of electives from any course 1000 level or higher | | | 14 |
| Complete 6 credits of upper division Hospitality electives. | | | 6 |
| Complete 6 credits of either lower or upper division Hospitality electives. | | | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with at least 40 credit hours of upper-division classes.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours. At least 12 of the credit hours must be in Hospitality Management courses.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until Matriculation is completed.

| Footnote |
|---|
| * Students will be required to complete the Business Computer Proficiency exam with a score of 80 percent or higher or complete IM 2010 or IM 2600 with a grade of B- or higher. |

# Human Resource Management, B.A.

## *Requirements*

The HRM program will provide students with practical and applied skills, experience in applying those skills, and a variety of intellectual tools to prepare them for HRM careers in business, government, and non-profit organizations. The proposed classes, engaged pedagogy, and instructors will aim to prepare students for staffing organizations, setting and advising procedures for recruitment, interview, and placement. Additionally, students will be prepared for carrying out disciplinary action, tracking leave and absences, and ensuring the health, safety, and development of organizational employees. HR graduates will also be prepared to advise company management on labor law issues.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| | ACC 2110 | Principles of Accounting I | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | My Educator | | |
| or | IM 2010 | Business Computer Proficiency (3) | |
| or | IM 2600 | Spreadsheet Applications (3) | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (any foreign language 202G/2020 class) | | 4 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 64 Credits |
| Business Foundation Courses (required for matriculation): | | | |
| | My Educator[1] | | |

| | | | |
|---|---|---|---|
| or | IM 2010 | Business Computer Proficiency (3) [1] | |
| or | IM 2600 | Spreadsheet Applications (3) [1] | |
| Complete the following: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance [2] | 3 |
| | HR 4050 | Human Resource Information Systems [2] | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 330G | Survey of International Business | 3 |
| or | MGMT 332G | Cross-Cultural Communications for International Business (3) | |
| or | ECON 305G | International Economics (3) | |
| or | MKTG 335G | International Marketing (3) | |
| or | HR 470G | International Human Resource Management (3) | |
| | MGMT 3450 | Operations Management | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation [2] | 3 |
| | MGMT 495R | Business Strategy Formulation and Implementation | 1 |
| | MKTG 1890 | Introduction to Careers in Business | 1 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3890 | Business Career Preparation | 2 |
| Human Resource Management Core Requirements | | | |
| | HR 3430 | Introduction to Human Resource Management | 3 |
| | HR 3530 | Employment and Labor Law | 3 |
| | HR 4000 | Total Compensation I--Pay and Incentives | 3 |
| | HR 4010 | Total Compensation II--Benefits | 3 |
| | HR 4060 | HR Analytics | 3 |
| | HR 4800 | Strategic Human Resource Management | 3 |
| | MGMT 481R | Internship (1) | 3 |
| Elective Requirements: | | | 20 Credits |
| | Complete 12 credits of any foreign language course 1010, 1020, 2010 sequence | | 12 |
| | Complete 8 credits numbered 1000 or higher | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BA degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until MATRICULATION is completed.

| Footnote |
|---|
| [1] Students will be required to complete My Educator with a score of 80 percent or higher or complete IM 2010 or IM 2600 with a grade of B or higher. |
| [2] Cannot be taken until student is matriculated. |

## Human Resource Management, B.S.

### *Requirements*

The HRM program will provide students with practical and applied skills, experience in applying those skills, and a variety of intellectual tools to prepare them for HRM careers in business, government, and non-profit organizations. The proposed classes, engaged pedagogy, and instructors will aim to prepare students for staffing organizations, setting and advising procedures for recruitment, interview, and placement. Additionally, students will be prepared for carrying out disciplinary action, tracking leave and absences, and ensuring the health, safety, and development of organizational employees. HR graduates will also be prepared to advise company management on labor law issues.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| | ACC 2110 | Principles of Accounting I | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | My Educator | | |
| or | IM 2010 | Business Computer Proficiency (3) | |
| or | IM 2600 | Spreadsheet Applications (3) | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |

| | | | |
|---|---|---|---|
| | MATH 1090 | College Algebra for Business | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 58 Credits |
| Business Foundation Courses (required for matriculation): | | | |
| | My Educator [1] | | |
| or | IM 2010 | Business Computer Proficiency (3) [1] | |
| or | IM 2600 | Spreadsheet Applications (3) [1] | |
| Complete the following: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance [2] | 3 |
| | HR 4050 | Human Resource Information Systems [2] | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 330G | Survey of International Business | 3 |
| or | MGMT 332G | Cross-Cultural Communications for International Business (3) | |
| or | ECON 305G | International Economics (3) | |
| or | MKTG 335G | International Marketing (3) | |
| or | HR 470G | International Human Resource Management (3) | |
| | MGMT 3450 | Operations Management | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation [2] | 3 |
| | MGMT 495R | Business Strategy Formulation and Implementation | 1 |
| | MKTG 1890 | Introduction to Careers in Business | 1 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3890 | Business Career Preparation | 2 |
| Human Resource Management Core Requirements | | | |
| | HR 3430 | Introduction to Human Resource Management | 3 |
| | HR 3530 | Employment and Labor Law | 3 |
| | HR 4000 | Total Compensation I--Pay and Incentives | 3 |
| | HR 4010 | Total Compensation II--Benefits | 3 |
| | HR 4060 | HR Analytics | 3 |
| | HR 4800 | Strategic Human Resource Management | 3 |
| Elective Requirements: | | | 27 Credits |
| | Complete 12 credits from the following: | | 12 |
| | MGMT 481R | Internship (1) (Must be taken for 3 credits) | |
| | HR 3550 | | |
| | HR 3570 | Training and Development (3) | |
| | HR 4610 | Strategic Staffing & Performance Evaluation (3) | |
| | HR 495R | Advanced Topics in Strategic Human Resource Management (3) | |
| Select 15 credits of any 1000 level course or higher. | | | 15 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BA degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until MATRICULATION is completed.

| Footnote |
|---|
| [1] Students will be required to complete My Educator with a score of 80 percent or higher or complete IM 2010 or IM 2600 with a grade of B- or higher. |
| [2] Cannot be taken until student is matriculated. |

# Philosophy and Humanities

## Philosophy and Humanities

The Philosophy and Humanities department is in the College of Humanities & Social Sciences . To find the most up-to-date information from the Philosophy and Humanities department, visit their website.

Philosophy and Humanities department

**DEPARTMENT CHAIR**

**SIMON, Leslie S.** *Professor*

**FACULTY**

**BARRETT, Kyle R.** *Lecturer - Placeholder*
**BIRCH, Brian** *Professor*
**BOULTER, Claudia** *Lecturer - Placeholder*
**BRETZ, Thomas Helmut** *Assistant Professor*
**CALDIERO, Alex** *Senior Artist in Residence*
**ENGLEHARDT, Elaine Eliason** *Distinguished Professor*
**GIBBY, Kristina** *Lecturer*
**GUERRERO, Laura P.** *Assistant Professor*
**HANSEN, Jorgen** *Lecturer*
**HARTE, Ryan** *Assistant Professor*
**LAMARCHE, Pierre** *Professor*
**LIANG, Samuel Y.** *Associate Professor*
**MINCH, Michael L.** *Professor*
**MIZELL, Karen L.** *Professor*
**MUSSETT, Shannon M.** *Professor*
**NIELSEN, Jeffrey** *Lecturer*
**POTTER, Kelli** *Associate Professor*
**SAWYER, Michaela** *Associate Professor*
**SERTLER, Ezgi** *Assistant Professor*
**SHAW, Michael M.** *Professor*
**SIMON, Leslie S.** *Professor*
**STENCIL, Eric** *Associate Professor*
**WEIGEL, Christine M.** *Professor*

## Course Descriptions

Classical Studies..... 535
Environmental Studies..... 618
Greek..... 656
Humanities..... 668
Interdisciplinary Studies Prog..... 672
Latin..... 688
Philosophy..... 738
Religious Studies..... 767

## Degrees & Programs

### Humanities, A.A.

#### *Requirements*

The discipline of humanities is the study of human intellectual and artistic creativity and what the resulting artistic forms reveal about the human experience. This field of study draws on other disciplines such as history, fine arts, literature, intellectual history, music, foreign languages, theology, and philosophy to see how the several artistic forms communicate and work together to give an in-depth record of the meaning of human life in the past and present. The discipline also emphasizes the relationship between the arts, culture, and society. A background in humanities is helpful in preparing for employment in education, business, government, civil and foreign service, tourism, and in preparation for graduate studies.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205H | Ethics and Values (3.0) | |
| or | PHIL 205G | Ethics and Values (3.0) | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 12 Credits |
| Complete one of the following: | | | 3 |
| | HUM 1010 | Humanities Through the Arts (3.0) | |
| | HUM 101H | Humanities Through the Arts (3.0) | |
| | HUM 101G | Humanities Through the Arts (3.0) | |
| Complete one of the following: | | | 3 |

| | | | |
|---|---|---|---|
| | HUM 2010 | World History Through the Arts I (3.0) | |
| | HUM 201G | World History Through the Arts I (3.0) | |
| | HUM 201H | World History Through the Arts I (3.0) | |
| Complete one of the following: | | | 3 |
| | HUM 2020 | World History Through the Arts II (3.0) | |
| | HUM 202G | World History Through the Arts II (3.0) | |
| | HUM 202H | World History Through the Arts II (3.0) | |
| Complete one of the following: | | | 3 |
| | HUM 2100 | Adventures of Ideas Through 1500 (3.0) | |
| | HUM 210H | Adventures of Ideas Through 1500 (3.0) | |
| | HUM 2200 | Adventures of Ideas After 1500 (3.0) | |
| | HUM 220H | Adventures of Ideas After 1500 (3.0) | |
| Elective Requirements: | | | 13 Credits |
| | Same Foreign Language | | 8 |
| | Any course 1000 or higher | | 5 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one language.

## Humanities, A.S.

### *Requirements*

The discipline of humanities is the study of human intellectual and artistic creativity and what the resulting artistic forms reveal about the human experience. This field of study draws on other disciplines such as history, fine arts, literature, intellectual history, music, foreign languages, theology, and philosophy to see how the several artistic forms communicate and work together to give an in-depth record of the meaning of human life in the past and present. The discipline also emphasizes the relationship between the arts, culture, and society. A background in humanities is helpful in preparing for employment in education, business, government, civil and foreign service, tourism, and in preparation for graduate studies.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values (3.0) | |
| or | PHIL 205H | Ethics and Values (3.0) | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 12 Credits |
| Complete One of the Following: | | | 3 |
| | HUM 1010 | Humanities Through the Arts (3.0) | |
| | HUM 101G | Humanities Through the Arts (3.0) | |
| | HUM 101H | Humanities Through the Arts (3.0) | |
| Complete one of the following: | | | 3 |
| | HUM 2010 | World History Through the Arts I (3.0) | |
| | HUM 201G | World History Through the Arts I (3.0) | |
| | HUM 201H | World History Through the Arts I (3.0) | |
| Complete one of the following: | | | 3 |
| | HUM 2020 | World History Through the Arts II (3.0) | |
| | HUM 202G | World History Through the Arts II (3.0) | |
| | HUM 202H | World History Through the Arts II (3.0) | |
| Complete 3 credits of the following: | | | 3 |
| | HUM 2100 | Adventures of Ideas Through 1500 (3.0) | |
| or | HUM 210H | Adventures of Ideas Through 1500 (3.0) | |

| | | | |
|---|---|---|---|
| | HUM 2200 | Adventures of Ideas After 1500 (3.0) | |
| or | HUM 220H | Adventures of Ideas After 1500 (3.0) | |
| Elective Requirements: | | | 13 Credits |
| | Any course 1000 level or higher | | 13 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Philosophy, A.A.

### *Requirements*

Interest in studying philosophy begins with the desire to engage life's greatest questions: finding the meaning of human existence, making sense of reality and our place in the cosmos, giving systematic form to our ethical and political intuitions, explaining the history of human ideas, and other equally significant problems. Often students wonder how the study of philosophy can provide the foundation for successful and meaningful employment. Contrary to popular belief, a philosophy major is one of the best preparations possible for careers in a large number of different areas. An article in the London Times rightly called philosophy the "ultimate 'transferable work skill'" insofar as it prepares students for a wide array of practical services. As a group, philosophy majors consistently score at or near the top on standardized tests, gain employment on graduation at higher than average rates, rank highly in median mid-career salary, and enjoy a well-earned reputation for rigorous thinking. In fact, the Association of American Colleges and Universities tells students, "[y]our specific choice of major matters far less than the knowledge and skills you gain through all your studies and experiences in college. In terms of jobs, employers don't hire majors. They hire individuals with potential to succeed over the long term and add value to their companies or organizations." The study of philosophy, one of the oldest and most rigorous disciplines, provides students with critical thinking, writing, and arguing skills necessary to succeed in today's competitive working environments.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | NGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social Science majors) (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| Complete the following: | | | |
| | PHIL 1000 | Introduction to Philosophy | 3 |
| | PHIL 120R | Philosophy Forum | 1 |
| | PHIL 1610 | Introduction to Western Religions | 3 |
| or | PHIL 1620 | Introduction to Eastern Religions (3.0) | |
| | PHIL 2000 | Formal Logic I | 3 |
| | PHIL 2110 | Ancient Greek Philosophy WE | 3 |
| | PHIL 2150 | Early Modern Philosophy | 3 |
| Elective Requirements: | | | 9 Credits |
| | Same Foreign Language | | 8 |
| | Any course 1000 level or higher | | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one language.

## Philosophy, A.S.

### *Requirements*

Interest in studying philosophy begins with the desire to engage life's greatest questions: finding the meaning of human existence, making sense of reality and our place in the cosmos, giving systematic form

to our ethical and political intuitions, explaining the history of human ideas, and other equally significant problems. Often students wonder how the study of philosophy can provide the foundation for successful and meaningful employment. Contrary to popular belief, a philosophy major is one of the best preparations possible for careers in a large number of different areas. An article in the London Times rightly called philosophy the "ultimate 'transferable work skill'" insofar as it prepares students for a wide array of practical services. As a group, philosophy majors consistently score at or near the top on standardized tests, gain employment on graduation at higher than average rates, rank highly in median mid-career salary, and enjoy a well-earned reputation for rigorous thinking. In fact, the Association of American Colleges and Universities tells students, “[y]our specific choice of major matters far less than the knowledge and skills you gain through all your studies and experiences in college. In terms of jobs, employers don’t hire majors. They hire individuals with potential to succeed over the long term and add value to their companies or organizations.” The study of philosophy, one of the oldest and most rigorous disciplines, provides students with critical thinking, writing, and arguing skills necessary to succeed in today’s competitive working environments.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| Complete the following: | | | |
| | PHIL 1000 | Introduction to Philosophy | 3 |
| | PHIL 120R | Philosophy Forum | 1 |
| | PHIL 1610 | Introduction to Western Religions | 3 |
| or | PHIL 1620 | Introduction to Eastern Religions (3.0) | |
| | PHIL 2000 | Formal Logic I | 3 |
| | PHIL 2110 | Ancient Greek Philosophy WE | 3 |
| | PHIL 2150 | Early Modern Philosophy | 3 |
| Elective Requirements: | | | 9 Credits |
| | Any course 1000 level or higher | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements

## Ethics, Certificate of Proficiency

### *Requirements*

A student in the Ethics program is offered an innovative approach in correlating various disciplines with structured ethical research. The program offers students opportunities to enhance their capacity to enter their chosen professions, careers, and vocations as ethical leaders. Students will examine real world ethical issues in the context of various disciplines, a valuable credential for employment and further education.

UVU has had a vested interest in Interdisciplinary Ethics since the 1980s, offering prestigious programs such as Ethics Across the Curriculum and hosting the only Ethics Center in the USHE system. The undergraduate Ethics curriculum and the Center for the Study of Ethics have received repeated national recognitions for their innovative and influential programs, conferences, events, symposia, and lecture series that educate students and the community about contemporary ethical issues.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 9 Credits |
| | PHIL 2050 | Ethics and Values | 3 |
| | PHIL 355G | Moral Philosophy | 3 |
| | PHIL 481R | Internship | 3 |
| Elective Requirements: | | | 12 Credits |
| Complete 12 credits from the following: | | | 12 |
| | PHIL 130R | Ethics Forum (1) (Limited to a maximum of 3 credits) | |
| | PHIL 3040 | Media Ethics (3) | |

| | | | |
|---|---|---|---|
| or | COMM 3040 | Media Ethics (3) | |
| | PHIL 3450 | Philosophy of Childhood (3) | |
| | PHIL 3460 | The Ethics of Human/Animal Relationships (3) | |
| | PHIL 3510 | Business and Professional Ethics (3) | |
| | PHIL 3520 | Bioethics (3) | |
| | PHIL 3530 | Environmental Ethics (3) | |
| | PHIL 3540 | Christian Ethics (3) | |
| | PHIL 357R | Moral Reasoning Through Case Studies Ethics Bowl (3) (Limited to a maximum of 3 credits with approval of instructor and department chair) | |
| | PHIL 3700 | Social and Political Philosophy (3) | |
| | PHIL 3710 | Philosophy of Law (3) | |
| | PHIL 450R | Interdisciplinary Senior Ethics Seminar (3) | |
| | PHIL 451R | Ethical Theory Seminar (3) | |
| | PHIL 490R | Independent Study (1) (Limited to a maximum of 3 credits) | |
| | ASL 4370 | Ethics for Interpreters (3) | |
| | BIOL 4260 | Ethical Issues in Biology WE (2) | |
| | CS 305G | Global Social and Ethical Issues in Computing (3) | |
| | PJST 3000 | Introduction to Peace and Justice Studies (3) | |
| | AVSC 410G | Global Ethical and Professional Issues in Aviation (3) | |
| | ESFF 2100 | Introduction to Emergency Services Leadership (3) | |
| | CJ 4200 | Ethical Issues in Criminal Justice (3) | |
| | POLS 3300 | Introduction to Public Administration (3) | |
| | ESMG 4650 | Emergency Services Capstone WE (3) | |
| | other advisor-approved course | | |

**Graduation Requirements:**

1. Completion of a minimum of 21 credits.
2. Overall grade point average of 2.0 or above.
3. Residency hours -- Minimum of 6 credits required through course attendance at UVU.

## Classical Studies, Minor

### *Requirements*

Classical Studies focuses on the language, philosophy, art, and culture of Ancient Greece and Ancient Rome.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of 30 hours of credit. | | | |
| Discipline Core Requirements: | | | 9 Credits |
| | PHIL 2110 | Ancient Greek Philosophy WE | 3 |
| | HIST 3110 | Greek History | 3 |
| | HIST 3130 | Roman History (3) | |
| or | HIST 3140 | Roman Empire | 3 |
| Elective Requirements: | | | 9 Credits |
| | Complete an additional 9 hours of electives. The following list of courses has been approved for the Classical Studies Minor. If a course that is not represented on the following list has sufficient classical studies related content, the student may seek approval from the Classical Studies Coordinator to have the course count toward the minor. | | 9 |
| | ANTH 2030 | Archeological Method and Theory (3.0) | |
| | ARTH 2710 | History of Art to the Renaissance (3.0) | |
| | ARTH 3020 | Classical Art and Architecture History (3.0) | |
| | ENGL 2230 | Myths and Legends in Literature (3.0) | |
| | ENGL 3610 | Medieval Literature (3.0) | |
| | ENGL 376G | World Literature (3.0) | |
| | HIST 3130 | Roman Republic (3.0) | |
| | HIST 3140 | Roman Empire (3.0) | |
| | HONR 2000 | Ancient Legacies (3.0) | |
| | HUM 2010 | World History Through the Arts I (3.0) | |
| | HUM 2500 | Introduction to Ancient Greek I (6.0) | |
| | HUM 2510 | Introduction to Ancient Greek II (6.0) | |
| | PHIL 2130 | Medieval Philosophy (3.0) | |
| | PHIL 386R | Topics in Ancient Philosophy (3.0) | |
| | LATN 1010 | Beginning Latin I (4.0) | |
| | LATN 1020 | Beginning Latin II (4.0) | |
| | LATN 2010 | Intermediate Latin I (4.0) | |
| | LATN 2020 | Intermediate Latin II (4.0) | |
| | LATN 3010 | Readings in Latin (3.0) | |
| | GRK 1010 | Beginning Ancient Greek I (4.0) | |
| | GRK 1020 | Beginning Ancient Greek II (4.0) | |
| | GRK 2010 | Intermediate Ancient Greek I (4.0) | |
| | GRK 2020 | Intermediate Ancient Greek II (4.0) | |
| | GRK 3010 | Readings in Ancient Greek (3.0) | |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above.
2. Residency hours--minimum of 12 credit hours through course attendance at UVU.

## Environmental Studies, Minor

### *Requirements*

Environmental Studies explores the complex links between human culture and the natural world. The program challenges students to critically examine both the ecological and social context of environmental issues and the numerous connections between natural and social systems, from local to global scales. It is undeniable that

humans have a profound impact on the environment. To have the greatest positive influence, we must seek knowledge of the structure and function of natural systems, as well as an understanding of how culture affects the way we perceive nature.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 3 Credits |
| | ENST 3000 | Introduction to Environmental Studies | 3 |
| Elective Requirements | | | 15 Credits |
| Choose 6 credits from the following courses in the College of Humanities and Social Sciences or the Woodbury School of Business. | | | 6 |
| | ANTH 3150 | Culture Ecology and Health (3) | |
| | ANTH 3830 | Biology and Culture (3) | |
| | COMM 3115 | Communicating in Environments (3) | |
| | COMM 3130 | The Culture of Nature and Technology (3) | |
| | ENGL 3460 | Wilderness and Environmental Writing (3) | |
| | HIST 3800 | Environmental History of the United States (3) | |
| | PHIL 3530 | Environmental Ethics (3) | |
| | PHIL 4300 | Environmental Aesthetics (3) | |
| or | HUM 4300 | Environmental Aesthetics (3) | |
| | PHIL 3460 | The Ethics of Human/Animal Relationships (3) | |
| or | SOC 3800 | Animals and Society (3) | |
| | ENST 3520 | Environmental Sociology (3) | |
| or | SOC 3520 | Environmental Sociology (3) | |
| | ECON 3040 | Environmental Economics (3) | |
| Any other advisor approved courses | | | |
| Choose 6 credits from the following courses in the College of Science. 3 of these credits must be at the 3000 or 4000 level. | | | 6 |
| Biology | | | |
| | BIOL 1610 | College Biology I (4) | |
| | BIOL 1620 | College Biology II (3) | |
| | BIOL 2500 | Environmental Biology (3) | |
| | BIOL 3700 | General Ecology (3) | |
| | BIOL 3800 | Conservation Biology (3) | |
| | ENVT 3280 | Environmental Law (3) | |
| | BIOL 4000 | Freshwater Ecology (4) | |
| | BIOL 4260 | Ethical Issues in Biology WE (2) | |
| Botany | | | |
| | BOT 2050 | Field Botany 3) | |
| | BOT 2100 | Flora of Utah (3) | |
| | BOT 3800 | Ethnobotany WE (4) | |
| | BOT 4050 | Plant Ecology (3) | |
| | BOT 4300 | Native Trees and Shrubs of Utah (3) | |
| | BOT 4500 | Introduction to Grasses (3) | |
| Chemistry | | | |
| | CHEM 1120 | Elementary Organic Bio-Chemistry (4) | |
| | CHEM 3020 | Environmental Chemistry (3) | |
| | CHEM 4030 | Radiochemistry (3) | |
| Environmental Management | | | |
| | ENVT 1110 | Introduction to Environmental Management (3) | |
| | ENVT 1210 | Introduction to Water Reclamation (3) | |
| | ENVT 1270 | Environmental Microbiology (3) | |
| | ENVT 1360 | Introduction to Water Treatment (3) | |
| | ENVT 1510 | Hazardous Materials Emergency Response (3) | |
| | ENVT 2560 | Environmental Health (3) | |
| | ENVT 2730 | Introduction to Soils (4) | |
| | ENVT 3280 | Environmental Law (3) | |
| | ENVT 3330 | Water Resources Management (3) | |
| | ENVT 3630 | Introduction to Geographic Information Systems (4) | |
| | ENVT 3750 | Land Use Planning (3) | |
| | ENVT 3770 | Natural Resources Management (3) | |
| | ENVT 3800 | Energy Use on Earth (3) | |
| Geology | | | |
| | GEO 1020 | Prehistoric Life (3) | |
| | GEO 1080 | Introduction to Oceanography (3) | |
| | GEO 1220 | Historical Geology (3) | |
| | GEO 3000 | Environmental Geochemistry (3) | |
| | GEO 3200 | Geologic Hazards (3) | |
| | GEO 3500 | Geomorphology WE (4) | |
| | GEO 4510 | Paleontology (4) | |
| Geography | | | |
| | GEOG 1000 | Introduction to Physical Geography (3) | |
| | GEOG 3400 | Environmental Remote Sensing (3) | |
| | GEOG 3600 | Introduction to Geographic Information Systems (4) | |
| | GEOG 3650 | Advanced Geographic Information Systems (4) | |
| | GEOG 3700 | Wetland Studies (3) | |
| | GEOG 3800 | Environmental History of the United States (3) | |
| Meterology | | | |
| | METO 1010 | Introduction to Meteorology (3) | |
| | METO 3100 | Climate and the Earth System (3) | |
| Physics | | | |
| | PHYS 1800 | Energy You and the Environment (3) | |
| | PHYS 3800 | Energy Use on Earth (3) | |
| Outdoor Recreation | | | |
| | REC 2200 | Foundations of Recreation (3) | |
| | REC 2700 | Leave No Trace Trainer (1) | |
| | REC 385G | Ethical Concerns in Recreation (3) | |

| | | | |
|---|---|---|---|
| | REC 420R | Outdoor Leadership and Management Practicum (2) | |
| | REC 4400 | Natural Resource and Protected Area Management (3) | |
| Zoology | | | |
| | ZOOL 3100 | Vertebrate Zoology (3) | |
| | ZOOL 3200 | Invertebrate Zoology (3) | |
| | ZOOL 3300 | Herpetology (3) | |
| | ZOOL 3430 | Entomology (3) | |
| | ZOOL 3500 | Mammalogy (3) | |
| | ZOOL 4000 | Animal Behavior (3) | |
| | ZOOL 4600 | Ornithology (4) | |
| Choose an additional 3 credits from any of the courses listed above – OR – complete 3 hours of research credits, service project credits, or internship credits | | | 3 |

## Ethics, Minor

### *Requirements*

A student in the Ethics program is offered an innovative approach in correlating various disciplines with structured ethical research. The program offers students opportunities to enhance their capacity to enter their chosen professions, careers, and vocations as ethical leaders. Students will examine real world ethical issues in the context of various disciplines, a valuable credential for employment and further education.

UVU has had a vested interest in Interdisciplinary Ethics since the 1980s, offering prestigious programs such as Ethics Across the Curriculum and hosting the only Ethics Center in the USHE system. The undergraduate Ethics curriculum and the Center for the Study of Ethics have received repeated national recognitions for their innovative and influential programs, conferences, events, symposia, and lecture series that educate students and the community about contemporary ethical issues.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 6 Credits |
| | PHIL 355G | Moral Philosophy | 3 |
| | PHIL 481R | Internship | 3 |
| Elective Requirements: | | | 12 Credits |
| Complete 12 credits from the following: | | | 12 |
| | PHIL 130R | Ethics Forum (1) (Limited to a maximum of 3 credits) | |
| | PHIL 3040 | Media Ethics (3) | |
| or | COMM 3040 | Media Ethics (3) | |
| | PHIL 3450 | Philosophy of Childhood (3) | |
| | PHIL 3460 | The Ethics of Human/Animal Relationships (3) | |
| | PHIL 3510 | Business and Professional Ethics (3) | |
| | PHIL 3520 | Bioethics (3) | |
| | PHIL 3530 | Environmental Ethics (3) | |
| | PHIL 3540 | Christian Ethics (3) | |
| | PHIL 357R | Moral Reasoning Through Case Studies: Ethics Bowl (3) | |
| | PHIL 3700 | Social and Political Philosophy (3) | |
| | PHIL 3710 | Philosophy of Law (3) | |
| | PHIL 450R | Interdisciplinary Senior Ethics Seminar (3) | |
| | PHIL 451R | Ethical Theory Seminar (3) | |
| | PHIL 490R | Independent Study (1) | |
| | ASL 4370 | Ethics for Interpreters (3) | |
| | BIOL 4260 | Ethical Issues in Biology WE (2) | |
| | CS 305G | Global Social and Ethical Issues in Computing (3) | |
| | PJST 3000 | Introduction to Peace and Justice Studies (3) | |
| | AVSC 410G | Global Ethical and Professional Issues in Aviation (3) | |
| | ESFF 2100 | Introduction to Emergency Services Leadership (3) | |
| | CJ 4200 | Ethical Issues in Criminal Justice (3) | |
| | POLS 3300 | Introduction to Public Administration (3) | |
| | ESMG 4650 | Emergency Services Capstone WE (3) | |
| | other advisor-approved course | | |

## Gender Studies, Minor

### *Requirements*

The Gender Studies minor allows students to study the extent to which gender and gender relations are socially influenced. Students will examine the ways in which conceptions of masculinity and femininity directly impact social and political institutions and practices, cultural expressions (such as art, communication, media, literature, music and film), law, education, business, scientific inquiry, interpersonal relations, sexuality and family. The minor broadens students' understanding of their chosen major and career path while facilitating the recognition of gender dynamics in their own lives.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of 30 hours of credit.<br>2. Admitted to a bachelor degree program at UVU | | | |
| Discipline Core Requirements: | | | 6 Credits |
| | ENGL 2730 | Introduction to Gender Studies | 3 |
| | ENGL 473R | Topics in Gender Studies | 3 |
| Elective Requirements: | | | 12 Credits |
| Complete an additional 12 hours of electives. If a course that is not represented on the following list has sufficient gender related content, the student may seek approval from the Gender Studies Coordinator to have the course count toward the minor. 6 credits must be upper-division. | | | 12 |
| | COMM 207G | Introduction to Gender and Communication (3) | |
| | ENGL 217G | Race Class and Gender in U S Cinema (3) | |

| | | | |
|---|---|---|---|
| | ENGL 317G | Ethnographic Methods for Communication Research (3) | |
| | ENGL 3710 | Literature by Women (3) | |
| | ENGL 3790 | Contemporary LGBTQ Literature (3) | |
| | HIST 320G | Women in American History to 1870 WE (3) | |
| | HIST 321G | Women in American History since 1870 (3) | |
| | HLTH 2800 | Human Sexuality (3) | |
| | HLTH 3240 | Womens Health Issues (3) | |
| | PHIL 3150 | Philosophical Issues in Feminism (3) | |
| | PHIL 3160 | Gender Values Knowledge and Reality (3) | |
| | PHIL 3450 | Philosophy of Childhood (3) | |
| | PSY 2800 | Human Sexuality (3) | |
| | PSY 3100 | Psychology of Gender (3) | |
| | SOC 2370 | Sociology of Gender (3) | |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above.
2. Residency hours--minimum of 12 credit hours through course attendance at UVU.

## Humanities, Minor

### *Requirements*

The discipline of humanities is the study of human intellectual and artistic creativity and what the resulting artistic forms reveal about the human experience. This field of study draws on other disciplines such as history, fine arts, literature, intellectual history, music, foreign languages, theology, and philosophy to see how the several artistic forms communicate and work together to give an in-depth record of the meaning of human life in the past and present. The discipline also emphasizes the relationship between the arts, culture, and society. A background in humanities is helpful in preparing for employment in education, business, government, civil and foreign service, tourism, and in preparation for graduate studies.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Overall grade point average of a 2.0 (C) or better<br>2. Admitted to a bachelor degree program at UVU | | | |
| Discipline Core Requirements: | | | 3 Credits |
| | HUM 3500 | Approaches to Humanities WE | 3 |
| Elective Requirements: | | | 15 Credits |
| Complete 3 credits from the following: | | | 3 |
| | HUM 2010 | World History Through the Arts I (3.0) | |
| or | HUM 201G | World History Through the Arts I (3.0) | |
| or | HUM 201H | World History Through the Arts I (3.0) | |
| | HUM 2100 | Adventures of Ideas Through 1500 (3.0) | |
| or | HUM 210H | Adventures of Ideas Through 1500 (3.0) | |
| Complete 3 credits from the following: | | | 3 |
| | HUM 2020 | World History Through the Arts II (3.0) | |
| or | HUM 202G | World History Through the Arts II (3.0) | |
| or | HUM 202H | World History Through the Arts II (3.0) | |
| | HUM 2200 | Adventures of Ideas After 1500 (3.0) | |
| or | HUM 220H | Adventures of Ideas After 1500 (3.0) | |
| Complete 9 credits from the following: | | | 9 |
| | HUM 320R | Topics in Humanities (1.0) | |
| | HUM 325R | Area Studies in Humanities (3.0) | |
| | HUM 330R | Period Studies in Humanities (3.0) | |
| | HUM 3800 | Aesthetics (3.0) | |
| | HUM 400R | Humanism and Posthumanism (3.0) | |
| | HUM 401R | Forms and Genres Across the Arts (3.0) | |
| | HUM 414R | Advanced Topics in Humanities (3.0) | |

**Graduation Requirements:**

1. Complete all Humanities courses with a grade of 2.0 (C) or better.

## Philosophy, Minor

### *Requirements*

Interest in studying philosophy begins with the desire to engage life's greatest questions: finding the meaning of human existence, making sense of reality and our place in the cosmos, giving systematic form to our ethical and political intuitions, explaining the history of human ideas, and other equally significant problems. Often students wonder how the study of philosophy can provide the foundation for successful and meaningful employment. Contrary to popular belief, a philosophy major is one of the best preparations possible for careers in a large number of different areas. An article in the London Times rightly called philosophy the "ultimate 'transferable work skill'" insofar as it prepares students for a wide array of practical services. As a group, philosophy majors consistently score at or near the top on standardized tests, gain employment on graduation at higher than average rates, rank highly in median mid-career salary, and enjoy a well-earned reputation for rigorous thinking. In fact, the Association of American Colleges and Universities tells students, "[y]our specific choice of major matters far less than the knowledge and skills you gain through all your studies and experiences in college. In terms of jobs, employers don't hire majors. They hire individuals with potential to succeed over the long term and add value to their companies or organizations." The study of philosophy, one of the oldest and most rigorous disciplines, provides students with critical thinking, writing, and arguing skills necessary to succeed in today's competitive working environments.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Enrollment at Utah Valley University<br>2. Overall grade point average of a 2.0 (C) or better.<br>3. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 18 Credits |
| Complete one of the following: | | | 3 |
| | PHIL 2110 | Ancient Greek Philosophy WE (3.0) | |
| or | PHIL 2150 | Early Modern Philosophy (3.0) | |
| Complete 15 additional credit hours of philosophy courses (9 credit hours must be 3000 level or above; no more than 6 credit hours may be at the 1000 level; Philosophy 2050 does not count for this requirement.) | | | 15 |

## Religious Studies, Minor

### *Requirements*

The Religious Studies minor fosters and facilitates an interdisciplinary approach to the academic study of religion. Due to its influential role at the local, national, and international levels, religion requires careful study utilizing academic methods employed in the examination of other cultural institutions. This includes the study of the history, theology, literature, folklore, etc., of various religions in an effort to study religion as a cultural phenomenon. The program is intended to serve our students and community by deepening our understanding of religious beliefs and practices in a spirit of open inquiry. Its aim is neither to endorse nor to undermine the claims of religion, but to create an environment in which various issues can be engaged from a variety of perspectives and methodologies.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Completion of 30 hours of credit<br>2. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 12 Credits |
| | PHIL 1610 | Introduction to Western Religions (3.0) | |
| or | PHIL 1620 | Introduction to Eastern Religions (3.0) | |
| or | ANTH 3450 | Shamanism and Indigenous Religion | 3 |
| | RLST 3650 | Approaches to Religious Studies | 3 |
| | RLST 366R | Issues in Religious Studies | 3 |
| | PHIL 3600 | Philosophy of Religion | 3 |
| Elective Requirements: | | | 9 Credits |
| Complete 9 credits of electives from the list below or as approved by advisor. | | | 9 |
| | ANTH 3400 | Myth Magic and Religion (3.0) | |
| | ANTH 3450 | Shamanism and Indigenous Religion (3.0) | |
| | ANTH 3460 | Anthropology of Mormonism (3.0) | |
| | COMM 3780 | Mormon Cultural Studies (3.0) | |
| | ENGL 374G | Literature of the Sacred (3.0) | |
| | ENGL 3780 | Mormon Literature (3.0) | |
| | PHIL 3540 | Christian Ethics (3.0) | |
| | PHIL 3610 | Introduction to Christian Theology (3.0) | |
| | SOC 3400 | Sociology of Religion (3.0) | |

## Humanities, B.A.

### *Requirements*

The discipline of humanities is the study of human intellectual and artistic creativity and what the resulting artistic forms reveal about the human experience. This field of study draws on other disciplines such as history, fine arts, literature, intellectual history, music, foreign languages, theology, and philosophy to see how the several artistic forms communicate and work together to give an in-depth record of the meaning of human life in the past and present. The discipline also emphasizes the relationship between the arts, culture, and society. A background in humanities is helpful in preparing for employment in education, business, government, civil and foreign service, tourism, and in preparation for graduate studies.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts) (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social Science majors) (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 36 Credits |
| | HUM 1010 | Humanities Through the Arts | 3 |
| or | HUM 101G | Humanities Through the Arts (3.0) | |
| or | HUM 101H | Humanities Through the Arts (3.0) | |
| | HUM 2010 | World History Through the Arts I | 3 |
| or | HUM 201G | World History Through the Arts I (3.0) | |
| or | HUM 201H | World History Through the Arts I (3.0) | |

| | | | |
|---|---|---|---|
| | HUM 2020 | World History Through the Arts II | 3 |
| or | HUM 202G | World History Through the Arts II (3.0) | |
| or | HUM 202H | World History Through the Arts II (3.0) | |
| | HUM 3500 | Approaches to Humanities WE | 3 |
| | HUM 400R | Humanism and Posthumanism | 3 |
| | HUM 4910 | Humanities Capstone WE | 3 |
| Complete 3 credits of the following: | | | 3 |
| | HUM 2100 | Adventures of Ideas Through 1500 (3.0) | |
| | HUM 210H | Adventures of Ideas Through 1500 (3.0) | |
| | HUM 2200 | Adventures of Ideas After 1500 (3.0) | |
| | HUM 220H | Adventures of Ideas After 1500 (3.0) | |
| Complete 9 credits of the following: | | | 9 |
| | HUM 320R | Topics in Humanities (1.0) | |
| | HUM 325R | Area Studies in Humanities (3.0) | |
| | HUM 330R | Period Studies in Humanities (3.0) | |
| | HUM 3800 | Aesthetics (3.0) | |
| Complete 6 credits of the following: | | | 6 |
| | HUM 401R | Forms and Genres Across the Arts (may be repeated for up to 6 credits) (3.0) | |
| | HUM 414R | Advanced Topics in Humanities (may be repeated for up to 6 credits) (3.0) | |
| Elective Requirements: | | | 49 Credits |
| | One Foreign Language | | 16 |
| | Any course 1000 or higher (No more than 6 total credit hours from HUM 281R and HUM 481R) 16 credits must be upper-division. | | 33 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 40 hours of upper-division credit.
6. Completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G levels or transferred equivalents.
7. Successful completion of at least one Global/Intercultural course.

# Philosophy, B.A.

## *Requirements*

Interest in studying philosophy begins with the desire to engage life's greatest questions: finding the meaning of human existence, making sense of reality and our place in the cosmos, giving systematic form to our ethical and political intuitions, explaining the history of human ideas, and other equally significant problems. Often students wonder how the study of philosophy can provide the foundation for successful and meaningful employment. Contrary to popular belief, a philosophy major is one of the best preparations possible for careers in a large number of different areas. An article in the London Times rightly called philosophy the "ultimate 'transferable work skill'" insofar as it prepares students for a wide array of practical services. As a group, philosophy majors consistently score at or near the top on standardized tests, gain employment on graduation at higher than average rates, rank highly in median mid-career salary, and enjoy a well-earned reputation for rigorous thinking. In fact, the Association of American Colleges and Universities tells students, "[y]our specific choice of major matters far less than the knowledge and skills you gain through all your studies and experiences in college. In terms of jobs, employers don't hire majors. They hire individuals with potential to succeed over the long term and add value to their companies or organizations." The study of philosophy, one of the oldest and most rigorous disciplines, provides students with critical thinking, writing, and arguing skills necessary to succeed in today's competitive working environments.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |

| | | | |
|---|---|---|---|
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 38 Credits |
| Complete the following: | | | |
| | PHIL 120R | Philosophy Forum | 1 |
| | PHIL 2000 | Formal Logic I | 3 |
| | PHIL 2110 | Ancient Greek Philosophy WE | 3 |
| | PHIL 2150 | Early Modern Philosophy | 3 |
| | PHIL 480R | Philosophy Capstone Prep | 1 |
| | PHIL 4910 | Philosophy Research Capstone WE | 3 |
| Ethics Set (complete 3 credits from the following): | | | 3 |
| | PHIL 3510 | Business and Professional Ethics (3.0) | |
| | PHIL 3520 | Bioethics (3.0) | |
| | PHIL 3530 | Environmental Ethics (3.0) | |
| | PHIL 3540 | Christian Ethics (3.0) | |
| | PHIL 355G | Moral Philosophy (3.0) | |
| | PHIL 3700 | Social and Political Philosophy (3.0) | |
| | PHIL 450R | Interdisciplinary Senior Ethics Seminar (3.0) | |
| | PHIL 451R | Ethical Theory Seminar (3.0) | |
| History Set (complete 3 credits from the following): | | | 3 |
| | PHIL 4140 | History of Analytic Philosophy (3.0) | |
| | PHIL 4150 | History of Continental Philosophy (3.0) | |
| Topic Set I (complete 3 credits, not previously completed, from the following): | | | 3 |
| | PHIL 3040 | Formal Logic II (3.0) | |
| | PHIL 3200 | Metaphysics (3.0) | |
| | PHIL 3300 | Epistemology (3.0) | |
| | PHIL 3400 | Philosophy of Science (3.0) | |
| | PHIL 4140 | History of Analytic Philosophy (3.0) | |
| | PHIL 4470 | Philosophy of Mind (3.0) | |
| | PHIL 4480 | Philosophy of Language (3.0) | |
| Topic Set II (complete 3 credits, not previously completed, from the following): | | | 3 |
| | PHIL 3470 | Pragmatism and American Philosophy (3.0) | |
| | PHIL 3750 | Marxist Philosophy (3.0) | |
| | PHIL 3810 | Existentialism and Phenomenology (3.0) | |
| | PHIL 386R | Topics in Ancient Philosophy (3.0) | |
| | PHIL 4130 | Nineteenth Century European Philosophy (3.0) | |
| | PHIL 4150 | History of Continental Philosophy (3.0) | |
| Complete 12 additional credits of Philosophy course work, at least 9 of which must be upper-division (excluding those courses taken to fulfill categories listed above). | | | 12 |
| Elective Requirements: | | | 47 Credits |
| | One Foreign Language | | 16 |
| | Any course 1000 or higher; 15 credits must be upper-division | | 31 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 40 hours or upper-division credit.
6. For the BA degree, completion of 16 credit hours of course work from one language to include the 1010, 1020, 2010, and 202G/2020 levels or transferred equivalents.
7. Successful completion of at least one Global/Intercultural course.

Note: It is recommended that students planning on earning a Baccalaureate Degree in Philosophy take a foreign language, preferably French or German, in their Freshman and Sophomore academic years. PHIL 120R, PHIL 290R, PHIL 295R, PHIL 400R, PHIL 492R, PHIL 450R, and PHIL 451R can be repeated for credit.

## Philosophy, B.S.

### *Requirements*

Interest in studying philosophy begins with the desire to engage life's greatest questions: finding the meaning of human existence, making sense of reality and our place in the cosmos, giving systematic form to our ethical and political intuitions, explaining the history of human ideas, and other equally significant problems. Often students wonder how the study of philosophy can provide the foundation for successful and meaningful employment. Contrary to popular belief, a philosophy major is one of the best preparations possible for careers in a large number of different areas. An article in the London Times rightly called philosophy the "ultimate 'transferable work skill'" insofar as it prepares students for a wide array of practical services. As a group, philosophy majors consistently score at or near the top on standardized tests, gain employment on graduation at higher than average rates, rank highly in median mid-career salary, and enjoy a well-earned reputation for rigorous thinking. In fact, the Association of American Colleges and Universities tells students, "[y]our specific choice of major matters far less than the knowledge and skills you gain through all your studies and experiences in college. In terms of jobs, employers don't hire majors. They hire individuals with potential to succeed over the long term and add value to their companies or organizations." The study of philosophy, one of the oldest and most rigorous disciplines, provides students with critical thinking, writing, and arguing skills necessary to succeed in today's competitive working environments.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |

| | | | |
|---|---|---|---|
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 38 Credits |
| Complete the following: | | | |
| | PHIL 120R | Philosophy Forum | 1 |
| | PHIL 2000 | Formal Logic I | 3 |
| | PHIL 2110 | Ancient Greek Philosophy WE | 3 |
| | PHIL 2150 | Early Modern Philosophy | 3 |
| | PHIL 480R | Philosophy Capstone Prep | 1 |
| | PHIL 4910 | Philosophy Research Capstone WE | 3 |
| Ethics Set (complete 3 credits from the following): | | | 3 |
| | PHIL 3510 | Business and Professional Ethics (3) | |
| | PHIL 3520 | Bioethics (3) | |
| | PHIL 3530 | Environmental Ethics (3) | |
| | PHIL 3540 | Christian Ethics (3) | |
| | PHIL 355G | Moral Philosophy (3) | |
| | PHIL 3700 | Social and Political Philosophy (3) | |
| | PHIL 450R | Interdisciplinary Senior Ethics Seminar (3) | |
| | PHIL 451R | Ethical Theory Seminar (3) | |
| History Set (complete 3 credits from the following): | | | 3 |
| | PHIL 4140 | History of Analytic Philosophy (3) | |
| | PHIL 4150 | History of Continental Philosophy (3) | |
| Topics Set I (complete 3 credits, not previously completed, from the following) | | | 3 |
| | PHIL 3040 | Formal Logic II (3) | |
| | PHIL 3200 | Metaphysics (3) | |
| | PHIL 3300 | Epistemology (3) | |
| | PHIL 3400 | Philosophy of Science (3) | |
| | PHIL 4140 | History of Analytic Philosophy (3) | |
| | PHIL 4470 | Philosophy of Mind (3) | |
| | PHIL 4480 | Philosophy of Language (3) | |
| Topic Set II (complete 3 credits, not previously completed, from the following): | | | 3 |
| | PHIL 3470 | Pragmatism and American Philosophy (3) | |
| | PHIL 3750 | Marxist Philosophy (3) | |
| | PHIL 3810 | Existentialism and Phenomenology (3) | |
| | PHIL 386R | Topics in Ancient Philosophy (3) | |
| | PHIL 4130 | Nineteenth Century European Philosophy (3) | |
| | PHIL 4150 | History of Continental Philosophy (3) | |
| Complete 12 additional credits of Philosophy course work, at least 9 of which must be upper-division (excluding those courses taken to fulfill categories listed above). | | | 12 |
| Elective Requirements: | | | 47 Credits |
| | Any course 1000 or higher; 15 credits must be upper-division | | 47 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Completion of 40 hours of upper-division credit.
6. Successful completion of at least one Global/Intercultural course.

Note: It is recommended that students planning on earning a Baccalaureate Degree in Philosophy take a foreign language, preferably French or German, in their Freshman and Sophomore academic years. PHIL 120R, PHIL 290R, PHIL 295R, PHIL 400R, PHIL 492R, PHIL 450R, and PHIL 451R can be repeated for credit.

# Physics

## Physics

The Physics department is in the College of Science . To find the most up-to-date information from the Physics department, visit their website.

Physics department

**DEPARTMENT CHAIR**

**MATHESON, Philip** *Professor*

**FACULTY**

**ANDERSEN, Bonnie** *Professor*
**DRAPER, Christian** *Assistant Professor*
**DURFEE, Dallin S.** *Assistant Professor*
**HAISCH, Karl Jr.** *Professor*
**HART, Vern** *Associate Professor*
**HENAGE, Thomas** *Lecturer*
**HINTZ, Maureen** *Lecturer*
**JAMES, Daniel** *Assistant Professor*
**JENSEN, Joseph** *Professor*
**LOTHRINGER, Joshua** *Assistant Professor*
**MATHESON, Philip** *Professor*
**NIELSEN, Kim** *Assistant Professor*
**POWELL, John** *Lecturer*
**SHIPP, Dustin** *Assistant Professor*
**SLEZAK, Cyrill B.** *Associate Professor*
**WASSERBAECH, Steven R.** *Professor*
**WEBER, Paul** *Associate Professor*
**YOUNG, York E.** *Assistant Professor*

## Course Descriptions

Astronomy....497
Physical Science....744
Physics....744

## Degrees & Programs

### Physics, Minor

#### *Requirements*

Must be admitted to a bachelor degree program at UVU. A minor in physics represents a substantial investment in mastering the basics of physics and gaining suitable problem solving skills that may then be applied to other disciplines. The minor requires 20 credit hours of physics credit.

**Total Program Credits: 20**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 20 Credits |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| | PHYS 3110 | Modern Physics I | 3 |
| | PHYS 3115 | Introduction to Experimental Physics I WE | 2 |
| Complete a minimum of 5 credits from the following courses: | | | 5 |
| | ASTR 3050 | Astrophysics I (3) | |
| | ASTR 3060 | Astrophysics I(3) | |
| | PHYS 2500 | Elementary Fluids and Thermal Physics (3) | |
| | PHYS 2800 | Introduction to Materials Physics (3) | |
| | PHYS 3120 | Modern Physics II (3) | |
| | PHYS 3125 | Introduction to Experimental Physics II WE (2) | |
| | PHYS 3230 | Principles of Electronics for the Physical Sciences (3) | |
| | PHYS 3300 | Mathematical Physics (3) | |
| | PHYS 3310 | Advanced Mathematical Physics (3) | |
| | PHYS 3400 | Classical Mechanics (3) | |
| | PHYS 3500 | Thermodynamics (3) | |
| | PHYS 3800 | Energy use on Earth (3) | |
| | PHYS 4210 | Advanced Experimental Techniques (3) | |
| | PHYS 4250 | Nuclear Physics (3) | |
| | PHYS 4300 | Computational Physics (3) | |
| | PHYS 4410 | Electrostatics and Magnetism (3) | |
| | PHYS 4420 | Electrodynamics (3) | |
| | PHYS 4510 | Quantum Mechanics I (3) | |
| | PHYS 4520 | Quantum Mechanics II (3) | |
| | PHYS 4600 | Optics (3) | |
| | PHYS 4700 | Acoustics (3) | |
| | PHYS 4800 | Solid State Physics (3) | |
| | PHYS 490R | Seminar (0.5) | |
| | METO 3100 | Climate and the Earth System (3) | |

**Graduation Requirements:**

1. A minimum grade of "C" must be earned in all minor courses.

### Physics Education, B.S.

#### *Requirements*

Prepares the student to teach high school physics and AP physics. The program allows for those interested to supplement their studies with extra courses in physics or other science through elective upper division credit. A seminar course provides the student with exposure to careers in physics.

**Total Program Credits: 120**

| |
|---|
| Matriculation Requirements: |
| 1. Students are admitted directly to the Baccalaureate degree program in Physics Education upon acceptance to the Secondary Education Program. |

2. Students must obtain the departmental Advisor's signature on an approved program plan prior to enrollment in their second semester of study.

Secondary Education Requirements:

1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.
2. GPA of 3.0 or higher with no grade lower than a C in content area courses.
3. Completion of all General Education requirements and the majority of content area courses.
4. Pass LiveScan Criminal Background Check.

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 39 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | CHEM 1210 | Principles of Chemistry I (To be taken with CHEM 1215) | 4 |
| | CHEM 1220 | Principles of Chemistry II (To be taken with CHEM 1225) | 4 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 73 Credits |
| | Must be completed with a grade B- or higher. | | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (To be taken with CHEM 1210) | 1 |
| | CHEM 1225 | Principles of Chemistry II Laboratory (To be taken with CHEM 1220) | 1 |
| | HIST 4320 | History of Scientific Thought | 3 |
| | MATH 1220 | Calculus II | 5 |
| | MATH 2210 | Calculus III | 3 |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| | PHYS 3010 | Physics Experiments for Secondary Education | 1 |
| | PHYS 3110 | Modern Physics I | 3 |
| | PHYS 3115 | Introduction to Experimental Physics I WE | 2 |
| | PHYS 4200 | Teaching Methods in Science | 3 |
| Education Courses: | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| Complete the following set: | | | |
| | PHYS 490R | Seminar (Must be repeated two times.) (0.5) | 1 |
| Complete 8 credits from the following: | | | 8 |
| | ASTR 3050 | Astrophysics I (3) | |
| | ASTR 3060 | Astrophysics II (3) | |
| | PHYS 1100 | Introductory Math Techniques for Physics and Engineering (3) | |
| | PHYS 2500 | Elementary Fluids and Thermal Physics (3) | |
| | PHYS 3120 | Modern Physics II (3) | |
| | PHYS 3125 | Introduction to Experimental Physics II WE (2) | |
| | PHYS 3230 | Principles of Electronics for the Physical Sciences (3) | |
| | PHYS 3300 | Mathematical Physics (3) | |
| | PHYS 3400 | Classical Mechanics (3) | |
| | PHYS 3500 | Thermodynamics (3) | |
| | PHYS 3800 | Energy use on Earth (3) | |
| | PHYS 4700 | Acoustics (3) | |
| Elective Requirements: | | | 8 Credits |
| | Complete 8 credits of upper division electives. | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with a minimum of 40 upper-division credits.
2. Overall Grade of 3.0 (B) or above with no grade lower than a C or better in major required content courses and no grade lower than a B- in Licensure and Methods courses.

3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. A minimum of 52 credit hours must be in the major with a minimum of 20 credits taken at UVU. A minimum of 24 chemistry and physics credits must be upper-division.
6. Successful completion of at least one Global/Intercultural course.

## Physics, B.S.

### *Requirements*

A Bachelor's degree is physics provides the student with an understanding of the laws of nature and with the experimental and analytical techniques necessary to describe and solve problems in physical systems. The degree is most useful in preparing students for further graduate study in physics, astronomy, engineering or other science. However physics BS degree recipients have also entered graduate programs in law and medicine and other diverse programs. Those not intending to pursue advanced degrees find successful employment in a variety of careers, including education, computer science, electronics and related industries and more.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Approval of department chair. | | | |
| General Education Requirements: | | | 37 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | MATH 1210 | Calculus I | 5 |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 63 Credits |
| | PHYS 2210 | Physics for Scientists and Engineers I | 4 |
| | PHYS 2215 | Physics for Scientists and Engineers I Lab | 1 |
| | PHYS 2220 | Physics for Scientists and Engineers II | 4 |
| | PHYS 2225 | Physics for Scientists and Engineers II Lab | 1 |
| | PHYS 3110 | Modern Physics I | 3 |
| | PHYS 3115 | Introduction to Experimental Physics I WE | 2 |
| | PHYS 3120 | Modern Physics II | 3 |
| | PHYS 3125 | Introduction to Experimental Physics II WE | 2 |
| | PHYS 3230 | Principles of Electronics for the Physical Sciences | 3 |
| | PHYS 3300 | Mathematical Physics | 3 |
| | PHYS 3330 | Computational Physics | 3 |
| | PHYS 3400 | Classical Mechanics | 3 |
| | PHYS 3500 | Thermodynamics | 3 |
| | PHYS 3600 | Optics | 3 |
| | PHYS 4210 | Advanced Experimental Techniques | 3 |
| | PHYS 4410 | Electrostatics and Magnetism | 3 |
| | PHYS 4420 | Electrodynamics | 3 |
| | PHYS 4510 | Quantum Mechanics I | 3 |
| | PHYS 490R | Seminar (0.5 credits, taken 4 times) | 2 |
| | MATH 1220 | Calculus II | 5 |
| | MATH 2210 | Calculus III | 3 |
| | MATH 2280 | Ordinary Differential Equations | 3 |
| Elective Requirements: | | | 20 Credits |
| Complete 20 credits from the following courses. The selection of elective coursework should present a coherent theme such as engineering physics, medical phyiscs, nuclear physics, geophysics, computational physics, etc. (Consult Advisor or Department Chair for assistance or to consider possible course substitutions.) | | | 20 |
| | ASTR 2040 | Intermediate Astronomy (3) | |
| | ASTR 3050 | Astrophysics I (3) | |
| | ASTR 3060 | Astrophysics II (3) | |
| | ASTR 4100 | Brown Dwarfs and Exoplanets (3) | |
| | ASTR 4350 | Research Methods in Astronomy (3) | |
| | PHYS 1100 | Introductory Math Techniques for Physics and Engineering (3) | |
| | PHYS 2500 | Elementary Fluids and Thermal Physics (3) | |
| | PHYS 2800 | Introduction to Materials Physics (3) | |
| | PHYS 3310 | Advanced Mathematical Physics (3) | |
| | PHYS 3350 | Applications of LabVIEW in Physics (3) | |
| | PHYS 3700 | Particle Physics (3) | |
| | PHYS 3800 | Energy use on Earth (3) | |
| | PHYS 4100 | Biophysics (3) | |
| | PHYS 4150 | Medical Physics (3) | |
| | PHYS 4250 | Nuclear Physics (3) | |
| | PHYS 4350 | Research Methods in Physics (3) | |

| | | | |
|---|---|---|---|
| | PHYS 4520 | Quantum Mechanics II (3) | |
| | PHYS 4700 | Acoustics[1] (3) | |
| | PHYS 4800 | Solid State Physics[1] (3) | |
| | PHYS 481R | Physics Internship (1) (no more than 4 hours counted toward degree) | |
| | PHYS 489R | Undergraduate Research in Physics (1) (no more than 9 hours counted toward degree) | |
| | PHYS 492R | Topics in Physics (3) (may only be taken once toward degree credit) | |
| | PHYS 495R | Independent Readings (1) (no more than 3 hours counted toward degree) | |
| | PHYS 499A | Senior Project (2) [1] | |
| | PHYS 499B | Senior Thesis (1) [1] | |
| | See Physics Department academic advisor for possibly more complete and up to date list. | | |
| | CHEM 1210 | Principles of Chemistry I (4) [2] | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (1) | |
| | CHEM 1220 | Principles of Chemistry II PP (4) [2] | |
| | CHEM 1225 | Principles of Chemistry II Laboratory (1) | |
| | Any CHEM course 2310 or higher except internship and independent study type courses. | | |
| | Any EENG course 2700 or higher except internship and independent study type courses. | | |
| | Any ENGR course 2010 or higher except internship and independent study type courses. | | |
| | MATH 2270 | Linear Algebra (3) | |
| | Any MATH course 3200 or higher except intership and independent study type courses. | | |
| | Any GEO course 3080 or higher, except internship and independent study-type courses. | | |
| | METO 3100 | Climate and the Earth System (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above with no grade lower than a "C" in core and elective requirement courses.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

| Footnotes: |
|---|
| 1-Suggested elective option for the student intent on continuing physics studies in graduate school. |
| 2-Strongly recommended for inclusion in any elective option. |

# Public Health

## Public Health

The Public Health department is in the College of Health and Public Services . To find the most up-to-date information from the Public Health department, visit their website.

Public Health department

**DEPARTMENT CHAIR**

**BROWN, Mary** *Professor*

**FACULTY**

**BARBER, Melinda** *Assistant Professor*
**BARTHEL, Brian R.** *Associate Professor*
**BEMEL, James** *Associate Professor*
**BROWN, Mary** *Professor*
**CUNNINGHAM, Ruthann** *Assistant Professor*
**FLINT, Matthew** *Associate Professor*
**HALL, Sarah M.** *Assistant Professor*
**HAMSON, Mckelle** *Lecturer*
**JACKSON, TeriSue Smith** *Professor*
**JOHNSON-SILVA, Virlana** *Assistant Professor*
**LARSEN, Merilee** *Assistant Professor*
**MULITALO, Karen E.** *Assistant Professor*
**MULITALO, Karen E.** *Assistant Professor*
**MURPHY, Lynley** *Associate Professor*
**WALSH, Robert O.** *Professor*

# Course Descriptions

Community Health.....660
Nutrition.....729

# Degrees & Programs

## Community Health, A.A.

### *Requirements*

Students in the Department of Public and Community Health may receive an Associate in Science or Arts with an emphasis in Community Health: an Integrated Studies Bachelor of Science or Arts with a Community Health Emphasis; a Bachelor of Science in Community Health in one of the following areas: Community Health Emphasis, Health Services Administration Emphasis, or School Health Education. A minor in Community Health Education is available, as well as an endorsement for School Health Education.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | Introduction to Statistics (4.0) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) (recommended for Business majors) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology | 3 |
| or | BIOL 1610 | General Biology I (4.0) | |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 17 Credits |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | HLTH 1200 | First Aid | 3 |
| | HLTH 2400 | Concepts of Stress Management | 3 |
| | HLTH 2800 | Human Sexuality | 3 |
| | HLTH 2600 | Drugs Behavior and Society | 3 |
| Complete 2 credits from the following: | | | 2 |
| | COMM 2110 | Interpersonal Communication (3) | |
| | ENVT 2560 | Environmental Health (3) | |
| | HLTH 1300 | Medical Terminology I (2) | |
| | HLTH 2000 | Body Image Self-Esteem and Weight Management (3) | |
| | HLTH 2200 | Introduction to Health Professions (2) | |
| | NUTR 2020 | Nutrition Through the Life Cycle (3) | |
| | PSY 1100 | Human Development Life Span (3) | |
| | PSY 2250 | Psychology of Interpersonal Relationships (3) | |
| | SOC 1010 | Introduction to Sociology (3) | |
| | Or any other department approved 1000 or 2000 level course | | |
| Elective Requirements: | | | 8 Credits |
| | Same Foreign Language (1010 and 1020) | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.

2. Overall GPA of 2.50 or above with no grade lower than a C- in core courses.
3. Residency hours-- minimum of 20 credit hours though course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one language.

## Community Health, A.S.

### *Requirements*

Students in the Department of Public and Community Health may receive an Associate in Science or Arts with an emphasis in Community Health: an Integrated Studies Bachelor of Science or Arts with a Community Health Emphasis; a Bachelor of Science in Community Health in one of the following areas: Community Health Emphasis, Health Services Administration Emphasis, or School Health Education. A minor in Community Health Education is available, as well as an endorsement for School Health Education.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | STAT 1040 | Introduction to Statistics (recommended for Social Science majors) (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra (recommended for Business majors) (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | BIOL 1010 | General Biology | 3 |
| or | BIOL 1610 | College Biology I (4) | |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 25 Credits |
| Complete the following: | | | |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | HLTH 1200 | First Aid | 3 |
| | HLTH 2400 | Concepts of Stress Management | 3 |
| | HLTH 2800 | Human Sexuality | 3 |
| | HLTH 2600 | Drugs Behavior and Society | 3 |
| Complete 10 credits from the following: | | | 10 |
| | COMM 2110 | Interpersonal Communication (3) | |
| | ENVT 2560 | Environmental Health (3) | |
| | HLTH 1300 | Medical Terminology I (2) | |
| | HLTH 2000 | Body Image Self-Esteem and Weight Management (3) | |
| | HLTH 2200 | Introduction to Health Professions (2) | |
| | NUTR 2020 | Nutrition Through the Life Cycle (3) | |
| | PSY 1100 | Human Development Life Span (3) | |
| | PSY 2250 | Psychology of Interpersonal Relationships (3) | |
| | SOC 1010 | Introduction to Sociology (3) | |
| | Or any other department approved 1000 or 2000 level course | | |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall GPA of 2.50 or above with no grade lower than a C- in core courses.
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Health Sciences, A.S.

### *Requirements*

The Associate of Science (AS) in Health Sciences will provide students who are undecided on which health program they will pursue an opportunity to complete an AS degree that includes some of the prerequisites for the BS degrees in health profession programs offered by Utah Valley University (UVU), and many of the health degrees offered across the USHE system. This Associate of Science in Health Sciences will allow the student to continue their education at UVU and other USHE schools in the areas of biology, chemistry, exercise science, and other health and science BS degrees. The degree includes instruction in medical terminology, physiology, anatomy, and other areas that will give the students a realistic overview of the health sciences. The Associate of Science in Health Sciences is transferrable to other colleges and universities and can be used as the foundation for moving on to a variety of health related disciplines preparing students to become a health professional.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |

| | | | |
|---|---|---|---|
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 4 |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values | |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | COMM 1020 | Public Speaking | 2 |
| and | COMM 1025 | Public Speaking Lab | 1 |
| | Fine Arts Distribution | | 3 |
| | PSY 1010 | General Psychology | 3 |
| | BIOL 1010 | General Biology | 3 |
| or | BIOL 1610 | College Biology I (4) | |
| | CHEM 1010 | Introduction to Chemistry | 3 |
| or | CHEM 1110 | Elementary Chemistry for the Health Sciences (4) | |
| | PHYS 1010 | Elementary Physics | 3 |
| Discipline Core Requirements: | | | 24 Credits |
| | ZOOL 2320 | Human Anatomy | 3 |
| and | ZOOL 2325 | Human Anatomy Laboratory | 1 |
| | ZOOL 2420 | Human Physiology | 3 |
| and | ZOOL 2425 | Human Physiology Laboratory | 1 |
| | STAT 2040 | Principles of Statistics | 4 |
| or | BESC 3010 | Statistics for the Behavioral Sciences (4) | |
| Complete 12 credits from the following. Courses cannot be counted multiple times. | | | 12 |
| | BIOL 1610 | College Biology I (4) (If not taken for GE) | |
| | BIOL 1615 | College Biology I Laboratory (1) | |
| | SOC 1010 | Introduction to Sociology (3) | |
| or | PSY 1100 | Human Development Life Span (3) | |
| | HLTH 1300 | Medical Terminology I (2) | |
| | RESP 1540 | Survey of Respiratory Therapy (1) | |
| | MICR 2060 | Microbiology for Health Professions (3) | |
| | MICR 2065 | Microbiology for Health Professions Laboratory (1) | |
| | MICR 3450 | General Microbiology (3) | |
| | MICR 3455 | General Microbiology Laboratory (1) | |
| | PHYS 2010 | College Physics I (4) | |
| | PHYS 2015 | College Physics I Lab (1) | |
| | PHYS 2020 | College Physics II (4) | |
| | PHYS 2025 | College Physics II Lab (1) | |
| | CHEM 1210 | Principles of Chemistry I (4) | |
| | CHEM 1215 | Principles of Chemistry I Laboratory (1) | |
| | CHEM 1220 | Principles of Chemistry II (4) | |
| | CHEM 1225 | Principles of Chemistry II Laboratory (1) | |
| | PSY 2300 | Abnormal Psychology (3) | |
| | ZOOL 4400 | Pathophysiology (4) | |
| | Or other department approved courses | | |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours though course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Health, Certificate of Proficiency

### *Requirements*

The Health certificate is available to all UVU students with a particular focus designed to provide high school students an opportunity to obtain a certificate of proficiency in a Career and Technical Education (CTE) field while still enrolled in high school and stack into certificate, associate and bachelor degrees at UVU. This certificate is available from the University for college students/adults looking for entry-level skills leading to further academic advancement and learn more about the Health field.

**Total Program Credits: 16**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 17 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | PSY 1100 | Human Development Life Span | 3 |
| or | PSY 1010 | General Psychology (3) | 3 |
| | NUTR 1020 | Foundations of Human Nutrition | |
| | BIOL 1610 | College Biology I | 4 |
| | Complete one of the following: | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | STAT 1040 | Introduction to Statistics (3) | |

| | | | |
|---|---|---|---|
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | | | |

**Graduation Requirements:**

1. Completion of a minimum of 16 semester credits.
2. Overall grade point average of 2.5 or above.
3. All core courses must be completed with grade 'C' or higher.

## Public and Community Health, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Public and Community Health is available for all UVU students with a particular focus designed to provide high school students an opportunity to obtain a stackable certificate of proficiency with an emphasis in career and technical education while still enrolled in high school. This certificate is available from the University for college students/adults looking for basic entry-level skills leading to further academic advancement and learn more about Public and Community Health as a career field.

**Total Program Credits: 15**

| Discipline Core Requirements: | | | 15 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | BIOL 1010 | General Biology | 3 |
| | HLTH 1200 | First Aid | 3 |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | Complete one of the following: | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |

**Graduation Requirements:**

1. Completion of a minimum of 15 semester credits.
2. Overall grade point average of 2.5 or above.
3. All core courses must be completed with grade 'C' or higher.

## Community Health Education, Minor

### *Requirements*

Students in the Department of Public and Community Health may receive an Associate in Science or Arts with an emphasis in Community Health: an Integrated Studies Bachelor of Science or Arts with a Community Health Emphasis; a Bachelor of Science in Community Health in one of the following areas: Community Health Emphasis, Health Services Administration Emphasis, or School Health Education. A minor in Community Health Education is available, as well as an endorsement for School Health Education.

**Total Program Credits: 21**

| Matriculation Requirements: |
|---|
| 1. Admitted to a bachelor degree program at UVU. |

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | HLTH 2600 | Drugs Behavior and Society | 3 |
| | HLTH 2800 | Human Sexuality | 3 |
| | HLTH 3200 | Principles of Community Health | 3 |
| | HLTH 3220 | Foundations of Health Education | 3 |
| | HLTH 3260 | Theory-Based Approaches to Modifying Health Behavior | 3 |
| Elective Requirements: | | | 3 Credits |
| | Any upper-division HLTH course not used in Discipline Core | | 3 |

**Graduation Requirements**

Overall GPA of 2.50 or above with a minimum GPA of 2.75 in all core and elective courses. No grade lower than a C- in core or elective courses.

## School Health Education, Minor

### *Requirements*

Students MUST have a Secondary Education degree to certify with the School Health Education Endorsement.

**Total Program Credits: 26**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 26 Credits |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | HLTH 2900 | Health Education for Elementary Teachers (2.0) | |
| | HLTH 1200 | First Aid | 3 |
| | HLTH 2400 | Concepts of Stress Management | 3 |
| | HLTH 2600 | Drugs Behavior and Society | 3 |
| | HLTH 2800 | Human Sexuality | 3 |
| | HLTH 3220 | Foundations of Health Education | 3 |
| | HLTH 4100 | Health Education Curriculum for Secondary Teachers | 3 |
| | HLTH 4200 | Health Education Teaching Methods WE | 3 |

**Graduation Requirements**

GPA of 3.0 or higher with no grade lower than a C in discipline core courses.

## Healthcare Administration, B.S.

### *Requirements*

The Bachelor of Science in Healthcare Administration provides students a solid foundation in the skills necessary to serve as an effective and competent administrator within any healthcare setting. Healthcare Administration graduates are prepared to work in entry and middle management positions within public, private, and non-profit health agencies. Responsibilities include administration and management tasks such as developing, planning, managing, and leading health care

operations and services, and directing changes in healthcare laws and regulation. The Healthcare Administration program at UVU includes 116 credit hours of coursework and four credit hours of internship experience for a total of 120 credit hours. The Department of Public Health strives to schedule courses to allow students to complete these requirements within a four-year timeframe while meeting the needs of traditional and non-traditional students.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| In order to be matriculated into the 'Healthcare Administration' program, students must:<br><br>1. Complete: ENGL 1010 or ENGH 1005 (ENGH 1005 requires a C or higher in order for students to qualify for ENGL 2010), ENGL 2010, BIOL 1010OR BIOL 1610, ZOOL 1090, HLTH 3200 and MATH 1050 or 1055 or MATH 1090 with a minimum grade of a C- or higher (with the exception ofENGH 1005 which requires a grade of C or higher) and a GPA of 2.5 in these courses<br>2. Submit a copy of your Personal Philosophy of Health<br>3. Submit a copy of your 1-, 5- and 10-year professional goals<br><br>Students will be required to complete the catalog requirements in effect for the semester in which matriculation is granted | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses | | | |
| | BIOL 1010 | General Biology | 3 |
| or | BIOL 1610 | College Biology I (4.0) | |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 76 Credits |
| | HLTH 3200 | Principles of Community Health | 3 |
| | HLTH 3230 | Professional Development for Community Health | 3 |
| | HLTH 3260 | Theory-Based Approaches to Modifying Health Behavior | 3 |
| | HLTH 3400 | Human Diseases | 3 |
| | HLTH 3700 | Grant Writing WE (3.0) | |
| or | HLTH 4600 | Research Methods for Community Health WE | 3 |
| | HLTH 3160 | Health Care Law | 3 |
| or | LEGL 3000 | Business Law (3.0) | |
| | HLTH 4250 | Public Health Organization and Policy WE | 3 |
| | HLTH 4300 | Community Health Ethics | 3 |
| | HLTH 440G | Health and Diversity | 3 |
| | HLTH 4500 | Healthcare Administration | 3 |
| | HLTH 4560 | Introduction to Healthcare Systems | 3 |
| | HLTH 4640 | Population Health and Strategic Management | 3 |
| | HLTH 4780 | Strategic Planning and Operations Management | 3 |
| | HLTH 482R | Community Health Internship | 4 |
| | ACC 3000 | Financial Managerial and Cost Accounting Concepts | 3 |
| | ECON 2010 | Principles of Economics I | 3 |
| | FIN 3100 | Principles of Finance | 3 |
| | HR 3430 | Introduction to Human Resource Management | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | INFO 3700 | Health Informatics Fundamentals | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| Emphasis Elective Requirements: | | | 9 Credits |
| | Complete 9 credits of any course 1000 or higher | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with a minimum of 40 upper-division credits. A minimum of at least 10 hours earned in the last 45 hours must be earned at UVU.
2. Overall GPA of 2.50 or above with a minimum GPA of 2.75 and no grade lower than a C- in all required and elective courses.
3. Completion of GE and specified departmental requirements.
4. Successful completion of at least one Global/Intercultural course.

# Public Health, B.S.

## *Requirements*

The Bachelor of Science in Public Health prepares students to serve as effective and competent public health professionals. Public health graduates are equipped with knowledge to help individuals, families, and communities improve and maintain healthy lifestyles. Students will be prepared to assess, plan, implement, manage, and evaluate public health programs. The curriculum provides a solid foundation in health behavior theory, data collection and analysis, social determinants of health, communication and marketing, policy and advocacy, and ethics. Students will be prepared to sit for the Certified Health Education Specialist exam. Public health professionals work in government, private, and nonprofit sectors. Employment settings include healthcare facilities, hospitals, state and local health departments, businesses, worksite wellness programs, schools, universities, and a variety of nonprofit organizations. The public health program at UVU includes 116 credits of coursework and four credits of internship experience for a total of 120 credit hours.

**Total Program Credits: 120**

| Matriculation Requirements: | |
|---|---|
| In order to be matriculated into the 'Public Health' program, students must:<br>1. Complete ENGL 1010 or ENGH 1005, ENGL 2010; BIOL 1010 or BIOL 1610; ZOOL 1090; and HLTH 3200 and MATH 1050 or 1055 or STAT 1040 or 1045 with a minimum grade of C- or higher (with the exception of ENGH 1005 requires a grade of C or higher) and a GPA of 2.5 in these courses.<br>2. Have an overall GPA of 2.50.<br>3. Submit a copy of your Personal Philosophy of Health.<br>4. Submit a copy of your one-, five- and 10-year professional goals.<br><br>Students will be required to complete the catalog requirements in effect for the semester in which matriculation is granted. | |

| General Education Requirements: | | | 35 Credits |
|---|---|---|---|
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: MATH 1050, MATH 1055 , STAT 1040 or STAT 1045 | | | 3 |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses | | | |
| | BIOL 1010 | General Biology | 3 |
| or | BIOL 1610 | College Biology I (4) | |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science[1] | | 3 |
| Discipline Core Requirements: | | | 59 Credits |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | HLTH 2600 | Drugs Behavior and Society | 3 |
| | HLTH 3200 | Principles of Community Health | 3 |
| | HLTH 3220 | Foundations of Health Education | 3 |
| | HLTH 3230 | Professional Development for Community Health | 3 |
| | HLTH 3260 | Theory-Based Approaches to Modifying Health Behavior | 3 |
| | HLTH 3400 | Human Diseases | 3 |
| | HLTH 3450 | Public Health and the Environment | 3 |
| | HLTH 350G | International Health | 3 |
| or | HLTH 440G | Health and Diversity (3) | |
| | HLTH 3600 | Social Marketing | 3 |
| | HLTH 3700 | Grant Writing WE (3) | |
| or | HLTH 4600 | Research Methods for Community Health WE | 3 |
| | HLTH 3750 | Biostatistics for Public Health | 3 |
| | HLTH 3800 | Epidemiology | 3 |
| | HLTH 4140 | Community Health Assessment and Program Development WE | 3 |
| | HLTH 4160 | Program Implementation and Evaluation WE | 3 |
| | HLTH 4250 | Public Health Organization and Policy WE | 3 |
| | HLTH 4300 | Community Health Ethics | 3 |
| | HLTH 482R | Community Health Internship (1) | 4 |
| | HLTH 4950 | Senior Capstone | 1 |
| Complete 12 credits from the following, at least 6 of which must be upper division) | | | 12 |
| | HLTH 1200 | First Aid (3) | |
| | HLTH 1300 | Medical Terminology I (3) | |
| | HLTH 2000 | Body Image, Self-Esteem, and Weight Management (3) | |
| | HLTH 2200 | Introduction to Health Professions (3) | |
| | HLTH 2400 | Concepts of Stress Management (3) | |
| | HLTH 2800 | Human Sexuality (3) | |
| | HLTH 3000 | Health Concepts of Death and Dying (3) | |

| | | | |
|---|---|---|---|
| | HLTH 3240 | Womens Health Issues (3) | |
| | HLTH 3300 | Health Promotion for Older Adults (3) | |
| | HLTH 4500 | Healthcare Administration (3) | |
| | HLTH 4720 | CHES Preparation (1) | |
| | HLTH 490R | Special Topics in Public Health (1) | |
| | NUTR 2020 | Nutrition Through the Life Cycle (3) | |
| | PSY 2300 | Abnormal Psychology (3) | |
| Elective Requirements | | | 14 |
| Any course 1000 or higher (may include courses counting toward a minor) | | | 14 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with a minimum of 40 upper-division credits. A minimum of at least 10 hours earned in the last 45 hours must be earned at UVU.
2. Overall GPA 0f 2.50 or above with a minimum GPA of 2.75 and no grade lower than a C- in all required and elective courses.
3. Completion of GE and specified departmental requirements.
4. Successful completion of at least one Global/Intercultural course.

| Footnote: |
|---|
| 1-HLTH 2800recommended. |

## School Health Education, B.S.

### *Requirements*

Students in the Department of Public and Community Health may receive an Associate in Science or Arts with an emphasis in Community Health: an Integrated Studies Bachelor of Science or Arts with a Community Health Emphasis; a Bachelor of Science in Community Health in one of the following areas: Community Health Emphasis, Health Services Administration Emphasis, or School Health Education. A minor in Community Health Education is available, as well as an endorsement for School Health Education.

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| 1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. Complete: ENGL 1010 or ENGH 1005, ENGL 2010, BIO 1010, ZOOL 1090, HLTH 3200, HLTH 3230 and MATH 1050, with a minimum grade of C<br>3. GPA of 3.0 or higher with no grade lower than C in discipline core course<br>4. Completion of all General Education requirements and the majority of discipline core courses<br>5. Pass LiveScan Criminal Background Check.<br>6. Submit a copy of your Personal Philosophy of Health<br>7. Submit a copy of your 1-, 5- and 10-year professional goals<br>8. Students will be required to complete the catalog requirements in effect for the semester in which matriculation is granted |

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | llege Algebra with Preliminaries (5.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2.0) | |
| Distribution Courses | | | |
| | BIOL 1010 | General Biology | 3 |
| or | BIOL 1610 | College Biology I (4.0) | |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 74 Credits |
| | HLTH 1200 | First Aid | 3 |
| | HLTH 2400 | Concepts of Stress Management | 3 |
| | HLTH 2600 | Drugs Behavior and Society | 3 |
| | HLTH 2800 | Human Sexuality | 3 |
| | HLTH 3200 | Principles of Community Health | 3 |
| | HLTH 3220 | Foundations of Health Education | 3 |
| | HLTH 3230 | Professional Development for Community Health | 3 |
| | HLTH 3260 | Theory-Based Approaches to Modifying Health Behavior | 3 |
| | HLTH 3400 | Human Diseases | 3 |
| | HLTH 3450 | Public Health and the Environment | 3 |
| | HLTH 4100 | Health Education Curriculum for Secondary Teachers | 3 |
| | HLTH 4200 | Health Education Teaching Methods WE | 3 |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| Secondary Education Courses: Must be completed with a grade of B- or higher | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |

| | | | |
|---|---|---|---|
| | EDSC 4200 | Classroom Management I (Dance Education majors take DANC 4430 in place of EDSC 4200 | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies (English Education majors take ENGL 4210, 4220, 4230 in place of EDSC 4440 | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| Elective Requirements: | | | 10 Credits |
| | Complete 10 credits of any course 1000 or higher | | 10 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with a minimum of 40 upper-division credits. A minimum of at least 10 hours earned in the last 45 hours must be earned at UVU.
2. Overall GPA of 3.0 or above with no grade lower than a C in major required discipline core courses and no grade lower than a B- in Licensure and Methods courses.
3. Completion of GE and specified departmental requirements.
4. Successful completion of at least one Global/Intercultural course.

# Public Service Graduate Programs

## Public Service Graduate Program

The Master of Public Service Graduate Program is in the College of Health and Public Service. To find the most up-to-date information on the Master of Public Service Graduate Program, visit their website.

Master of Public Service Graduate Program

## Course Descriptions

Criminal Justice..... 532
Emergency Services Emerg Mgmt.....629
Masters of Public Service.....715

## Degrees & Programs

### Public Service, M.P.S.

#### *Requirements*

The Master of Public Service at Utah Valley University is an applied inter-disciplinary professional master's degree aimed at preparing public service administrators in emergency services and criminal justice. This graduate degree provides an in-depth education of the science and praxis of administering vital public services, public safety functions, ethical considerations, leadership, and strategic communications, along with issues in emergency management, civil security/resiliency, public works, transportation, critical infrastructure protection, post-disaster humanitarian response, pandemics, strategic planning, public health, and public policy issues.

**Total Program Credits: 36**

| Matriculation Requirements: | |
|---|---|
| 1. A 3.0 cumulative GPA from the institution where the undergraduate degree was awarded or a 3.0 GPA calculated on the last 60 semester hours (90 quarter hours) from the institution where the undergraduate degree was awarded.<br><br>2. A bachelor's degree from a regionally-accredited college/university, a nationally accredited program, or an international college or university recognized by a Ministry of Education in one of the following or related fields: *<br><br>• Emergency Services<br>• Criminal Justice/Law Enforcement, Forensic Science<br>• Political Science<br>• Public and Community Health<br>• Aviation Science<br>• Emergency Management/Homeland Security<br>• Emergency Medical Services<br>• Business Administration, Organizational Management<br>• Environmental Science<br>• Public Admin/Public Management<br>• Social Science<br>• Technology Management<br><br>3. Graduate School Application.<br><br>4. Official transcripts from all attended institutions of higher education.<br><br>5. Two letters of recommendation.<br><br>6. Admissions Essay | |
| Discipline Core Requirements: | 24 Credits |

| | | | |
|---|---|---|---|
| | MPS 6000 | Public Services Administration | 3 |
| | MPS 6010 | Public Services Finance and Budgeting | 3 |
| | MPS 6020 | Public Services Policy and Evaluation | 3 |
| | MPS 6030 | Legal Issues for the Public Services | 3 |
| | MPS 6040 | Organizational Behavior in the Public Services | 3 |
| | MPS 6050 | Public Services Leadership and Ethics | 3 |
| | MPS 6060 | Research Methods for the Public Services | 3 |
| | MPS 690R | Public Services Project | 3 |
| Elective Requirements: | | | 12 Credits |
| Complete 12 credits | | | 12 |
| | ESMG 6100 | Psychology and the Emergency Services Responder (3.0) | |
| | ESMG 6110 | Disasters/Vulnerability/and Impacts (3.0) | |
| | ESMG 6120 | Emergency Planning and Response (3.0) | |
| | ESMG 6130 | Social Vulnerability in Emergencies (3.0) | |
| | ESMG 6140 | Homeland Security Fundamentals (3.0) | |
| | CJ 6200 | Advanced Topics in Criminal Justice (3.0) | |
| | CJ 6210 | Information-based Decision Making for Criminal Justice Administrators (3.0) | |
| | CJ 6220 | Contemporary Issues In Criminal Justice (3.0) | |
| | CJ 6230 | Criminal Justice Policy (3.0) | |
| | HLTH 6200 | Issues in Public Health (3.0) | |
| | MPS 679R | Special Topics in Public Services (1.0) | |
| | MPS 6400 | Public Services Program Development and Evaluation (3.0) | |
| | NSS 6500 | US National Security Policy and Strategy (3.0) | |
| | NSS 6700 | Intelligence Analysis and Tradecraft (3.0) | |
| | Graduate-level electives as approved by the MPS Director | | |

**Graduation Requirements:**

1. A minimum cumulative GPA of 3.0 or higher must be maintained within program.
2. All course work must be completed with a "B" or higher.

| Footnotes |
|---|
| * Applicants with a bachelor's degrees in other fields may be admitted if they have at least two years of public services experience and completed undergraduate courses with a B grade or better. These applications are handled on a case-by-case basis. |

# Public Service Graduate Programs

## Public Service Graduate Program

The Master of Public Service Graduate Program is in the College of Health and Public Service. To find the most up-to-date information on the Master of Public Service Graduate Program, visit their website.

Master of Public Service Graduate Program

## Course Descriptions

Criminal Justice..... 532
Emergency Services Emerg Mgmt.....629
Masters of Public Service.....715

## Degrees & Programs

### Public Service, M.P.S.

#### *Requirements*

The Master of Public Service at Utah Valley University is an applied inter-disciplinary professional master's degree aimed at preparing public service administrators in emergency services and criminal justice. This graduate degree provides an in-depth education of the science and praxis of administering vital public services, public safety functions, ethical considerations, leadership, and strategic communications, along with issues in emergency management, civil security/resiliency, public works, transportation, critical infrastructure protection, post-disaster humanitarian response, pandemics, strategic planning, public health, and public policy issues.

**Total Program Credits: 36**

| Matriculation Requirements: | |
|---|---|
| 1. A 3.0 cumulative GPA from the institution where the undergraduate degree was awarded or a 3.0 GPA calculated on the last 60 semester hours (90 quarter hours) from the institution where the undergraduate degree was awarded.<br><br>2. A bachelor's degree from a regionally-accredited college/university, a nationally accredited program, or an international college or university recognized by a Ministry of Education in one of the following or related fields: *<br><br>• Emergency Services<br>• Criminal Justice/Law Enforcement, Forensic Science<br>• Political Science<br>• Public and Community Health<br>• Aviation Science<br>• Emergency Management/Homeland Security<br>• Emergency Medical Services<br>• Business Administration, Organizational Management<br>• Environmental Science<br>• Public Admin/Public Management<br>• Social Science<br>• Technology Management<br><br>3. Graduate School Application.<br><br>4. Official transcripts from all attended institutions of higher education.<br><br>5. Two letters of recommendation.<br><br>6. Admissions Essay | |
| Discipline Core Requirements: | 24 Credits |

| | | | |
|---|---|---|---|
| | MPS 6000 | Public Services Administration | 3 |
| | MPS 6010 | Public Services Finance and Budgeting | 3 |
| | MPS 6020 | Public Services Policy and Evaluation | 3 |
| | MPS 6030 | Legal Issues for the Public Services | 3 |
| | MPS 6040 | Organizational Behavior in the Public Services | 3 |
| | MPS 6050 | Public Services Leadership and Ethics | 3 |
| | MPS 6060 | Research Methods for the Public Services | 3 |
| | MPS 690R | Public Services Project | 3 |
| Elective Requirements: | | | 12 Credits |
| Complete 12 credits | | | 12 |
| | ESMG 6100 | Psychology and the Emergency Services Responder (3.0) | |
| | ESMG 6110 | Disasters/Vulnerability/and Impacts (3.0) | |
| | ESMG 6120 | Emergency Planning and Response (3.0) | |
| | ESMG 6130 | Social Vulnerability in Emergencies (3.0) | |
| | ESMG 6140 | Homeland Security Fundamentals (3.0) | |
| | CJ 6200 | Advanced Topics in Criminal Justice (3.0) | |
| | CJ 6210 | Information-based Decision Making for Criminal Justice Administrators (3.0) | |
| | CJ 6220 | Contemporary Issues In Criminal Justice (3.0) | |
| | CJ 6230 | Criminal Justice Policy (3.0) | |
| | HLTH 6200 | Issues in Public Health (3.0) | |
| | MPS 679R | Special Topics in Public Services (1.0) | |
| | MPS 6400 | Public Services Program Development and Evaluation (3.0) | |
| | NSS 6500 | US National Security Policy and Strategy (3.0) | |
| | NSS 6700 | Intelligence Analysis and Tradecraft (3.0) | |
| | Graduate-level electives as approved by the MPS Director | | |

**Graduation Requirements:**

1. A minimum cumulative GPA of 3.0 or higher must be maintained within program.
2. All course work must be completed with a "B" or higher.

| Footnotes |
|---|
| * Applicants with a bachelor's degrees in other fields may be admitted if they have at least two years of public services experience and completed undergraduate courses with a B grade or better. These applications are handled on a case-by-case basis. |

# Secondary and Special Education

## Secondary and Special Education

The Secondary and Special Education department is in the School of Education. To find the most up-to-date information from the Secondary and Special Education department, visit their website.

Secondary and Special Education department

## Course Descriptions

Autism Studies....502
Edu Secondary Education....590
Edu Special Education....591
Physical Education Teacher Ed....737

## Degrees & Programs

### Autism Studies, Certificate of Proficiency

#### *Requirements*

The Autism Studies Certificate of Proficieny will be beneficial to anyone needing to work with, or interact with, those who have Autism Spectrum Disorder (ASD). This would include those in supervisory positions overseeing ASD adults, educators who may have students with an ASD diagnosis in their classrooms, counselors and medical professionals, emergency services personnel, librarians and other city personnel, and anyone seeking additional information and insight.

**Total Program Credits: 16**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 16 Credits |
| Prerequisites: | | | |
| | ENGL 1010 | Introduction to Academic Writing | |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| or | Writing proficiency determined by Autism Studies program director | | |
| Complete the following: | | | |
| | AUTS 250G | Understanding the Autism Spectrum | 3 |
| | AUTS 3810 | Autism Across the Lifespan I Infants and Children | 3 |
| | AUTS 382G | Autism across the Lifespan II Teens and Adults | 3 |
| | AUTS 3850 | Autism Assessment and Treatment | 3 |
| | AUTS 481R | Field Placement | 3 |
| | AUTS 482R | Group Autism Seminar | 1 |

**Graduation Requirements:**

1. Completion of a minimum 16 semester credits.
2. Overall GPA of 2.0 or above.
3. Residency hours -- minimum of 4 credit hours through course attendance at UVU.

### Autism Studies, Minor

#### *Requirements*

The Minor in Autism Studies will be beneficial to anyone needing to work with, or interact with, those who have an Autism Spectrum Disorder (ASD). This would include those in supervisory positions overseeing ASD adults, educators who may have students with an ASD diagnosis in their classrooms, counselors and medical professionals, emergency services personnel, information and insight.

**Total Program Credits: 19**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 19 Credits |
| Prerequisites: | | | |
| | ENGL 1010 | Introduction to Academic Writing | |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| or | Writing proficiency determined by Autism Studies program director | | |
| Complete the following: | | | |
| | AUTS 250G | Understanding the Autism Spectrum | 3 |
| | AUTS 3810 | Autism Across the Lifespan I Infants and Children | 3 |
| | AUTS 382G | Autism across the Lifespan II Teens and Adults | 3 |
| | AUTS 3850 | Autism Assessment and Treatment | 3 |
| | AUTS 4650 | Autism and Applied Behavior Analysis | 3 |
| | AUTS 481R | Field Placement | 3 |
| | AUTS 482R | Group Autism Seminar | 1 |

### Physical Education Teacher Education, B.S.

#### *Requirements*

Graduates from the Physical Education K-12 Teacher Education (PETE) program will be prepared to meet all standards for Utah licensure for K-12 Physical Education. They should also be prepared to meet most standards for certification in the rest of the 49 states, since the National Initial Physical Education Teacher Education Standards have been used to develop, assess, and update the program on an annual basis. The focus of this program is on enhancing student outcomes – both for university students and for their future students. Outcomes that should be met by the end of the program include scientific and theoretical knowledge, skill and fitness based competency, planning and implementation, instructional delivery and management, impact on student learning, and professionalism. PETE majors learn to individualize instruction to enhance learning for all students, regardless of their abilities.

**Total Program Credits: 120**

| Matriculation Requirements: |
|---|
| 1. Acceptance to the Secondary Education Program, which include the following requirements: (1) ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement. (2) GPA of 3.0 or higher with no grade lower than a C in content area courses. (3) Completion of all General Education requirements and the majority of content area courses. (4) Pass LiveScan Criminal Background Check.<br>2. Complete PETE 3100 with a grade of C or better. |

3. Fitness requirement: Students must achieve and maintain a health-enhancing level of fitness. Standards will be set according to expert guidelines that take info effect age, gender, disability, and other contributing factors.

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MATH 1050 | College Algebra | 4 |
| or | MATH 1055 | College Algebra with Preliminaries (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | BIOL 1010 | General Biology | 3 |
| or | BIOL 1610 | College Biology I (4) | |
| | Physical Science* | | 3 |
| | ZOOL 1090 | Introduction to Human Anatomy and Physiology | 3 |
| or | ZOOL 2320 | Human Anatomy (3) | |
| and | ZOOL 2325 | Human Anatomy Laboratory (1) | |
| and | ZOOL 2420 | Human Physiology (3) | |
| and | ZOOL 2425 | Human Physiology Laboratory (1) | |
| Humanities Distribution ** | | | 3 |
| Fine Arts Distribution | | | 3 |
| Social/Behavioral Science *** | | | 3 |
| Discipline Core Requirements: | | | 84 Credits |
| | HLTH 1200 | First Aid | 3 |
| | NUTR 1020 | Foundations of Human Nutrition | 3 |
| | EXSC 3500 | Kinesiology | 3 |
| | EXSC 3550 | Motor Learning and Control | 3 |
| | EXSC 3700 | Exercise Physiology | 3 |
| | EXSC 3705 | Exercise Physiology Laboratory | 1 |
| | EXSC 3750 | Psychosocial Aspects of Human Performance | 2 |
| | PETE 2120 | Fitness for Secondary Physical Educators | 1 |
| Complete one of the following | | | 1 |
| | PES 1010 | Aerobics I (1) | |
| | PES 1011 | Aerobics II (1) | |
| | PES 1050 | Powertone (1) | |
| | PES 1055 | Pilates I CoreMax Training (1) | |
| | PES 1057 | Power Yoga (1) | |
| | PES 1085 | Weight Training I (1) | |
| | PES 1086 | Weight Training II (1) | |
| | PES 1087 | Weight Training III (1) | |
| | PES 2050 | Aerobic Instructor Training (2) | |
| Complete 3 of the following areas of focus | | | 6 |
| Games & Sports (complete 1 team & 1 individual/dual) | | | |
| | PES 1200 | Basketball I (1) | |
| | PES 1201 | Basketball II (1) | |
| | PES 1210 | Volleyball I (1) | |
| | PES 1211 | Volleyball II (1) | |
| | PES 1212 | Volleyball III (1) | |
| | PES 1214 | Volleyball Club Team (1) | |
| | PES 1230 | Soccer I (1) | |
| | PES 1231 | Soccer II (1) | |
| | PES 1234 | Soccer Club Team (1) | |
| | PES 1254 | Lacrosse Club Team (1) | |
| | PES 1260 | Ice Hockey (1) | |
| | PES 1100 | Tennis I (1) | |
| | PES 1101 | Tennis II (1) | |
| | PES 1105 | Badminton (1) | |
| | PES 1110 | Racquetball I (1) | |
| | PES 1111 | Racquetball II (1) | |
| | PES 1131 | Golf II (1) | |
| | PES 1135 | Archery I (1) | |
| | PES 1136 | Archery II (1) | |
| | PES 1145 | Bowling I (1) | |
| | PES 1146 | Bowling II (1) | |
| | PES 1155 | Beginning Fencing (1) | |
| Dance & Rhythmic (2 different styles) | | | |
| | PES 201R | Elite Precision Team (1) | |
| | DANC 1100 | Beginning Ballet (1) | |
| | DANC 1200 | Beginning Modern/Contemporary Dance (1) | |
| | DANC 127R | Ballet Technique I (3) | |
| | DANC 141R | Intermediate Modern/Contemporary Dance (2) | |
| | DANC 1500 | Beginning Jazz Dance (1) | |
| | DANC 1510 | Intermediate Jazz Dance (1) | |
| | DANC 1520 | Folk Dance I (1) | |
| | DANC 1530 | Folk Dance II (1) | |
| | DANC 1540 | Clogging I (1) | |
| | DANC 1550 | Clogging II (1) | |
| | DANC 1560 | African Dance I (1) | |
| | DANC 1580 | Tap Dance I (1) | |

| | | | |
|---|---|---|---|
| | DANC 1590 | Hip Hop Dance I (1) | |
| | DANC 1600 | Hip Hop II (1) | |
| | DANC 1620 | Polynesian Dance I (1) | |
| | DANC 1700 | American Social Dance I (1) | |
| | DANC 1710 | International Ballroom Dance I (1) | |
| | DANC 1720 | Latin Ballroom Dance I (1) | |
| | DANC 1780 | Country Western Dance I (1) | |
| | DANC 1790 | Country Western Dance II (1) | |
| | DANC 2100 | Teaching Dance for Children (3) | |
| Individual Performance (2 different areas) | | | |
| | PES 1405 | Womens Safety Awareness and Self Defense (1) | |
| | PES 1410 | Introduction to Tai Chi (1) | |
| | PES 1415 | Survey of Martial Arts (1) | |
| | PES 1425 | Jiu Jitsu I (1) | |
| | PES 1426 | Jiu Jitsu II (1) | |
| | PES 1435 | Kenpo Karate I (1) | |
| | PES 1436 | Kenpo Karate II (1) | |
| | PES 1440 | Aikido (1) | |
| | PES 1460 | Kickboxing I (1) | |
| | PES 1670 | Ice Skating (1) | |
| Outdoor Pursuits (2 different activities) | | | |
| | REC 1500 | Canoeing I (1) | |
| | REC 1501 | Canoeing II (1) | |
| | REC 1505 | Whitewater Kayaking I (1) | |
| | REC 1506 | Whitewater Kayaking II (1) | |
| | REC 1516 | Ropes Course and Teambuilding (1) | |
| | REC 1521 | Indoor Rock Climbing I (1) | |
| | REC 1522 | Indoor Rock Climbing II (1) | |
| | REC 1525 | Mountaineering (1) | |
| | REC 1527 | Rock Climbing I (1) | |
| | REC 1528 | Rock Climbing II (1) | |
| | REC 1535 | Backpacking (1) | |
| | REC 1550 | Mountain Biking (1) | |
| | REC 1580 | Kayak Touring (1) | |
| | REC 1600 | Winter Exploration (1) | |
| Aquatics (2 credits or current WSI) | | | |
| | PES 1300 | Swimming I (1) | |
| | PES 1301 | Swimming II (1) | |
| | PES 1315 | Water Aerobics (1) | |
| | PETE 2500 | Skill Analysis and Competency for PETE Majors | 3 |
| | PETE 2700 | Foundations of Physical Education K-12 Teacher Education | 3 |
| | PETE 3100 | Introduction to Physical Education Pedagogy | 3 |
| | PETE 3450 | Special Populations in Physical Education | 3 |
| | PETE 4200 | Methods of Teaching Elementary Physical Education | 3 |
| | PETE 4250 | Methods of Teaching Secondary Physical Education | 3 |
| | PETE 4400 | Assessment in Physical Education | 3 |
| | PETE 4900 | Student Teaching Seminar for Physical Education | 1 |
| Additional 4 credits of any courses | | | 4 |
| Secondary Education Courses: | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| | EDSP 340G | Exceptional Students | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits with 40 semester credits from 3000 and 4000 level courses.
2. Overall GPA of 3.0 (B) or above with no grade lower than a C in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

| footnotes: |
|---|
| * CHEM 1010 or CHEM 1110 recommended. |
| ** COMM 1020 and COMM 1025 recommended. |
| *** PSY 1100 recommended |

## Secondary Education, Licensure

### *Requirements*

The Professional Teacher Education Program at Utah Valley University is designed to prepare quality, entry level candidates for teaching in secondary education programs grades 7-12.

All students who matriculate into the professional licensure program must have a major in an approved content area. Students seeking licensure in approved content areas complete a major in that area and required coursework in Secondary Education to qualify for a Level I Utah State Professional Educator License for grades 7-12.

Baccalaureate degrees (BS and BA) are granted through the content area department and not through the School of Education. Licensure is granted through the School of Education Program.

To continue in the teacher education program, students are expected to maintain all program standards. They must maintain expected levels

of competence in all coursework, field work, and student teaching with all course grades at or above a B- or higher. Additionally, teacher candidates are expected to adhere to standards of personal integrity, responsibility, and citizenship commonly expected of professional educators.

**Total Program Credits: 32**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. ACT or SAT Reading-ACT composite score of 21 with a Verbal/ English score of 20 or higher or combined SAT score of 1000 with Verbal score 450 or higher. Writing-English 2010 passed with C+ or better. Math-ACT. Math Quantitative score of 19 or higher or SAT Mathematics score 450 or higher or passing Math 1030 (35), Math 1040 (45), or 1050 (55) with a C+ or higher. If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check. | | | |
| Discipline Core Requirements: | | | 32 Credits |
| Pre-Professional Core Requirements | | | |
| | EDSC 1010 | Introduction to Education | 2 |
| Discipline Core Courses[1] | | | |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSP 340G | Exceptional Students | 2 |
| | EDSC 4200 | Classroom Management I[2] | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 4440 | Content Area Literacies[3] | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |

| Footnotes: |
|---|
| [1] Must be completed with a grade of B- or higher. |
| [2] Dance Education majors take DANC 4430 in place of EDSC 4200. |
| [3] English Education majors take ENGL 4210, 4220, 4230 in place of EDSC 4440. |

## Special Education - Mild/Moderate/Severe and Autism Studies, B.S.

### *Requirements*

The Special Education - Mild/Moderate/Severe and Autism Studies, B.S. Program at Utah Valley University is designed to prepare quality, entry-level candidates for teaching students with mild to moderate disabilities in special education programs grades K-12. Students successfully completing the Teacher Education Program graduation and licensure requirements will receive a BS in Special Education - Mild/Moderate/ Severe and Autism Studies, B.S. and a Level I Utah Professional Teaching License. Through electives, students can choose to specialize in concentration areas such as Autism Studies or Secondary Special Education Mathematics. To continue in the Teacher Education Program, students are expected in all coursework, to maintain all program standards. They must maintain expected levels of competence in fieldwork and student teaching placements with all course grades at or above a B- and a program GPA of 3.00 or higher. In addition, teacher candidates are expected to adhere to standards of personal integrity, responsibility, and citizenship commonly expected of professional educators.

**Total Program Credits: 122**

| Matriculation Requirements | | | |
|---|---|---|---|
| Admission criteria includes:<br>1. ACT/SAT Reading-ACT composite score of 21 with a Verbal/ English score no less than 20 or combined SAT score of 1000 with Verbal score 450 or higher Writing-English 2010 passed with C or better Math-ACT Math/Quantitative score 19 or higher or SAT Mathematics score 450 or higher or passing MATH 1050, 1055, or 2000 with a C or higher<br>2. GPA of 3.0 or higher<br>3. General Education and Pre-program coursework<br>4. Grade of B- or higher in pre-program courses (Math courses C or higher)<br>5. Pass LiveScan Criminal Background Check<br>6. (Optional) Completion of the Associate of Science degree in Pre-Elementary Education or equivalent (completion of this degree does not guarantee acceptance into the UVU Special Education Program) | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following:[1] | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 2000 | Algebraic Reasoning with Modeling (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 2900 | Health Education for Elementary Teachers | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |

| | | | |
|---|---|---|---|
| | PSY 1100 | Human Development Life Span [1] | 3 |
| | Fine Arts Distribution: | | |
| | ART 2100 | Teaching Art for Children (3) | 3 |
| | DANC 2100 | Teaching Dance for Children (3) | |
| | MUSC 2100 | Teaching Music for Children (3) | |
| | THEA 2100 | Teaching Theatre For Children (3) | |
| Discipline Core Requirements: | | | 84 Credits |
| Pre-Professional Core Requirements: [2] | | | |
| | AUTS 250G | Understanding the Autism Spectrum | 3 |
| | EDEL 1010 | Introduction to Education [3] | 2 |
| | EDEL 2330 | Childrens Literature [3] | 3 |
| | EDSP 2840 | Instruction and Assistive Technology | 2 |
| | MATH 2010 | Mathematics for Elementary Teachers I [1] | 3 |
| | MATH 2020 | Mathematics for Elementary Teachers II [1] | 3 |
| Professional Education Core Requirements:[3] | | | |
| | AUTS 3810 | Autism Across the Lifespan I Infants and Children | 3 |
| | AUTS 382G | Autism across the LIfespan II Teens and Adults | 3 |
| | AUTS 3850 | Autism Assessment and Treatment | 3 |
| | AUTS 4650 | Autism and Applied Behavior Analysis | 3 |
| | AUTS 481R | Field Placement (1) [4] | 3 |
| | AUTS 482R | Group Autism Seminar (1) [4] | 1 |
| | EDSP 3000 | Educational Psychology | 3 |
| | EDSP 340G | Exceptional Students [3] | 2 |
| | EDSP 4100 | Instructional Strategies and Program Management for Students with Mild/ Moderate Disabilities | 3 |
| | EDSP 4110 | Special Education Law/Policies/ Procedures | 3 |
| | EDSP 4120 | School to Post-School Transition Planning | 2 |
| | EDSP 4130 | Math Instruction for Students with Mild/ Moderate Disabilities | 2 |
| | EDSP 4131 | Math Practicum | 1 |
| | EDSP 4135 | Reading and Writing Instruction for Students with Mild/Moderate Disabilities K-12 | 2 |
| | EDSP 4136 | Reading Practicum | 1 |
| | EDSP 4140 | Collaboration and Consultation with Parents and School Staff WE | 3 |
| | EDSP 4160 | Assessment and Evaluation in Special Education | 3 |
| | EDSP 4170 | Instruction in Life Skills for Students with Severe and Significant Disabilities | 3 |
| | EDSP 4180 | Curriculum and Instruction for Students with Severe and Significant Disabilities | 3 |
| | EDSP 4200 | Classroom Management I | 2 |
| | EDSP 4250 | Classroom Management II | 2 |
| | EDSP 4440 | Content Literacy | 3 |
| | EDSP 445G | Multicultural Education/ESL | 3 |
| | EDSP 455G | Curriculum Design and Assessment | 3 |
| | EDSP 4885 | Special Education Student Teaching--Grades K-6 | 6 |
| or | EDSP 4895 | Special Education Student Teaching--7-12 (4) | |
| | EDSP 4990 | Teacher Performance Assessment Project WE [4] | 2 |
| Elective Requirements: | | | 3 Credits |
| Complete additional credits to meet requirements. | | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 122 semester credits.
2. Overall grade point average of 3.0 or above.
3. Residency hours -- minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Application forms are available at the beginning of each Fall semester, must be completed by October 1st, and can be obtained in the Education Department, 801-863-8527.

| Footnotes |
|---|
| [1] "C" grade or higher |
| [2] Students must complete all Pre-Professional and General Education courses with an overall GPA of 3.0 before they are formally admitted into theTeacher Preparation Program. Students must meet with their academic advisor to determine which classes to take 1st, 2nd, 3rd, and 4thsemesters. |
| [3] Must be completed with a grade of B- or higher. |
| [4] Taken with student teaching. Must register for AUTS 481R and AUTS 482R plus attend 482R class once a week during student teaching. |

# Social Work Graduate Programs

## Social Work Graduate Programs

The Master of Social Work Graduate Programs are in the College of Humanities and Social Sciences. To find the most up-to-date information on the Master of Social Work Graduate Programs, visit their website.

Master of Social Work Graduate Programs

## Course Descriptions

Social Work.....781

## Degrees & Programs

### Master of Social Work Advanced Standing, M.S.W.

#### *Requirements*

The Master of Social Work (MSW) at UVU is designed to educate and prepare students for a career at the next level in the social work profession. The MSW will prepare students to become a Licensed Clinical Social Worker (LCSW) qualifying them for a wider range of employment opportunities (mental health, medical social work, child welfare, etc.) working with various populations (children, adolescents, adults, elderly, disabled, etc.). The MSW Program will have three different specializations: Mental Health, Addictions (including substance and nonsubstance addictions, i.e. pornography, gambling, painkillers, etc.), and Engaging with Diverse Populations.

Total Program Credits: 44

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 38 Credits |
| Social Work Core | | | |
| | SW 6407 | Advanced Social Work Ethics | 3 |
| Advanced Standing Bridge Requirement | | | |
| | SW 6490 | MSW Advanced Standing Bridge Course | 4 |
| | SW 6491 | MSW Advanced Standing Skills Course | 4 |
| Complete the following: | | | |
| | SW 6030 | Social Work Practice III-Advanced Practice with Individuals and Families | 3 |
| | SW 6050 | Social Work Practice V-Advanced Practice with Organizations and Communities | 3 |
| | SW 6320 | Social Work Practice with Diverse Groups and Populations | 3 |
| | SW 6400 | Social Work Research Methods | 3 |
| | SW 6500 | Addictions | 3 |
| | SW 6950 | MSW Capstone | 2 |
| Field Practicum Requirement | | | |
| Complete the following: | | | |
| | SW 6830 | Integrative Seminar III | 1 |
| and | SW 6930 | Advanced Field Practicum I | 4 |
| | SW 6840 | Integrative Seminar IV | 1 |
| and | SW 6940 | Advanced Field Practicum II | 4 |

| | | | |
|---|---|---|---|
| Elective Requirements: | | | 6 Credits |
| Choose 6 credits from the following: | | | 6 |
| | SW 6530 | Psychopharmacology (3) | |
| | SW 6610 | Spirituality in Social Work (3) | |
| | SW 6620 | Family Therapy (3) | |
| | SW 6630 | Mental Health Diagnosis (3) | |
| | SW 6640 | Crisis Intervention (3) | |
| | SW 6650 | Couples Therapy (3) | |
| | SW 6660 | Family Violence Across the Lifespan (3) | |
| | SW 6700 | Advanced Practice with Communities of Color and Other Diverse Populations (3) | |
| | SW 679R | Engaging and Empowering the Latino Community (3) | |
| | SW 6945 | Special Topics in Social Work Practice (1) | |
| or | other departmental approved courses | | |

Graduation Requirements:

1. Completion of a minimum of 44 semester credits required in the Master of Social Work degree.
2. A minimum of two-thirds credits of graduate degree credit hours must be completed at Utah Valley University.
3. Overall grade point average of 3.0 or higher in all Master of Social Work courses.
4. A grade of "C" or higher required for all courses used to satisfy graduation requirement

### Social Work, M.S.W.

#### *Requirements*

The Master of Social Work (MSW) at UVU is designed to educate and prepare students for a career at the next level in the social work profession. The MSW will prepare students to become a Licensed Clinical Social Worker (LCSW) qualifying them for a wider range of employment opportunities (mental health, medical social work, child welfare, etc.) working with various populations (children, adolescents, adults, elderly, disabled, etc.). The MSW Program will have three different specializations: Mental Health, Addictions (including substance and nonsubstance addictions, i.e. pornography, gambling, painkillers, etc.), and Engaging with Diverse Populations.

**Total Program Credits: 64**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 55 Credits |
| Social Work Core | | | |
| Complete the following: | | | |
| | SW 6000 | Social Work Practice I-- Individuals and Families | 3 |
| | SW 6020 | Social Work Practice II-Groups | 3 |
| | SW 6030 | Social Work Practice III-Advanced Practice with Individuals and Families | 3 |
| | SW 6050 | Social Work Practice IV-Advanced Practice with Organizations and Communities | 3 |
| | SW 6200 | Human Behavior and the Social Environment I | 3 |

| | | | |
|---|---|---|---|
| | SW 6210 | Human Behavior and the Social Environment II | 3 |
| | SW 6300 | Social Welfare Policy and Analysis | 3 |
| | SW 6320 | Social Work Practice with Diverse Groups and Populations | 3 |
| | SW 6400 | Social Work Research Methods | 3 |
| | SW 6407 | Advanced Social Work Ethics | 3 |
| | SW 6500 | Addictions | 3 |
| | SW 6950 | MSW Capstone | 2 |
| Field Practicum Requirement | | | |
| Complete the following: | | | |
| | SW 6810 | Integrative Seminar I | 1 |
| and | SW 6910 | Foundation Field Practicum I | 4 |
| | SW 6820 | Integrative Seminar II | 1 |
| and | SW 6920 | Foundation Field Practicum II | 4 |
| | SW 6830 | Integrative Seminar III | 1 |
| and | SW 6930 | Advanced Field Practicum I | 4 |
| | SW 6840 | Integrative Seminar IV | 1 |
| and | SW 6940 | Advanced Field Practicum II | 4 |
| Elective Requirements: | | | 9 Credits |
| Complete 9 credits from the following | | | 9 |
| | SW 6530 | Psychopharmacology (3) | |
| | SW 6610 | Spirituality in Social Work (3) | |
| | SW 6620 | Family Therapy (3) | |
| | SW 6630 | Mental Health Diagnosis (3) | |
| | SW 6640 | Crisis Intervention (3) | |
| | SW 6650 | Couples Therapy (3) | |
| | SW 6660 | Family Violence Across the Lifespan (3) | |
| | SW 6700 | Advanced Practice with Communities of Color and Other Diverse Populations (3) | |
| | SW 679R | Engaging and Empowering the Latino Community (3) | |
| | SW 6945 | Supplemental Field Practicum (1) | |
| or | other departmental approved courses | | |

**Graduation Requirements:**

1. Completion of a minimum of 64 semester credits required in the Master of Social Work degree.
2. A minimum of two-thirds of graduate degree credit hours must be completed at Utah Valley University.
3. Overall grade point average of 3.0 or higher in all Master of Social Work courses.
4. A grade of "C" or higher required for all courses used to satisfy graduation requirement.

# Strategic Management and Operations

## Strategic Management and Operations

The Strategic Management department is in the Woodbury School of Business. To find the most up-to-date information from the Strategic Management department, visit their website.

Strategic Management department

**DEPARTMENT CHAIR**

**ADAMS, Lynn L.** *Associate Professor*

**FACULTY**

**ADAMS, Lynn L.** *Associate Professor*
**CALISKAN, Cenk** *Associate Professor*
**EL SAIDI, Mohammed** *Professor*
**GOUGH, Vance** *Associate Professor*
**HAMIDI, Mohsen** *Assistant Professor*
**HAMILTON, Carolyn** *Associate Professor*
**MCARTHUR, David N.** *Associate Professor*
**MILLER, Ronald** *Professor*
**MILLIGAN, Patrick** *Professional In Residence*
**MORTENSEN, James** *Professional In Residence*
**PARKER, Tammy** *Associate Professor*
**RHOADS, Kevin A.** *Assistant Professor*
**ROBINSON, Peter B.** *Professor*
**SEELEY, Eugene L.** *Associate Professor*
**SMITH, Gregory Richard** *Professional in Residence*
**WARMBIER, H. Peter** *Lecturer*
**WITT, Phillip W.** *Assistant Professor*

# Course Descriptions

Entrepreneurship..... 618
Business Management..... 704

# Degrees & Programs

## Associate in Science in Business, A.S.B.

### *Requirements*

An Associate in Science Woodbury School of Business transfer degree is available for students planning to transfer to another college or university in Utah.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | ECON 2010 | Principles of Economics I (fulfills Social/Behavioral Science credit) | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| Discipline Core Requirements: | | | 25 Credits |
| | ACC 2110 | Principles of Accounting I | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| or | STAT 2040 | Principles of Statistics (4) | |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Complete one of the following: | | | 3 |
| | IM 2010 | Business Computer Proficiency (3)[1] | |
| | IM 2600 | Spreadsheet Applications (3)[1] | |
| Complete an additional 7 credit hours from any course numbered 1000 or higher. | | | 7 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 or above with 2.5 GPA or above in Business courses. No grade below C- in business courses.
3. Residency hours: Minimum of 20 credit hours through course attendance at UVU with at least 12 credits of School of Business courses.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

Notes: See information on the back of the program card for additional specialized general education/major requirements for individual transfer schools (some requirements for other schools cannot be taken at UVU.

| Footnote |
|---|
| [1] Students are required to complete IM 2010 or IM 2600 with a grade of B- or higher. |

## Business Management, A.A.S.

### *Requirements*

Students majoring in business management may receive a Certificate of Completion, an Associate in Applied Science in Business Management, an Associate in Science with a pre-major in Business, a Bachelor of Science in Hospitality Management, or a Bachelor of Science in Business Management with a specialization in one of the following four areas: Entrepreneurship, General Business, Hospitality Management, or International Business. An Associate in Science Woodbury School of Business transfer degree is available for students planning to transfer to another college or university in Utah.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 11 Credits |
| ENGLISH | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| MATHEMATICS | | | |
| Complete one of the following | | | 4 |
| | MAT 1000 | Integrated Beginning and Intermediate Algebra (5) | |
| | MAT 1010 | Intermediate Algebra (4) | |
| | Any approved Physical Education, Health, Safety or Environment course | | 1 |
| | FIN 1060 | Personal Finance | 3 |
| Discipline Core Requirements: | | | 24 Credits |
| | ACC 2110 | Principles of Accounting I | 3 |
| | IM 2600 | Spreadsheet Applications | 3 |
| | MGMT 1010 | Introduction to Business | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | ENTR 2500 | Creativity and Entrepreneurial Thinking | 3 |
| | DGM 2120 | Web Essentials | 3 |
| | DGM 1220 | Digital Design Essentials | 3 |
| Elective Requirements: | | | 28 Credits |
| | Any ACC, ECON, FIN, HM, LEGL, MGMT, MKTG course 1000 level or higher [1] | | 28 |
| | MTECH students will receive 28 credits for electives with a 900+ hour certificate in any technical area. | | |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above with 2.5 required for all Woodbury School of Business courses. No grade below C- in required courses.
3. Residency hours: Minimum of 20 credit hours through course attendance at UVU with at least 12 credits of Woodbury School of Business courses.
4. Completion of GE and specified departmental requirements.

| Footnote |
|---|
| [1] No more than three credits of MGMT 281R Cooperative Work Experience will be allowed as business elective; see advisor for further recommendations. |

## Pre-Major in Business, A.S.

### *Requirements*

Students majoring in business management may receive a Certificate of Completion, an Associate in Applied Science in Business Management, an Associate in Science with a pre-major in Business, a Bachelor of Science in Hospitality Management, or a Bachelor of Science in Business Management with a specialization in one of the following four areas: Entrepreneurship, General Business, Hospitality Management, or International Business. An Associate in Science Woodbury School of Business transfer degree is available for students planning to transfer to another college or university in Utah.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | ECON 2010 | Principles of Economics I | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 15 Credits |
| Choose 15 credits from the following list: | | | 15 |
| | ACC 2110 | Principles of Accounting I (3) | |
| | ACC 2120 | Principles of Accounting II (3) | |
| | ENTR 2500 | Creativity and Entrepreneurial Thinking (3) | |
| | MGMT 2240 | Business Calculus (3) | |

| | | | |
|---|---|---|---|
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I (3) | |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals (3) | |
| | MKTG 220G | Written Business Communication WE (3) | |
| | MKTG 2390 | Professional Business Presentations (3) | |
| | IM 2010 | Business Computer Proficiency (3)[1] | |
| or | IM 2600 | Spreadsheet Applications (3)[1] | |
| Elective Requirements: | | | 10 Credits |
| Complete an additional 10 credits of any course numbered 1000 or higher. | | | 10 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 or above with 2.5 GPA in Business courses. No grade below "C-" in Business courses.
3. Residency hours: Minimum of 20 credit hours through course attendance at UVU with at least 12 credits of Woodbury School of Business courses.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.

| Footnote |
|---|
| * Students will be required to complete IM 2010 or IM 2600 with a grade of B- or higher. |

## Business Management, Certificate of Completion

### *Requirements*

Students completing this program of study may receive a Certificate of Completion in Business Management.

**Total Program Credits: 30**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 24 Credits |
| | FIN 1060 | Personal Finance | 3 |
| | MGMT 1010 | Introduction to Business | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | ACC 1150 | Fundamentals of Business Math | 3 |
| | ACC 2110 | Principles of Accounting I | 3 |
| | ECON 1010 | Economics as a Social Science | 3 |
| | Choose one of the following: | | 3 |
| | IM 2010 | Business Computer Proficiency (3)[1] | |
| | IM 2600 | Spreadsheet Applications (3)[1] | |
| Elective Requirements: | | | 6 Credits |
| Choose six credits of business electives from the ACC, ECON, FIN, HM, LEGL MKTG, or MGMT prefixes. A maximum of 3 credits may be cooperative work experience. | | | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 30 semester credits.
2. Overall grade point average of 2.0 or above with 2.5 GPA or above in Business courses. No grade below "C-" in business courses.
3. Residency hours: Minimum of 10 credit hours through course attendance at UVU with at least 12 credits of Woodbury School of Business courses.

| Footnote |
|---|
| [1] Students are required to complete IM 2010, or IM 2600 with a score of 80 percent or higher. |

## Data Analytics and Decision Making, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in DataAnalytics and Decision Making provides a skill set of recognizing the importance of data for solving operational, tactical, and strategic level organizational problems. Students will learn how to evaluate the characteristics, capabilities, and limitations of digital data as well as understand data-related laws and ethical practices. Courses cover topics related to the data analytics process, business rule modeling, data transformation, data management, applied statistics, data visualization, storytelling, and the ethical considerations of data analytics.

**Total Program Credits: 18**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 18 Credits |
| | MGMT 1400 | Introduction to Data Analytics | 3 |
| | CS 1400 | Fundamentals of Programming | 3 |
| | MATH 1050 | College Algebra (MATH 1050 or higher)[1] | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1100 | Introduction to Calculus (4)[3] | |
| | MGMT 2240 | Business Calculus (3) | |
| | MGMT 2340 | Business Statistics I (3) | |
| | STAT 2050 | Introduction to Statistical Methods (4) | |
| Elective Requirements: | | | 6 Credits |
| Choose six credits from the following:[2] | | | 6 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals (3) | |
| | MGMT 2240 | Business Calculus (3) | |
| | MGMT 2340 | Business Statistics I (3) | |
| | MKTG 3300 | Marketing Analytics (3) | |
| | CS 1410 | Object-Oriented Programming (3) | |
| | CS 2420 | Introduction to Algorithms and Data Structures (3) | |
| | STAT 2050 | Introduction to Statistical Methods (4) | |
| | BIOL 1011 | Introduction to Bioinformatics (3) | |
| | BIOL 3100 | Introduction to Data Analysis for Biologists (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credit hours.
2. Overall grade point average 2.0 (C-) or above.

3. Residency hours: Minimum of 5 credit hours of course attendance at UVU.

| Footnote |
|---|
| [1] Math courses numbered higher than MATH 1050 may also be used to fulfill the requirement. |
| [2] Cannot use courses as electives that were counted in the core. |
| [3] If this course was used to fulfill the MATH 1050 requirement, a different course must be selected for this category. |

## Entrepreneurship, Certificate of Proficiency

### *Requirements*

Students minoring in the business management area of entrepreneurship will be exposed to and practice the skills needed by entrepreneurs in starting and developing their own businesses or growing the business of another entrepreneur.

**Total Program Credits: 16**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 13 Credits |
| | ENTR 3170 | Entrepreneurship and Opportunity Validation** | 3 |
| | ENTR 3180 | Developing Small Business** | 3 |
| | ENTR 3190 | Early-stage Financing | 3 |
| | ENTR 4300 | The Art of the Pitch* | 3 |
| | ENTR 493R | Entrepreneurship Lecture Series | 1 |
| Elective Requirements: | | | 3 Credits |
| Choose 3 credits from the following: | | | 3 |
| | ENTR 4200 | Innovative Opportunity Development (3.0) | |
| | ENTR 4210 | Career Development for Entrepreneurs (3.0) | |
| | ENTR 3220 | Entrepreneurship Law (3.0)** | |

**Graduation Requirements:**

1. Completion of a minimum of 16 credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 6 credit hours through course attendance at UVU.

Note: The Certificate in Entrepreneurship provides students from all majors outside the Woodbury School of Business a program by which they can add the mindset and basic competencies provided in a formal entrepreneurship program without abandoning their chosen field of study. Coursework includes principles of small business development, financing, technology-based opportunity identification, law, and personal entrepreneurial development.

| Footnote |
|---|
| * Course prerequisite of MATRICULATION will be waived for non-business majors who are enrolled in the Certificate program. |
| ** Has a prerequisite of ENGL 1010 or ENGH 1005. |

## Process Improvement and Operations CA, Certificate of Proficiency

### *Requirements*

The Utah Leads CP in Process Improvement and Operations CA is aimed at producing career-enhanced graduates in operations management to meet the growing demand for employees with this skill set. Students can enhance their careers through a program of study consisting not only of a theoretical base in making good business operating decisions, but the program also takes a hands-on, practical approach to learning. Practical knowledge is gained by not only offering, but requiring, each graduate to sit for a professional industry certification exam in lean management, as well as other applicable, hands-on projects with industry partners applying skills and tools learned throughout their coursework. Further, students will benefit from UVU's program connection with industry leaders who advise program directors regarding course offerings and course content that is most valuable on the job market. Students will also be provided multiple opportunities to interact and network with industry partners on in-class projects and in-class guest speakers. Students will gain knowledge in core topics such as analytics for business decisions, business decision optimization, supply chain management, process improvement tools and methodologies, and quality management tools and techniques (lean, six sigma, theory of constraints, etc.). Graduates will be prepared to enter the job market as operations professionals in a variety of industries such as technology, healthcare, supply chain, manufacturing, distribution, and logistics.

**Total Program Credits: 9**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 9 Credits |
| | MGMT 3450 | Operations Management | 3 |
| | MGMT 3070 | Total Quality Management | 3 |
| | MGMT 3470 | Lean Management Systems | 3 |

**Graduation Requirements:**

1. All credits must be taken at UVU.
2. No grade lower than a "C-" in any of the program courses.
3. Minimum GPA of 2.5.

## Business Management, Minor

### *Requirements*

Students minoring in business management may have their Bachelor of Science (whether in Business Management or in another field) endorsed with a Minor in Business Management.

**Total Program Credits: 19**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 16 Credits |
| Business Core Courses: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | LEGL 3000 | Business Law | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | ECON 2010 | Principles of Economics I | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |

| | | | |
|---|---|---|---|
| | MGMT 495R | Executive Lecture Series | 1 |
| or | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| Complete one of the following:[2] | | | |
| | IM 2600 | Spreadsheet Applications (3) | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | INFO 3120 | Management Information Systems (3) | |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals (3) | |
| Elective Requirements: | | | 3 Credits |
| Choose one of the following: | | | 3 |
| | FIN 3100 | Principles of Finance (3) [1] | |
| | MGMT 330G | Survey of International Business (3) | |
| | HR 3430 | Introduction to Human Resource Management(3) | |
| | MKTG 3600 | Principles of Marketing (3) | |

**Graduation Requirements:**

1. Overall grade point average of 2.5 in all Woodbury School of Business courses and no grade lower than a C- in business courses.
2. Completion of GE and specified departmental requirements.

Note: Students are responsible for completing all prerequisite courses. Not available to Business Management majors.

| Footnote |
|---|
| [1] Cannot be taken until student is matriculated into a bachelor degree program. |
| [2] Must be completed with a score of 80% or better. |

## Entrepreneurship, Minor

### *Requirements*

Students minoring in the business management area of entrepreneurship will be exposed to and practice the skills needed by entrepreneurs in starting and developing their own businesses or growing the business of another entrepreneur.

**Total Program Credits: 21**

| Discipline Core Requirements: | | | 15 Credits |
|---|---|---|---|
| | ACC 2110 | Principles of Accounting I | 3 |
| or | ACC 2010 | Financial Accounting (3) | |
| | ENTR 2500 | Creativity and Entrepreneurial Thinking | 3 |
| | ENTR 3170 | Entrepreneurship and Opportunity Validation | 3 |
| | ENTR 3180 | Developing Small Business | 3 |
| | ENTR 4300 | The Art of the Pitch | 3 |
| Elective Requirements: | | | 6 Credits |
| Choose 6 credits from the following: | | | 6 |
| | ACC 2120 | Principles of Accounting II (3) | |
| or | ACC 2020 | Managerial Accounting (3) | |
| | ENTR 3190 | Early-stage Financing (3) | |
| | ENTR 4200 | Innovative Opportunity Development (3) | |
| | ENTR 493R | Entrepreneurship Lecture Series (1) | |
| | HR 3430 | Introduction to Human Resource Management (3) | |
| | MKTG 3650 | Professional Selling (3) | |
| | MKTG 3670 | Advertising and Promotion (3) | |

## Business Management - General Business Emphasis, B.S.

### *Requirements*

Students majoring in business management may receive a Certificate of Completion, an Associate in Applied Science in Business Management, an Associate in Science with a pre-major in Business, a Bachelor of Science in Hospitality Management, or a Bachelor of Science in Business Management with a specialization in one of the following four areas: Entrepreneurship, General Business, Hospitality Management, or International Business. An Associate in Science Woodbury School of Business transfer degree is available for students planning to transfer to another college or university in Utah.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| | Complete the following: | | |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | ECON 2010 | Principles of Economics I | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Complete one of the following: [2] | | | |
| | My Educator | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |

| | | | |
|---|---|---|---|
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 37 Credits |
| Business Foundation Courses (required for matriculation): | | | |
| Complete one of the following: [1] | | | |
| | My Educator | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| Complete the following | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | MKTG 1890 | Introduction to Careers in Business | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3890 | Business Career Preparation | 2 |
| | ENTR 493R | Entrepreneurship Lecture Series | 1 |
| or | MGMT 495R | Executive Lecture Series (1) | |
| | MGMT 4860 | Business Strategy Formulation and Implementation | 3 |
| Elective Requirements: | | | 21 Credits |
| Select 21 credits of any courses 1000 level or higher. | | | 21 |
| Emphasis Requirements: | | | 27 Credits |
| | MGMT 3020 | Individual Action and Corporate Social Responsibility | 3 |
| or | MGMT 3500 | Leadership Theory and Application (6) | |
| | MGMT 330G | Survey of International Business | 3 |
| | HR 3430 | Introduction to Human Resource Management | 3 |
| Complete 18 credits from the approved list of upper-division credits for the Woodbury School. Three credits hours must come from MGMT 481R | | | 18 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until Matriculation is completed.

| Footnote |
|---|
| 1- My Educator score of 80% or better; IM 2010 or IM 2600 with a grade of B- or higher. |

## Business Management - Hospitality Management Emphasis, B.S.

### *Requirements*

Students majoring in business management may receive a Certificate of Completion, an Associate in Applied Science in Business Management, an Associate in Science with a pre-major in Business, a Bachelor of Science in Hospitality Management, or a Bachelor of Science in Business Management with a specialization in one of the following four areas: Entrepreneurship, General Business, Hospitality Management or International Business. An Associate in Science Woodbury School of Business transfer degree is available for students planning to transfer to another college or university in Utah.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| | Complete the following: | | |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | ECON 2010 | Principles of Economics I | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Complete one of the following: [2] | | | |

| | | | |
|---|---|---|---|
| | My Educator | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 37 Credits |
| Business Foundation Courses (required for matriculation): | | | |
| Complete one of the following: [1] | | | |
| | My Educator | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| Complete the following | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | MKTG 1890 | Introduction to Careers in Business | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3890 | Business Career Preparation | 2 |
| | ENTR 493R | Entrepreneurship Lecture Series | 1 |
| or | MGMT 495R | Executive Lecture Series (1) | |
| | MGMT 4860 | Business Strategy Formulation and Implementation | 3 |
| Elective Requirements: | | | 21 Credits |
| Select 21 credits of any courses 1000 level or higher. | | | 21 |
| Emphasis Requirements: | | | 27 Credits |
| | MGMT 330G | Survey of International Business | 3 |
| or | MGMT 332G | Cross-Cultural Communications for International Business (3.0) | |
| | HM 1130 | Hotel Operations I | 3 |
| | HM 1180 | Food and Beverage Management | 3 |
| | HM 3020 | Hospitality Managerial Accounting I | 3 |
| | HM 3030 | Hospitality Managerial Accounting II | 3 |
| | HM 3150 | Hospitality Finance | 3 |
| | HM 3210 | Event Venue and Convention Management | 3 |
| | HM 4550 | Hospitality Strategic Management | 3 |
| | HM 481R | Internship (1.0) | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until Matriculation is completed.

| Footnote |
|---|
| 1- My Educator score of 80% or better; IM 2010 or IM 2600 with a grade of B- or higher. |

# Business Management - International Business Emphasis, B.S.

## *Requirements*

Students majoring in business management may receive a Certificate of Completion, an Associate in Applied Science in Business Management, an Associate in Science with a pre-major in Business, a Bachelor of Science in Hospitality Management, or a Bachelor of Science in Business Management with a specialization in one of the following four areas: Entrepreneurship, General Business, Hospitality Management, or International Business. An Associate in Science Woodbury School of Business transfer degree is available for students planning to transfer to another college or university in Utah.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| | Complete the following: | | |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | ECON 2010 | Microeconomics | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Complete one of the following: [2] | | | |
| | My Educator | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I (fulfills Social/Behavioral Science credit) | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 37 Credits |
| Business Foundation Courses (required for matriculation): | | | |
| Complete one of the following: [1] | | | |
| | My Educator | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| Complete the following | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | MKTG 1890 | Introduction to Careers in Business | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MKTG 3890 | Career Preparation | 2 |
| | ENTR 493R | Entrepreneurship Lecture Series | 1 |
| or | MGMT 495R | Executive Lecture Series (1) | |
| | MGMT 4860 | Business Strategy Formulation and Implementation | 3 |
| Elective Requirements: | | | 21 Credits |
| Select 21 credits of any courses 1000 level or higher. | | | 21 |
| Emphasis Requirements: | | | 12 Credits |
| | FIN 4180 | International Finance Management[2] | 3 |
| | MGMT 332G | Cross-Cultural Communications for International Business | 3 |
| | MKTG 335G | International Marketing | 3 |
| | MGMT 4870 | International Management[2] | 3 |
| | MGMT 481R | Internship (1) | 3 |
| Emphasis Elective Requirements: | | | 12 Credits |
| Complete 12 upper-division elective credits with advisor approval. | | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until Matriculation is completed.

| Footnote |
|---|
| [1]My Educator score of 80% or better;  IM 2010 or IM 2600 with a grade of B- or higher. |
| [2]Courses cannot be taken until student is matriculated. |

## Entrepreneurship, B.S.

### *Requirements*

Students minoring in the business management area of entrepreneurship will be exposed to and practice the skills needed by entrepreneurs in starting and developing their own businesses or growing the business of another entrepreneur.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 58 Credits |
| Business Foundation Courses (required for Matriculation): | | | |
| | ACC 2110 | Introduction to Data Analytics for Business Professionals | 3 |
| | My Educator[2] | | |
| or | IM 2010 | Business Computer Proficiency (3.0)[2] | |
| or | IM 2600 | Spreadsheet Applications (3.0)[2] | |
| Complete the following: | | | |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4.0) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MKTG 1890 | Introduction to Careers in Business | 1 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | MKTG 2390 | Professional Business Presentations | 3 |
| | MKTG 3890 | Business Career Preparation | 2 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance [1] | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 330G | Survey of International Business | 3 |
| or | MGMT 332G | Cross-Cultural Communications for International Business (3.0) | |
| or | ECON 305G | International Economics (3.0) | |
| or | MKTG 335G | International Marketing (3.0) | |
| | MGMT 3450 | Operations Management [1] | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation [1] | 3 |
| Entrepreneurship Core Requirements: | | | |
| | ENTR 2500 | Creativity and Entrepreneurial Thinking | 3 |
| | ENTR 3170 | Entrepreneurship and Opportunity Validation | 3 |
| | ENTR 3180 | Developing Small Business | 3 |
| | ENTR 4300 | The Art of the Pitch | 3 |
| | ENTR 4450 | Enterprise Formation 1 | 3 |
| | ENTR 4300 | The Art of the Pitch | 3 |
| | ENTR 493R | Entrepreneurship Lecture Series | 1 |
| Elective Requirements: | | | 27 Credits |

| | |
|---|---|
| Select 21 additional credits of any 1000 level or higher courses | 21 |
| Choose 6 credits of any upper division courses. | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" in core courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until Matriculation is completed.

| Footnote |
|---|
| [1] Course cannot be taken until student is matriculated. |
| [2] Students are required to complete My Educator with a score of 80% or better or IM 2010 or IM 2600 with a grade of B- or higher. |

## Operations and Supply Chain Management, B.S,

### *Requirements*

The BS in Operations and Supply Chain Management is aimed at producing career-ready graduates in operations and supply chain management to meet the growing demand for employees with this skill set. Students become career-ready through a program of study consisting not only of a theoretical base in making good business operating decisions but also a hands-on, practical approach to learning. Practical knowledge is gained by not only offering but requiring each graduate to sit for at least one professional industry certification exam (Domo, Lean, Six Sigma, Project Management), and complete either an internship or an independent study applying skills and tools learned throughout their coursework. Further, students will benefit from the program's connection with industry leaders who advise program directors regarding course offerings and course content that is most valuable on the job market. Students will also be provided multiple opportunities to interact and network with industry partners on in-class projects, internships, and full-time employment post-graduation. Students will gain knowledge in core topics such as analytics for business decisions, business decision optimization, supply chain management, simulation for business applications, and quality management tools and techniques (Lean, Six Sigma, Theory of Constraints, etc.). Graduates will be prepared to enter the job market in a variety of industries such as technology, healthcare, supply chain, manufacturing, distribution, and logistics.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| Complete one of the following:[1] | | | |
| | My Educator | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| Complete the following: | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | ECON 2010 | Principles of Economics I | 3 |
| | MGMT 2240 | Business Calculus | 3 |
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business | |
| | An Advanced Placement (AP) Mathematics Test with a score of 3 or higher | | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | ECON 2010 | Principles of Economics I | 3 |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| Discipline Core Requirements: | | | 55 Credits |
| Business Foundation Courses | | | |
| Complete one of the following: [1] | | | |
| | My Educator | | |
| | IM 2010 | Business Computer Proficiency (3) | |
| | IM 2600 | Spreadsheet Applications (3) | |
| Complete the following | | | |
| | ACC 2110 | Principles of Accounting I | 3 |
| | MGMT 2240 | Business Calculus | 3 |

| | | | |
|---|---|---|---|
| or | MATH 1100 | Introduction to Calculus (4) | |
| | MGMT 2340 | Business Statistics I | 3 |
| | MGMT 2400 | Introduction to Data Analytics for Business Professionals | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| Business Core Courses: | | | |
| | FIN 3100 | Principles of Finance | 3 |
| | MGMT 3000 | Organizational Behavior WE | 3 |
| | MGMT 3450 | Operations Management | 3 |
| | MKTG 3600 | Principles of Marketing | 3 |
| | ENTR 493R | Entrepreneurship Lecture Series | 1 |
| or | MGMT 495R | Executive Lecture Series (1) | |
| Complete one of the following: | | | 3 |
| | ECON 305G | International Economics (3) | |
| | MGMT 330G | Survey of International Business (3) | |
| | MGMT 332G | Cross Cultural Communications for International Business (3) | |
| Program Core Requirements: | | | |
| | MGMT 3460 | Scheduling, Forecasting and Inventory Management | 3 |
| | MGMT 3480 | Operations Simulation | 3 |
| | MGMT 3700 | Supply Chain and Logistics Management | 3 |
| | MGMT 4470 | Strategic Operational Planning | 3 |
| | MGMT 4480 | Strategic Operational Planning | 3 |
| | MGMT 481R | Internship (1) | 3 |
| or | MGMT 490R | Independent Study (1) | 3 |
| | MGMT 4860 | Business Strategy Formulation and Implementation | 3 |
| Complete one of the following: | | | 3 |
| | MGMT 3070 | Total Quality Management (3) | |
| | MGMT 3470 | Lean Management Systems (3) | |
| | MGMT 4350 | Business Intelligence and Data Visualization (3) | |
| | TECH 4400 | Advanced Project Management (3) | |
| Elective Requirements: | | | 30 Credits |
| Complete 18 credits from the following list:[2] | | | 18 |
| | MGMT 3345 | Business Statistics II (3) | |
| | ECON 4040 | International Economics (3) | |
| | HR 4610 | Strategic Staffing & Performance Evaluation (3) | |
| | INFO 4440 | Enterprise Computing Environments (3) | |
| | MGMT 3070 | Total Quality Management (3) | |
| | MGMT 3470 | Lean Management Systems (3) | |
| | MGMT 4350 | Business Intelligence and Data Visualization (3) | |
| | MKTG 4300 | Marketing Data Science (3) | |
| | MKTG 4600 | Customer Experience (3) | |
| | TECH 3400 | Project Management WE (3) | |
| | TECH 3700 | Materials Management (3) | |
| | TECH 4000 | Reliability Management (3) | |
| | TECH 4400 | Advanced Project Management (3) | |
| Complete 12 credits of any courses 1000-level or higher | | | 12 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all Woodbury School of Business courses. No grade lower than a "C-" incore and specialization courses.
3. Residency hours: Minimum of 30 credit hours of business courses through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

NOTE: Students will be limited to 9 hours of upper-division credit until Matriculation is completed.

| Footnote |
|---|
| [1] My Educator score of 80% or better;  IM 2010 or IM 2600 with a grade of B- or higher. |
| [2] May not choose a course previously taken for business or program requirement. |

# Student Leadership and Success Studies

## Student Leadership and Success Studies

The Student Leadership and Success Studies department is in the University College. To find the most up-to-date information from the Student Leadership and Success Studies department, visit their website.

Student Leadership and Success Studies department

**DEPARTMENT CHAIR**

**ASHMAN, Marinda G.** *Associate Professor*

**DEPARTMENT CHAIR**

**ECKTON, Darin** *Associate Professor*

**FACULTY**

**ANDERSON, Zann** *Assistant Professor*
**ASHMAN, Marinda G.** *Associate Professor*
**BORNS, Renee** *Associate Professor*
**ECKTON, Darin** *Associate Professor*
**GARDNER, Douglas** *Associate Professor*
**GOSLIN, Christopher** *Associate Professor*
**HAUG-BELVIN, Theresa** *Assistant Professor*
**JOHNSON, Benjamin** *Associate Professor*
**LAMBERT, Lisa** *Associate Professor*
**LYDE, Steven** *Assistant Professor*
**RICHARDS, Denise** *Associate Professor*
**SANFT, Marni** *Associate Professor*
**WADDOUPS, Stacy D.** *Associate Professor*
**WONG, Cynthia** *Assistant Professor*
**YOAST, Tiffany** *Professional in Residence*

# Course Descriptions

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# Degrees & Programs

## University Studies, A.A.

### *Requirements*

The University Studies Associate in Arts/Science is designed to provide an opportunity for students who may be potentially exploring their career and major options, or provides flexibility for those that are seeking an Associate that enables transferability or simply completion of a broad variety of curriculum options. The AS/AA UVST enables the ability to begin work toward the General Education requirements while meeting the needs of a broad variety of student circumstances.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (recommended for Social Science majors) (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (recommended for Business, Education, Science, and Health Professions majors) (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values (3) | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 25 Credits |
| | Any course(s) 1000 or higher | | 17 |
| | One Language (other than English) to include the 1010 or 1020 levels | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.
5. For the AA degree, completion of 8 credit hours of course work from one language.

## University Studies, A.S.

### *Requirements*

The University Studies Associate in Arts/Science is designed to provide an opportunity for students who may be potentially exploring their career and major options, or provides flexibility for those that are seeking an Associate that enables transferability or simply completion of a broad variety of curriculum options. The AS/AA UVST enables the ability to begin work toward the General Education requirements while meeting the needs of a broad variety of student circumstances.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (recommended for Social Science majors) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) (recommended for Business, Education, Science, and Health Professions majors) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (recommended for Business majors) (3) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| or | PHIL 205G | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 25 Credits |
| | Any course(s) 1000 or higher | | 25 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## General Education, Certificate of Completion

### *Requirements*

The Certificate of Completion in General Education is comprised of the courses that are required for completion of the general education requirements at Utah Valley University. The purpose of general education at UVU is a shared academic experience that provides students with the opportunity to explore new subjects, intellectual traditions, and perspectives; expands their awareness of the wider world; and prepares them with foundational knowledge, skills, and abilities that are expanded on in their disciplines of study in order to be successful learners and professionals positioned to contribute to their broader communities. When a student completes the requirements for the Certificate of Completion in General Education at UVU, the certificate is accepted at other USHE institutions as completing their General Education requirements.

**Total Program Credits: 35**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1000 | American Heritage (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values (3.0) | 3 |

| | | | |
|---|---|---|---|
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 35 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 12 credit hours through course attendance at UVU

## Leadership for Personal and Social Impact, Certificate of Proficiency

### *Requirements*

The Leadership for Personal and Social Impact certificate provides an academic setting where students gain theoretical and practical skills with principles of self-awareness and improvement that can immediately transform personal success and performance. As students learn and apply these principles and skills they will also be provided with and create their own engaging experiences to become more active contributors and stewards across a wide range of professional, volunteer, public, and private settings in their current and future local, regional, national, and international communities. Students from any academic major or minor are encouraged to enroll in and complete this certificate. Currently, two of the courses are offered online, (SLSS 1000 and SLSS 1200) so it is possible that students may choose to take those courses online. Initially, it is anticipated that the other courses will be offered on the main campus. As interest and demand increases, the Department of Student Leadership and Success Studies will reevaluate and may offer the remaining courses online.

**Total Program Credits: 16**

| General Education Requirements: | | | 16 Credits |
|---|---|---|---|
| | SLSS 1200 | The 7 Habits of Highly Effective People | 3 |
| | SLSS 2500 | Leader--Strengths-Based Leader/ Coach | 3 |
| | SLSS 3200 | Leader--Teacher and Mentor | 3 |
| | SLSS 405G | Leader--Global Contributor | 3 |
| | SLSS 4800 | Leader Capstone--Lifelong Change Agent | 4 |

**Graduation Requirements:**

1. Complete 16 credits of course work.
2. Earn a minimum 2.5 GPA in all certificate course work with no grades lower than a C-.
3. Residency hours -- Minimum of 4 credits required through course attendance at UVU.

## University Studies, B.A.

### *Requirements*

The BA/BS is designed to meet the academic and professional objectives of learners whose needs are not addressed through existing degree programs. The degree assists learners in developing essential skills valued by employers and graduate schools (e.g., applied learning, critical thinking, written and oral communication, teamwork, ethical reasoning, and global understanding) within the framework of a larger discipline. Learners will complete a structured yet customized set of upper division courses under the guidance of an advisor and faculty mentor to ensure that standards for academic rigor at the Bachelor level are achieved. Candidates for the degree will focus on intellectual skills and integrative knowledge by enrolling in courses in a general disciplinary area with intentionally-selected, specialized knowledge courses that contribute to an integrated whole, and by completing a capstone experience that further prepares them for their chosen professions or graduate school admission. Under the direction of a faculty member, students will complete a capstone course or an internship which will involve reflection and a synthesis of learning to demonstrate achievement of the learning outcomes for the degree.

**Total Program Credits: 120**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. An approved Plan of Study that focuses on the achievement of clearly defined personal, career, or professional goals, as part of the application process for the major.<br>2. Minimum 2.0 grade point average.<br>3. Completed 60 or more semester credit hours. | | | |
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | 3 |
| | PHIL 2050 | Ethics and Values (3) | |
| or | PHIL 205G | Ethics and Values (3) | |
| | HLTH 1100 | Personal Health and Wellness (2) | |

| | | | |
|---|---|---|---|
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (Fulfilled with Foreign Language 202G/2020 course) | | 4 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 5 Credits |
| Career Focus Course - Choose one from the following: | | | 3 |
| | ANTH 3000 | Language and Culture (3) | |
| | COMM 3040 | Media Ethics (3) | |
| | COMM 3410 | Fundamentals of Mediation and Negotiation (3) | |
| | COMM 3115 | Communicating in Environments (3) | |
| | COMM 319G | Intercultural Communication Encounters (3) | |
| | COMM 4250 | Communication and Leadership (3) | |
| | CS 305G | Global Social and Ethical Issues in Computing (3) | |
| | ENGL 3070 | Public Rhetorics (3) | |
| | ENGL 3300 | Collaborative Communication for Technology Professions (3) | |
| | ENST 3000 | Introduction to Environmental Studies (3) | |
| | ENTR 3170 | Entrepreneurship and Opportunity Validation (3) | |
| | FAMS 3250 | Applied Parenting (3) | |
| | FAMS 4660 | Family Financial and Resource Management (3) | |
| | HUM 3800 | Aesthetics (3) | |
| | IM 3700 | Database Applications (3) | |
| | MGMT 3000 | Organizational Behavior WE (3) | |
| | PHIL 3510 | Business and Professional Ethics (3) | |
| | PHIL 3530 | Environmental Ethics (3) | |
| | PHIL 3700 | Social and Political Philosophy (3) | |
| | PHIL 3710 | Philosophy of Law (3) | |
| | PJST 3000 | Introduction to Peace and Justice Studies (3) | |
| | PSY 3480 | Principles of Learning (4) | |
| | SOC 320G | Race and Minority Relations (3) | |
| | SOC 3510 | Sociology of Work and Occupations (3) | |
| | TECH 3000 | Introduction to Technology Management (3) | |
| | TECH 3010 | Creativity Innovation and Change Management (3) | |
| | TECH 3400 | Project Management WE (3) | |
| Complete one of the following: | | | 2 |
| | UVST 481R | Internship (1) | |
| | UVST 4930 | Capstone WE (3) | |
| Elective Requirements: | | | 79 Credits |
| Choose 27 credits from one School or College (except WSOB - 24 credit max)* | | | 27 |
| | 12 Upper Division Credits (any courses 3000-4000 level from above School or College)<br>15 Lower Division Credits (any courses 1000-2000 level from above School or College) | | |
| 40 Elective Credits (23 Upper Division Credits and 17 Lower Division Credits) | | | 40 |
| | 23 Upper Division Credits<br>17 Lower Division Credits | | |
| Foreign Language & Humanities (Foreign Language 202G/2020 course fulfills Humanities Distribution) | | | 12 |

**Graduation Requirements:**

1. Completion of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. At least 40 credit hours in upper division courses.
5. Complete 16 credit hours of course work from one language to include the 1010, 1020, 2010 and 202G/2020 levels, or transferred equivalents.
6. Completion of General Education requirements.
7. Completion of specific departmental (major) requirements.
8. Completion of Global/Intercultural Requirement course.

| Footnote |
|---|
| * If focus area is with the Woodbury School of Business, only 21-24 credits may be used. |

## University Studies, B.S.

### *Requirements*

The BA/BS is designed to meet the academic and professional objectives of learners whose needs are not addressed through existing degree programs. The degree assists learners in developing essential skills valued by employers and graduate schools (e.g., applied learning, critical thinking, written and oral communication, teamwork, ethical reasoning, and global understanding) within the framework of a larger discipline. Learners will complete a structured yet customized set up upper division courses under the guidance of an advisor and faculty mentor to ensure that standards for academic rigor at the Bachelor level are achieved. Candidates for the degree will focus on intellectual skills and integrative knowledge by enrolling in courses in a general disciplinary area with intentionally-selected, specialized knowledge courses that contribute to an integrated whole, and by completing a capstone experience that further prepares them for their chosen professions or graduate school admission. Under the direction of a faculty member, students will complete a capstone course or an internship which will involve reflection and a synthesis of learning to demonstrate achievement of the learning outcomes for the degree.

**Total Program Credits: 120**

| Matriculation Requirements: | |
|---|---|
| 1. An approved Plan of Study that focuses on the achievement of clearly defined personal, career, or professional goals, as part of the application process for the major.<br>2. Minimum 2.0 grade point average. | |

3. Completed 60 or more semester credit hours.

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | 3 |
| | PHIL 2050 | Ethics and Values (3) | |
| or | PHIL 205G | Ethics and Values (3) | |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | Fine Arts | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 5 Credits |
| Career Focus Course – Choose one from the following: | | | 3 |
| | ANTH 3000 | Language and Culture (3) | |
| | COMM 3040 | Media Ethics (3) | |
| | COMM 3410 | Fundamentals of Mediation and Negotiation (3) | |
| | COMM 3115 | Communicating in Environments (3) | |
| | COMM 319G | Intercultural Communication Encounters (3) | |
| | COMM 4250 | Communication and Leadership (3) | |
| | CS 305G | Global Social and Ethical Issues in Computing (3) | |
| | ENGL 3070 | Public Rhetorics (3) | |
| | ENGL 3300 | Collaborative Communication for Technology Professions (3) | |
| | ENST 3000 | Introduction to Environmental Studies (3) | |
| | ENTR 3170 | Entrepreneurship and Opportunity Validation (3) | |
| | FAMS 3250 | Applied Parenting (3) | |
| | FAMS 4660 | Family Financial and Resource Management (3) | |
| | HUM 3800 | Aesthetics (3) | |
| | IM 3700 | Database Applications (3) | |
| | MGMT 3000 | Organizational Behavior WE (3) | |
| | PHIL 3510 | Business and Professional Ethics (3) | |
| | PHIL 3530 | Environmental Ethics (3) | |
| | PHIL 3700 | Social and Political Philosophy (3) | |
| | PHIL 3710 | Philosophy of Law (3) | |
| | PJST 3000 | Introduction to Peace and Justice Studies (3) | |
| | PSY 3480 | Principles of Learning (4) | |
| | SOC 320G | Race and Minority Relations (3) | |
| | SOC 3510 | Sociology of Work and Occupations (3) | |
| | TECH 3000 | Introduction to Technology Management (3) | |
| | TECH 3010 | Creativity Innovation and Change Management (3) | |
| | TECH 3400 | Project Management WE (3) | |
| Complete one of the following: | | | 2 |
| | UVST 481R | Internship (1) | |
| | UVST 4930 | Capstone WE (3) | |
| Elective Requirements: | | | 80 Credits |
| Choose 27 credits from one School or College (except WSOB – 24 credit max)*<br>*WSOB Concentration (additional 3 credits may be Upper or Lower Division, depending on total) | | | 27 |
| | 12 Upper Division Credits (any courses 3000-4000 level from above School or College)<br>15 Lower Division Credits (any courses 1000-2000 level from above School or College) | | |
| 53 Elective Credits | | | 53 |
| | 23 Upper Division Credits<br>30 Lower Division Credits | | |

**Graduation Requirements:**

1. Completion of 120 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours: minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. At least 40 credit hours in upper division courses.
5. Completion of General Education requirements.
6. Completion of specific departmental (major) requirements.
7. Completion of Global/Intercultural Requirement course.

| Footnote |
|---|

* If focus area is with the Woodbury School of Business, only 21-24 credits may be used.

# Technology Management

## Technology Management

The Technology Management department is in the College of Engineering & Technology. To find the most up-to-date information from the Technology Management department, visit their website.

Technology Management department

**DEPARTMENT CHAIR**

**ARENDT, Anne** *Associate Professor*

**FACULTY**

**ALIN, Pauli** *Assistant Professor*
**ARENDT, Anne** *Associate Professor*
**ILIKCHYAN, Armen** *Associate Professor*
**KUEHNE, Carolyn** *Lecturer*
**MERRILL, Kyle** *Professional In Residence*
**THACKERAY, Susan** *Assistant Professor*

## Course Descriptions

Apprentice.....480
Technology Management.....786

## Degrees & Programs

### Technology, A.A.S.

#### *Requirements*

The Associate in Applied Science (AAS) in Technology is designed for individuals seeking to work in a technical area or who have considerable work experience seeking better upward mobility in their professions. Students can receive up to 15 credit hours for extensive work experience, certifications, licenses, or apprenticeships. Additionally, students who earn certifications in many 900+ hour technical programs offered throughout the Utah Technical College system can transfer in their certificate and receive up to 30 hours of academic credit, or almost half the credit required to graduate from the AAS. Students in the AAS pathway will build on their technical education and experience by completing core and elective course options, including experiential portfolio, business computer proficiency, and supervision.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 16 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| Complete one of the following: | | | 3 |
| | EGDT 1600 | Technical Math--Algebra (3) | |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| | STAT 1040 | Introduction to Statistics (3) (Recommended for students intending to continue on to the BS Degree in Technology Management) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| | MATH 1050 | College Algebra (4) | |
| | MATH 1055 | College Algebra with Preliminaries (5) | |
| | MATH 1090 | College Algebra for Business (3) | |
| | Biology / Physical Science | | 3 |
| | Health / PE / Safety / Environment | | 1 |
| | Humanities / Fine Arts | | 3 |
| | Social/Behavioral Science[1] | | 3 |
| Discipline Core Requirements: | | | 23 Credits |
| | TECH 1000 | Experiential Credit Portfolio Development and Assessment [2] | 2 |
| | TECH 110R | Technical Experiential Credit | 6 |
| | TECH 1010 | Understanding Technology | 3 |
| | INFO 2100 | Computer Proficiency for Technology Professionals | 3 |
| or | IM 2010 | Business Computer Proficiency (3) | |
| | TECH 2010 | Supervision in Technology | 3 |
| | Technical Area Credits - With advisor approval, students must select a minimum of 6 credits. See catalog for 2-year AAS programs for course selections.[2] | | 6 |
| Elective Requirements: | | | 24 Credits |
| Students must select a minimum of 24 credits of electives from the following or other advisor approved course work: | | | 24 |
| | TECH 110R | Technical Experiential Credit (1) (Maximum of 10 in addition to the core) | |
| | Additional Technical Area credits as approved by Advisor. | | |
| | ANTH 101G | Social/Cultural Anthropology (3) | |
| | BIOL 1010 | General Biology (3) | |
| | BIOL 1015 | General Biology Laboratory (1) | |
| | BIOL 1070 | Heredity (3) | |
| | CHEM 1010 | Introduction to Chemistry (3) | |
| | CHEM 1110 | Elementary Chemistry for the Health Sciences (4) | |
| | CHEM 1115 | Elementary Chemistry Laboratory (1) | |
| | SLSS 1000 | University Student Success (3) | |
| | SLSS 1200 | The 7 Habits of Highly Effective People (3) | |
| | COMM 1050 | Introduction to Communication (3) | |
| | COMM 1500 | Introduction to Mass Communication (3) | |
| | COMM 3030 | Media Literacy (3) | |
| | ENGR 1000 | Introduction to Engineering WE (3) | |
| | ENVT 1110 | Introduction to Environmental Management (3) | |
| | ENVT 1510 | Hazardous Materials Emergency Response (3) | |
| | GEO 1010 | Introduction to Geology (3) | |
| | GEO 1015 | Introduction to Geology Laboratory (1) | |
| | MAT 1010 | Intermediate Algebra (4) | |
| | PHSC 1000 | Survey of Physical Science (3) | |

| | | | |
|---|---|---|---|
| | PHYS 1010 | Elementary Physics (3) | |
| | PHYS 3800 | Energy use on Earth (3) | |
| | TECH 290R | Current Topics in Technology (3) | |
| | Foreign Language Credits - Students may select up to 10 credits of a foreign language | | |
| | Sixteen (16) credits may be satisfied by R473 Matriculation Agreement. | | |

**Graduation Requirements:**

1. Complete a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours - minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements
5. This degree MAY apply toward the BS in Technology Management, if the majority of course work is in a related technical area, and has been approved by the department to be used toward the BSTM.

| Footnote |
|---|
| 1- TECH 200G recommended |
| 2- This requirement may be satisfied by R473 Matriculation Agreement. Up to sixteen (16) credits may be satisfied by R473 Matriculation Agreement. |

## Advanced Manufacturing, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Advanced Manufacturing is designed to provide entry-level manufacturing technician skills that are needed in expanding the manufacturing industry in Utah Valley. Although the term "advanced" might be confusing for a program providing entry-level skills, nationally this is the term that is being used. The program focuses on the basic skills used in advanced manufacturing processes expanding across the nation. The components of the certificate will include basic manufacturing skills with hands-on activities on equipment used in local facilities. Graduates of this certificate will have a basic understanding of advanced manufacturing operations with an emphasis on solving problems in the organization. While this program offers an entry-level certification for individuals pursuing a career in manufacturing, it has been designed to enable individuals the opportunity to continually expand and upgrade their applied skills as well as to maintain a thorough mastery of evolving manufacturing technologies.

**Total Program Credits: 18**

| Discipline Core Requirements: | | | 18 Credits |
|---|---|---|---|
| | TECH 1050 | Manufacturing Processes and Systems | 3 |
| | TECH 2050 | Introduction to Quality Management | 3 |
| | TECH 2010 | Supervision in Technology | 3 |
| | TECH 1000 | Experiential Credit Portfolio Development and Assessment (2.0) | |
| or | TECH 281R | Internship in Technology | 1 |
| | IM 2010 | Business Computer Proficiency | 3 |
| | STAT 1040 | Introduction to Statistics | 3 |
| or | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| or | EGDT 1600 | Technical Math--Algebra (3.0) | |
| | EGDT 1000 | Introduction to Engineering Drawing and Technical Design | 2 |
| or | EGDT 1071 | 3 Dimensional Modeling--Solidworks (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 18 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average of 2.0 (C) or above.
4. Residency hours: minimum of 5 credit hours through course attendance at UVU.

## Six Sigma Green Belt, Certificate of Proficiency

### *Requirements*

The Six Sigma Green Belt Certificate at UVU demonstrates knowledge in quality improvement and elimination of waste or defects in production processes. It can be utilized in every aspect of business such as production, human resources, information technology, and customer service. This certificate is built into the curriculum of the Bachelor of Science in Technology Management program. Students who complete this credential have high-demand, industry-recognized skill sets.

**Total Program Credits: 27**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. University Advanced Standing | | | |
| Discipline Core Requirements: | | | 27 Credits |
| | TECH 3000 | Introduction to Technology Management | 3 |
| | TECH 3010 | Creativity Innovation and Change Management (3.0) | |
| or | ENTR 3170 | Entrepreneurship and Opportunity Validation | 3 |
| | TECH 3400 | Project Management WE | 3 |
| | TECH 3700 | Materials Management (3.0) | |
| or | MGMT 3470 | Lean Management Systems | 3 |
| | TECH 3850 | Quality Management in Technology (3.0) | |
| or | MGMT 3070 | Total Quality Management | 3 |
| | TECH 4000 | Reliability Management | 3 |
| | TECH 4400 | Advanced Project Management (3.0) | |
| or | MGMT 3450 | Operations Management | 3 |
| | TECH 4910 | Senior Capstone Project WE | 3 |
| Complete one of the following for 3 credits | | | 3 |
| | ACC 2020 | Managerial Accounting (3.0) | |
| | ACC 3000 | Financial Managerial and Cost Accounting Concepts (3.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | STAT 2040 | Principles of Statistics (4.0) | |

| | | | |
|---|---|---|---|
| | STAT 3040 | Probability and Statistics for Engineering and the Sciences (3.0) | |
| | MGMT 2240 | Business Calculus (3.0) | |
| | MGMT 2340 | Business Statistics I (3.0) | |

**Graduation Requirements:**

1. Completion of a minimum of 27 credits.
2. Overall grade point average of 3.0 (B) or above. Students must complete each course with a grade "B" or higher.
3. Residency hours -- minimum of 7 credit hours through course attendance at UVU.

## Technology Management, Minor

### *Requirements*

The Technology Management Minor will provide students the opportunity to explore many aspects of technology management, including project management, quality assurance, and creativity, as well as become more aware of the issues surrounding technology. This background will also benefit such students in their quest for employment, since project management and its related skills are highly sought after by employers.

**Total Program Credits: 21**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 15 Credits |
| | TECH 3000 | Introduction to Technology Management | 3 |
| | TECH 3400 | Project Management WE | 3 |
| | TECH 3850 | Quality Management in Technology | 3 |
| | TECH 4000 | Reliability Management | 3 |
| | TECH 4420 | Organization Information Technologies | 3 |
| Elective Requirements: | | | 6 Credits |
| Select 6 credits from the following: | | | 6 |
| | TECH 3010 | Creativity Innovation and Change Management (3.0) | |
| | TECH 3700 | Materials Management (3.0) | |
| | TECH 405G | Global Ethical and Professional Issues in Technology (3.0) | |
| | TECH 4200 | Technology Marketing and Customer Relationship Management (3.0) | |
| | TECH 4400 | Advanced Project Management (3.0) | |
| | TECH 497R | Independent Study (1.0) | |

## Technology Management, B.S.

### *Requirements*

The Bachelor of Science in Technology Management has curriculum designed to prepare students who want to develop skills which will enable them to successfully: Manage complex technical projects, manage people within an technical environment, prepare to succeed in an ever changing environment which is reliant on technology, and be on the forefront of innovation and the future of work. Employers are regularly seeking technically savvy individuals who can speak clearly about technical innovations while having the skill set to manage a wide variety of projects and individuals. The BS in TM will prepare this much needed workforce for success. For this degree, students must complete 45 technical credits. Up to 45 technical credits may be transferable from an Associate of Applied Science (AAS), Associate of Science (AS), or individual courses from a regionally accredited institution of higher education in an approved technical area as agreed upon by the Technology Management advisor and department chair.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | 45 Credits |
| | Students must complete 45 technical credits. Up to 45 technical credits may be transferable from an Associate of Applied Science (AAS), Associate of Science (AS), or individual courses from a regionally accredited institution of higher education in an approved technical area as agreed upon by the Technology Management advisor and department chair. | | 45 |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| | STAT 1040 | Introduction to Statistics | 3 |
| or | STAT 1045 | Introduction to Statistics with Algebra (5) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 28 Credits |
| Meet with Technology Management advisor to complete a degree plan prior to enrollment in Technology Management courses. | | | |
| | TECH 3000 | Introduction to Technology Management | 3 |
| | TECH 3010 | Creativity Innovation and Change Management | 3 |
| or | ENTR 3170 | Entrepreneurship and Opportunity Validation (3) | |
| | TECH 3400 | Project Management WE | 3 |
| | TECH 3850 | Quality Management in Technology | 3 |

| | | | |
|---|---|---|---|
| | TECH 405G | Global Ethical and Professional Issues in Technology | 3 |
| | TECH 4420 | Organization Information Technologies | 3 |
| | TECH 4910 | Senior Capstone Project WE | 3 |
| | ACC 3000 | Financial Managerial and Cost Accounting Concepts | 3 |
| | HR 3430 | Introduction to Human Resource Management | 3 |
| | TECH 301R | Technology Lecture Series | 1 |
| | Business Computer Proficiency | | |
| or | INFO 2100 | Computer Proficiency for Technology Professionals (3) | |
| or | IM 2010 | Business Computer Proficiency (3) | |
| Technical Credit Requirements: | | | 45 Credits |
| Students must complete 45 technical credits as agreed upon by the Technology Management advisor and department chair | | | 45 |
| Elective Requirements: | | | 12 Credits |
| Complete 12 credits from the following: | | | 12 |
| | TECH 3700 | Materials Management (3) | |
| | TECH 4000 | Reliability Management (3) | |
| | TECH 4200 | Technology Marketing and Customer Relationship Management (3) | |
| | TECH 4400 | Advanced Project Management (3) | |
| | TECH 481R | Internship (1) | |
| | TECH 489R | Undergraduate Research in Technology Management (1) | |
| | TECH 490R | Current Topics in Technology Management (3) | |
| | TECH 497R | Independent Study (1) | |
| | LEGL 3000 | Business Law (3) | |
| | ENGL 3300 | Collaborative Communication for Technology Professions (3) | |
| | MGMT 3470 | Lean Management Systems (3) | |
| | Up to 6 credits toward Leadership Certification with the Center for the Advancement of Leadership | | |
| | Students may select up to 9 credits of other upper division technology related courses with advisor approval. | | |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits
2. Overall grade point average of 2.0 (C) or above.
3. No grade lower than a C- in any TECH course.
4. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
5. Completion of General Education (GE) and specified departmental requirements.
6. Successful completion of at least one Global/Intercultural course.

# Technology Management Graduate Programs

## Technology Management Graduate Program

The Master of Science in Engineering and Technology Management Graduate Program is in the College of Engineering and Technology. To find the most up-to-date information on the Engineering and Technology Management Graduate Program, visit their website.

Master of Science in Engineering and Technology Management Graduate Program

## Course Descriptions

Technology Management.....786

## Degrees & Programs

### Master of Science in Engineering and Technology Management, M.S.

#### *Requirements*

The Engineering and Technology Management (ETM) program prepares engineering and technological professionals to make process-, product-, and project-oriented strategic and operational decisions and become leaders in the management of technology by providing the link between engineering, science, and management. It helps companies, research organizations, and governments to plan, develop, and implement technologies by specifically addressing real needs identified by industry leaders. Effective planning, selection, implementation, and management of technology, and the teams involved, is essential to the success of any business in today's complex and time-critical global markets. Students learn to apply proven evaluation concepts and implementation strategies to fast moving, technical management decisions that make the difference in both career and business success. Courses provide practicing engineers and managers of technical teams or projects with the knowledge, tools, and skills to manage projects, operations, organizations, and people. The program includes product and project management, engineering management, quality and safety management, and statistical analysis to enable the graduate to be more effective in technical managerial and leadership roles in a business environment. The program is specifically tailored for professionals who want to advance their careers while still working full time. The entire program is available through distance learning as well as face to face and involves 30 credit hours of course work

**Total Program Credits: 30**

| Matriculation Requirements: | |
|---|---|
| Application for admission:<br>1. A bachelor's degree from a regionally accredited college/ university, a nationally accredited program, or an international college or universityrecognized by a Ministry of Education<br>2. Overall undergraduate GPA of 3.2 or higher on a 4.0 scale from an accredited institution, or GPA of 3.2 or higher on a 4.0 scale from an accreditedinstitution in last 60 semester hours (90 quarter hours) of undergraduate coursework<br>3. For international students whose native language is not English, a TOEFL score of 80 iBT (550 pBT) or higher, or an IELTS band score of 6.5 orhigher within the past two years<br>4. Three professional letters of recommendation<br>5. Official transcripts from all attended institutions of higher education<br>6. A personal statement<br>7. Graduate Record Examination (GRE) score from within the last five years | |

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 24 Credits |
| | TECH 6010 | Engineering Law and Patents | 3 |
| | TECH 6400 | Six Sigma Project Management | 3 |
| | TECH 6420 | Finance for Technical Systems | 3 |
| | TECH 6430 | Product Management Processes | 3 |
| | TECH 6450 | Engineering Economics and Project Evaluation | 3 |
| | TECH 6700 | Data Driven Decision Making | 3 |
| | TECH 6950 | Engineering and Technology Projects I | 3 |
| | TECH 6960 | Engineering and Technology Projects II | 3 |
| Elective Requirements: | | | 6 Credits |
| Complete six credits from the following: | | | 6 |
| | TECH 6000 | Strategic Management of Technology and Innovation in Engineering (3) | |
| | TECH 6500 | Resource Management in Engineering and Technology (3) | |
| | TECH 6710 | Materials Management (3) | |
| | TECH 679R | Special Topics in Engineering (3) | |
| | TECH 690R | Independent Study (3) | |

**Graduation Requirements:**

1. Complete all courses with an overall GPA of 3.0 or higher
2. A grade of "C" or higher required for all courses used to satisfy graduation requirement
3. Courses must be finished within a five-year period. No courses will apply toward graduation that are older than five years
4. Graduates may not transfer more than ten semester credit hours into this master's program. Only transfer courses approved by the graduateprogram faculty shall be counted as approved credit for the degree
5. A minimum of 30 credits is required

# Theatrical Arts for Stage and Screen

## Theatrical Arts for Stage and Screen

The Theatre department is in the School of the Arts. To find the most up-to-date information from the Theatre department, visit their website.

Theatre department

**DEPARTMENT CHAIR**

**NEWMAN, John** *Associate Professor*

**FACULTY**

**AUGUST, Matt** *Assistant Professor*
**BEENE, Lara A.** *Assistant Professor*
**CRABB, Amanda** *Assistant Professor*
**HALL, Lisa** *Associate Professor*
**HARROP-PURSER, Laurie** *Associate Professor*
**HEATON, Julie** *Assistant Professor*
**HOPKIN, Ben** *Lecturer*
**KNIGHTON, Janine Sobeck** *Assistant Professor*
**MOODY, Richard L.** *Associate Professor*
**NEWMAN, John** *Associate Professor*
**ROBINSON, Jill** *Lecturer*
**SORTORE, Jeremy** *Assistant Professor*
**WHIPPLE, Graham** *Assistant Professor*

## Course Descriptions

Fine Arts Music and Theatre....639
Theatre....789

## Degrees & Programs

### Theatre Arts, A.A.

#### *Requirements*

The AA and AS in Theatre Arts provide students with basic training in theatre arts. The department offers associate degree students beginning courses in acting, stagecraft, script and text analysis, theatre for children and youth, theatrical design, and directing.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) (recommended for Humanities or Arts majors) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values (3) | 3 |
| | HLTH 1100 | Personal Health and Wellness ((2) | 2 |
| or | PES 1097 | Fitness for Life ((2) | |
| Distribution Courses: | | | |
| | Biology- Choose from Distribution List | | 3 |
| | Physical Science- Choose from Distribution List | | 3 |
| | Additional Biology or Physical Science- Choose from Distribution List | | 3 |
| | Humanities - Choose from Distribution List | | 3 |
| | THEA 1013 | Introduction to Theatre WE (3) | 3 |
| | Social/Behavioral Science- Choose from Distribution List | | 3 |
| Discipline Core Requirements: | | | 17 Credits |
| Complete the following: | | | |
| | THEA 1033 | Acting I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 159R | Production Practicum for Stage and Screen I | 1 |
| | THEA 1713 | Script and Text Analysis I | 3 |
| | THEA 2211 | Theatre for Children and Youth | 3 |
| | THEA 2513 | Introduction to Design for Stage and Screen | 3 |
| | THEA 2514 | Introduction to Design for Stage and Screen Lab | 1 |
| Elective Requirements: | | | 8 Credits |
| | Two courses in the same foreign language | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.5 (C+) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

### Theatre Arts, A.S.

#### *Requirements*

The AA and AS in Theatre Arts provide students with basic training in theatre arts. The department offers associate degree students beginning courses in acting, stagecraft, script and text analysis, theatre for children and youth, theatrical design, and directing.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (recommended for Humanities or Arts majors) (3) | |
| | MAT 1035 | Quantitative Reasoning (6) | |
| Complete one of the following: | | | 3 |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values (3) | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology - Choose from Distribution List | | 3 |
| | Physical Science - Choose from Distribution List | | 3 |
| | Additional Biology or Physical Science - Choose from Distribution List | | 3 |
| | Humanities - Choose from Distribution List | | 3 |
| | THEA 1013 | Introduction to Theatre WE (3) | 3 |
| | Social/Behavioral Science - Choose from Distribution List | | 3 |
| Discipline Core Requirements: | | | 17 Credits |
| Complete the following: | | | |
| | THEA 1033 | Acting I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 159R | Production Practicum for Stage and Screen I | 1 |
| | THEA 1713 | Script and Text Analysis I | 3 |
| | THEA 2211 | Theatre for Children and Youth | 3 |
| | THEA 2513 | Introduction to Design for Stage and Screen | 3 |
| | THEA 2514 | Introduction to Design for Stage and Screen Lab | 1 |
| Elective Requirements: | | | 8 Credits |
| | Select any THEA course(s) 1000 level or higher for a total of 8 credits | | 8 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.5 (C+) or above. (Departments may require a higher GPA.)
3. Residency hours-- minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Theatre Technology, Certificate of Proficiency

### *Requirements*

The Certificate of Proficiency in Theatre Technology provides students with basic training in theatre technology. The department will offer the certificate for students completing beginning courses in stagecraft, costume construction, lighting and sound operation, makeup, shop and backstage procedures, basic design principles, and drafting.

**Total Program Credits: 27**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 24 Credits |
| Complete the following courses: | | | |
| | THEA 1013 | Introduction to Theatre WE | 3 |
| | THEA 1223 | Makeup I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 159R | Production Practicum for Stage and Screen I | 1 |
| | THEA 2203 | Costume Construction I | 3 |
| | THEA 2204 | Costume Construction I Lab | 1 |
| | THEA 2513 | Introduction to Design for Stage and Screen | 3 |
| | THEA 2514 | Introduction to Design for Stage and Screen Lab | 1 |
| | THEA 2531 | Introduction to Lighting and Sound | 3 |
| | THEA 2574 | Drafting for Theatre Design | 3 |
| Elective Requirements: | | | 3 Credits |
| Any THEA courses 1000 or higher | | | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 27 semester credits.
2. Minimum grade of C- required in all courses.
3. Overall grade point average 2.0 (C) or above.
4. Residency hours: minimum of 12 credit hours through course attendance at UVU.

## Theatre Arts, Minor

### *Requirements*

The minor in Theatre Arts serves as a supplement to students from all other disciplines to pursue their interest and cultivate their talents in theatre while pursuing a major in a high-demand field. It also helps secondary education majors in other subject areas to qualify students for a teaching endorsement in theatre. English teaching majors frequently complete a minor in theatre to enrich their teaching of plays and to help prepare them to qualify for an additional subject endorsement in theatre.

**Total Program Credits: 22**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admitted to a bachelor degree program at UVU. | | | |
| Discipline Core Requirements: | | | 22 Credits |
| Complete the following courses: | | | |
| | THEA 1013 | Introduction to Theatre | 3 |
| | THEA 1033 | Acting I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 1713 | Script and Text Analysis I | 3 |
| | THEA 2513 | Introduction to Design for Stage and Screen | 3 |
| | THEA 2514 | Introduction to Design for Stage and Screen Lab | 1 |
| | THEA 2741 | Scriptwriting for the Stage | 3 |
| | THEA 3561 | Stage Management I | 3 |
| or | THEA 3611 | Directing Actors for Stage and Screen (3) | |

**Graduation Requirements:**

1. Complete all theatre courses with a grade of C- or better.

## Theatre Arts - Acting Emphasis, B.F.A.

### *Requirements*

In the Bachelor of Fine Arts program, Acting students receive extensive training in acting, voice, movement, and auditioning, while Musical Theatre students receive extensive training in movement, dance, and vocal and singing technique, as well as acting. Theatre Design and Production students receive extensive design in conceptualization, stage management, costuming, lighting, makeup, scenic design, and rendering.

**Total Program Credits: 126**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admission is competitive and based on successful evaluation of student's performance audition or production portfolio. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical ScienceStudents in the Sound track of the BFA Theatre Design & Production Emphasis are strongly recommended to take PHYS 1700 Physics of Sound | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | HUM 1010 | Humanities Through the Arts | 3 |
| | THEA 1013 | Introduction to Theatre WE (Majors only section) | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 28 Credits |
| | THEA 1033 | Acting I | 3 |
| | THEA 1223 | Makeup I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 159R | Production Practicum for Stage and Screen I | 1 |
| | THEA 1713 | Script and Text Analysis I | 3 |
| | THEA 3611 | Directing Actors for Stage and Screen | 3 |
| | THEA 3721 | Theatre History and Literature I WE | 3 |
| | THEA 3722 | Theatre History and Literature II | 3 |
| | THEA 481R | Theatre Internship (1) | 2 |
| | Complete 4 credits of any THEA, MUSC, DANC, or ART course 1000 level or higher | | 4 |
| Emphasis Requirements: | | | 63 Credits |
| | THEA 1113 | Voice and Speech I | 3 |
| | THEA 1131 | Movement Principles | 2 |
| | THEA 2033 | Acting II | 3 |
| | THEA 2131 | Movement for the Actor I | 3 |
| | THEA 2156 | Group Voice for Theatre | 2 |
| | THEA 3033 | Acting III | 3 |
| | THEA 3113 | Acting for Film | 3 |
| | THEA 3115 | Improvisation I - BFA | 3 |
| | THEA 3118 | Improvisation II-Performance Team - BFA | 2 |
| | THEA 3122 | Voice and Speech II-BFA | 3 |
| | THEA 3123 | Acting in Accent - BFA | 3 |
| | THEA 3124 | Voice and Speech III - BFA | 3 |
| | THEA 3131 | Movement for the Actor II-BFA | 3 |
| | THEA 3133 | Stage Combat | 3 |
| | THEA 3151 | Acting for Musical Theatre I | 3 |
| | THEA 3154 | Dance for Musical Theatre I | 3 |
| | THEA 319R | Performance Practicum for Stage and Screen (1) | 3 |

| | | | |
|---|---|---|---|
| | THEA 4114 | Film Acting II - Reel/Media - BFA | 2 |
| | THEA 4115 | Acting Styles-BFA | 3 |
| | THEA 4117 | Auditioning and the Business - BFA | 3 |
| | THEA 4119 | Senior Showcase and Career Management - BFA | 3 |
| | THEA 4122 | Speaking Shakespeare-BFA | 3 |
| | Complete any THEA, DANC, or MUSC course at 1000 level or higher | | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 126 semester credits; a minimum of 40 credits must be upper division.
2. Overall grade point average of 3.0 or higher.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## Theatre Arts - Musical Theatre, B.F.A.

### *Requirements*

In the Bachelor of Fine Arts program, Acting students receive extensive training in acting, voice, movement, and auditioning, while Musical Theatre students receive extensive training in movement, dance, and vocal and singing technique, as well as acting. Theatre Design and Production students receive extensive design in conceptualization, stage management, costuming, lighting, makeup, scenic design, and rendering.

**Total Program Credits: 126**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admission is competitive and based on successful evaluation of student's performance audition or production portfolio. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science Students in the Sound track of the BFA Theatre Design & Production Emphasis are strongly recommended to take PHYS 1700 Physics of Sound | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | HUM 1010 | Humanities Through the Arts | 3 |
| | THEA 1013 | Introduction to Theatre WE (Majors only section) | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 28 Credits |
| | THEA 1033 | Acting I | 3 |
| | THEA 1223 | Makeup I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 159R | Production Practicum for Stage and Screen I | 1 |
| | THEA 1713 | Script and Text Analysis I | 3 |
| | THEA 3611 | Directing Actors for Stage and Screen | 3 |
| | THEA 3721 | Theatre History and Literature I WE | 3 |
| | THEA 3722 | Theatre History and Literature II | 3 |
| | THEA 481R | Theatre Internship (1) | 2 |
| | Complete 4 credits of any THEA, MUSC, DANC, or ART course 1000 level or higher | | 4 |
| Emphasis Requirements: | | | 63 Credits |
| | DANC 1100 | Beginning Ballet | 1 |
| | DANC 1200 | Beginning Modern/Contemporary Dance | 1 |
| | THEA 1113 | Voice and Speech I | 3 |
| | THEA 2033 | Acting II | 3 |
| | THEA 2131 | Movement for the Actor I | 3 |
| | THEA 2156 | Group Voice for Theatre | 2 |
| | THEA 284R | Singing Technique for Actors I - BFA (1 credit, must be repeated for 3 credits) | 3 |
| or | THEA 184R | Singing Technique for Actors I-BA (1) | |
| | THEA 3033 | Acting III | 3 |
| | THEA 3115 | Improvisation I - BFA | 3 |
| | THEA 3122 | Voice and Speech II-BFA | 3 |
| | THEA 3131 | Movement for the Actor II-BFA | 3 |
| | THEA 3151 | Acting for Musical Theatre I | 3 |
| | THEA 3152 | Acting for Musical Theatre II - BFA | 3 |
| | THEA 3154 | Dance for Musical Theatre I | 3 |
| | THEA 3155 | Dance for Musical Theatre II - BFA | 3 |
| | THEA 319R | Performance Practicum for Stage and Screen | 3 |
| | THEA 3725 | Musical Theatre History | 3 |
| | THEA 4115 | Acting Styles-BFA | 3 |
| | THEA 415R | Musical Theatre Workshop - BFA | 4 |
| | THEA 4117 | Auditioning and the Business - BFA | 3 |

| | | | |
|---|---|---|---|
| | THEA 4119 | Senior Showcase and Career Management - BFA | 3 |
| | THEA 484R | Singing Techniques for Actors II-BFA (1 credit, must be repeated for 4 credits) | 4 |

Graduation Requirements:

1. Completion of a minimum of 126 semester credits; a minimum of 40 credits must be upper division.
2. Overall grade point average of 3.0 or higher.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## Theatre Arts - Theatre Design and Production Emphasis, B.F.A.

### *Requirements*

In the Bachelor of Fine Arts program, Acting students receive extensive training in acting, voice, movement, and auditioning, while Musical Theatre students receive extensive training in movement, dance, and vocal and singing technique, as well as acting. Theatre Design and Production students receive extensive design in conceptualization, stage management, costuming, lighting, makeup, scenic design, and rendering.

**Total Program Credits: 126**

| | | | |
|---|---|---|---|
| Matriculation Requirements: | | | |
| 1. Admission is competitive and based on successful evaluation of student's performance audition or production portfolio. | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 1740 | US Economic History (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | POLS 1000 | American Heritage (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical ScienceStudents in the Sound track of the BFA Theatre Design & Production Emphasis arestrongly recommended to take PHYS 1700 Physics of Sound | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | HUM 1010 | Humanities Through the Arts | 3 |
| | THEA 1013 | Introduction to Theatre WE (Majors only section) | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 28 Credits |
| | THEA 1033 | Acting I | 3 |
| | THEA 1223 | Makeup I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 159R | Production Practicum for Stage and Screen I | 1 |
| | THEA 1713 | Script and Text Analysis I | 3 |
| | THEA 3611 | Directing Actors for Stage and Screen | 3 |
| | THEA 3721 | Theatre History and Literature I WE | 3 |
| | THEA 3722 | Theatre History and Literature II | 3 |
| | THEA 481R | Theatre Internship (1) | 2 |
| | Complete 4 credits of any THEA, MUSC, DANC, or ART course 1000 level or higher | | 4 |
| Emphasis Requirements: | | | 39 Credits |
| | ART 1020 | Basic Drawing for Non-Majors | 3 |
| | ART 1650 | Watercolor | 3 |
| | ARTH 2720 | History of Art from the Renaissance Students in the Sound track should take MUSC 1100; students inother tracks should take ARTH 2720 | 3 |
| or | MUSC 1100 | Fundamentals of Music (3) | |
| | THEA 2203 | Costume Construction I | 3 |
| | THEA 2204 | Costume Construction I Lab | 1 |
| | THEA 2513 | Introduction to Design for Stage and Screen | 3 |
| | THEA 2514 | Introduction to Design for Stage and Screen Lab | 1 |
| | THEA 2515 | Rendering for Theatre | 3 |
| | THEA 2517 | Visual Concepts in Theatre | 3 |
| | THEA 3531 | Lighting Design I | 3 |
| | THEA 3535 | Lighting Design I Lab | 1 |
| | THEA 3541 | Costume Design I | 3 |
| | THEA 3545 | Costume Design I Lab | 1 |
| | THEA 3571 | Scenic Design I | 3 |
| | THEA 3575 | Scenic Design I Lab | 1 |
| | THEA 4981 | Portfolio | 1 |
| | THEA 4994 | Senior Project in Theatre | 3 |
| Emphasis Elective Requirements: | | | 24 Credits |
| Complete 9 credits from the following | | | 9 |

| | | | |
|---|---|---|---|
| | DGM 2130 | Digital Audio Essentials (3) | |
| | THEA 259R | Production Practicum for Stage and Screen II (1) | |
| | THEA 3241 | Storytelling (3) | |
| | THEA 3251 | Puppetry (3) | |
| | THEA 3514 | Period Styles for Theatre Design (3) | |
| | THEA 3561 | Stage Management I (3) | |
| | THEA 359R | Production Practicum for Stage and Screen III (1) | |
| | THEA 3625 | Fundraising for the Arts (3) | |
| | THEA 451R | Special Topics in Theatre Design and Technology (1) | |
| | THEA 454R | Special Topics in Costume Construction (1) | |
| | THEA 457R | Practical Design (1) | |
| | THEA 4621 | Theatre Administration I (3) | |
| | PHIL 3800 | Aesthetics (3) | |
| or | HUM 3800 | Aesthetics (3) | |
| Complete 15 credits from the following | | | 15 |
| COSTUME TRACK | | | |
| | THEA 2541 | Costume History (3) | |
| | THEA 3223 | Makeup II (3) | |
| | THEA 3542 | Costume Construction II (3) | |
| | THEA 3543 | Costume Design II (3) | |
| | THEA 4546 | Digital Costume Design (3) | |
| SCENERY TRACK | | | |
| | THEA 2574 | Drafting for Theatre Design (3) | |
| | THEA 3511 | Stagecraft II (3) | |
| | THEA 3514 | Period Styles for Theatre Design (3) | |
| | THEA 3572 | Scenic Design II (3) | |
| | THEA 3573 | Scenic Painting (3) | |
| LIGHTING TRACK | | | |
| | THEA 2574 | Drafting for Theatre Design (3) | |
| | THEA 3514 | Period Styles for Theatre Design (3) | |
| | THEA 3521 | Sound Design I (3) | |
| | THEA 3534 | Lighting Design II (3) | |
| | THEA 4535 | Multimedia Design for Stage (3) | |
| TECHNICAL DIRECTION TRACK | | | |
| | THEA 2574 | Drafting for Theatre Design (3) | |
| | THEA 3511 | Stagecraft II (3) | |
| | THEA 3514 | Period Styles for Theatre Design (3) | |
| | THEA 3521 | Sound Design I (3) | |
| | THEA 3565 | Technical Direction for the Stage (3) | |
| STAGE MANAGEMENT TRACK | | | |
| | THEA 3514 | Period Styles for Theatre Design (3) | |
| | THEA 3521 | Sound Design I (3) | |
| | THEA 3561 | Stage Management I (3) | |
| | THEA 3625 | Fundraising for the Arts (3) | |
| | THEA 4561 | Stage Management II (3) | |
| SOUND TRACK | | | |
| | DGM 3460 | Live Sound Reinforcement (3) | |
| | THEA 3511 | Stagecraft II (3) | |
| | THEA 3521 | Sound Design I (3) | |
| | THEA 3565 | Technical Direction for the Stage (3) | |
| | THEA 4522 | Sound Design II (3) | |

**Graduation Requirements:**

1. Completion of a minimum of 126 semester credits; a minimum of 40 credits must be upper division.
2. Overall grade point average of 3.0 or higher.
3. Residency hours--minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements.
5. Successful completion of at least one Global/Intercultural course.

## Theatre Arts Education, B.S.

### *Requirements*

The BS in Theatre Arts Education prepares and certifies students to teach and direct theatre in public, private, and charter schools. Student in the program take courses in acting, directing, stagecraft, theatrical design, script and text analysis, directing, and theatre teaching. Those seeking the BS in Theatre Arts Education also take courses from the School of Education in pedagogy, curriculum, classroom management, and child and adolescent development. The program includes mentored student teaching and qualifies students for a professional educator license.

**Total Program Credits: 125**

| Matriculation Requirements: | | | |
|---|---|---|---|
| 1. ACT exam minimums: Composite 21, English 20, Math 19; or SAT exam minimums: Critical Read /Math 1000, with Math and Reading scores of 450; or If student has a bachelor degree or higher, he/she does not need to meet this testing requirement.<br>2. GPA of 3.0 or higher with no grade lower than a C in content area courses.<br>3. Completion of all General Education requirements and the majority of content area courses.<br>4. Pass LiveScan Criminal Background Check | | | |
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| | MAT 1030 | Quantitative Reasoning | 3 |
| or | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |

| | | | |
|---|---|---|---|
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities | | 3 |
| | THEA 1013 | Introduction to Theatre WE | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 90 Credits |
| Theatre Arts Eductation Core Requirements. Complete the following: | | | |
| | THEA 1033 | Acting I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 159R | Production Practicum for Stage and Screen I | 1 |
| | THEA 1713 | Script and Text Analysis I | 3 |
| | THEA 2033 | Acting II [1] | 3 |
| | THEA 2211 | Theatre for Children and Youth | 3 |
| | THEA 2513 | Introduction to Design for Stage and Screen | 3 |
| | THEA 2514 | Introduction to Design for Stage and Screen Lab | 1 |
| | THEA 2741 | Scriptwriting for Stage | 3 |
| | THEA 3511 | Stagecraft II | 3 |
| | THEA 3561 | Stage Management I | 3 |
| | THEA 3611 | Directing Actors for Stage and Screen | 3 |
| | THEA 3612 | Directing Actors for the Stage | 3 |
| | THEA 3721 | Theatre History and Literature I WE | 3 |
| | THEA 3722 | Theatre History and Literature II | 3 |
| | THEA 4200 | Theatre and Drama in the Secondary School | 3 |
| Theatre Arts Education Technical Theatre Requirement. Complete 14 credits from the following courses: | | | 14 |
| | THEA 1223 | Makeup I (3) | |
| | THEA 2531 | Introduction to Lighting and Sound (3) | |
| | THEA 2574 | Drafting for Theatre Design (3) | |
| | THEA 3514 | Period Styles for Theatre Design (3) | |
| | THEA 3521 | Sound Design I (3) | |
| | THEA 3531 | Lighting Design I (3) | |
| | THEA 3535 | Lighting Design I Lab (1) | |
| | THEA 3541 | Costume Design I (3) | |
| | THEA 3545 | Costume Design I Lab (1) | |
| | THEA 3571 | Scenic Design I (3) | |
| | THEA 3573 | Scenic Painting (3) | |
| | THEA 3575 | Scenic Design I Lab (1) | |
| Secondary Education Licensure Requirements. Complete the following: Must be completed with a grade of B- or higher. | | | |
| | EDEL 1010 | Introduction to Education | 2 |
| | EDSC 3000 | Educational Psychology | 3 |
| | EDSC 3250 | Instructional Media | 2 |
| | EDSC 4200 | Classroom Management I | 2 |
| | EDSC 4250 | Classroom Management II | 2 |
| | EDSC 4440 | Content Area Literacies | 3 |
| | EDSC 445G | Multicultural Instruction ESL | 3 |
| | EDSC 455G | Secondary Curriculum Instruction and Assessment | 3 |
| | EDSC 4850 | Student Teaching--Secondary | 8 |
| | EDSC 4990 | Teacher Performance Assessment Project WE | 2 |
| | EDSP 340G | Exceptional Students | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 125 semester credits, 40 of which must be upper division.
2. Overall GPA of 3.0 (B) or above with no grade lower than a C in major required content courses and no grade lower than a B- in Licensure and Methods courses.
3. Residency hours - minimum of 30 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Successful completion of at least one Global/Intercultural course.

Footnote

[1] For Theatre Arts Education students, the prerequisite of THEA 1113 Voice and Speech I will be waived.

## Theatre Arts, B.A.

### *Requirements*

The recently revised BA in Theatre focuses theatre majors' work in a module (12 credits) in Performance, in Production, and a given specialty. The revised BA in Theatre Arts offers students a broader-based program that better reflects the liberal arts paradigm of BA degrees. It provides students with a higher level of choice than does a BFA program while ensuring that students graduate with three specific skill sets.

**Total Program Credits: 120**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 36 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | ENGL 2010 | Intermediate Writing Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3) | |
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6) | |
| Complete one of the following: | | | 3 |
| | HIST 1700 | American Civilization (3) | |

| | | | |
|---|---|---|---|
| | HIST 2700 | US History to 1877 (3) | |
| and | HIST 2710 | US History since 1877 (3) | |
| | HIST 1740 | US Economic History (3) | |
| | POLS 1000 | American Heritage (3) | |
| | POLS 1100 | American National Government (3) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values (3) | 3 |
| | HLTH 1100 | Personal Health and Wellness (2) | 2 |
| or | PES 1097 | Fitness for Life (2) | |
| Distribution Courses: | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution (202G/2020 foreign language course) | | 4 |
| | THEA 1013 | Introduction to Theatre WE (3) | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 66 Credits |
| THEATRE ARTS CORE COURSES | | | |
| | THEA 1033 | Acting I | 3 |
| | THEA 1513 | Stagecraft I | 2 |
| | THEA 1514 | Stagecraft I Lab | 1 |
| | THEA 159R | Production Practicum for Stage and Screen I | 1 |
| | THEA 1713 | Script and Text Analysis I | 3 |
| | THEA 2211 | Theatre for Children and Youth | 3 |
| | THEA 2513 | Introduction to Design for Stage and Screen | 3 |
| | THEA 2514 | Introduction to Design for Stage and Screen Lab | 1 |
| | THEA 3561 | Stage Management I | 3 |
| | THEA 3611 | Directing Actors for Stage and Screen | 3 |
| | THEA 3721 | Theatre History and Literature I WE | 3 |
| | THEA 3722 | Theatre History and Literature II | 3 |
| | THEA 4981 | Portfolio | 1 |
| AREA OF STUDY A: PERFORMANCE. Complete 12 approved credits from the following courses. At least 9 of the 12 credits must be at the 3000 level or above. To ensure a higher level of rigor and focus, students are strongly advised to complete their requirements in the Performance Area of Study in a single module: Directing, Musical Theatre, or Acting. See advisor for the specifics of each module. | | | 12 |
| DIRECTING MODULE COURSES | | | |
| | THEA 2033 | Acting II (3) | |
| | THEA 3612 | Directing Actors for the Stage (3) | |
| | THEA 3614 | Directing Actors for the Screen (3) | |
| | THEA 3711 | Script and Text Analysis II (3) | |
| | THEA 4993 | Senior Project in Performance (3) | |
| MUSICAL THEATRE MODULE COURSES | | | |
| | THEA 184R | Singing Technique for Actors I-BA (1) | |
| | THEA 2033 | Acting II (3) | |
| | THEA 2156 | Group Voice for Theatre (2) | |
| | THEA 3116 | Auditioning - BA (3) | |
| | THEA 3151 | Acting for Musical Theatre I (3) | |
| | THEA 3154 | Dance for Musical Theatre I (3) | |
| | THEA 315R | Musical Theatre Practicum (2) | |
| | THEA 319R | Performance Practicum for Stage and Screen (1) | |
| | THEA 3725 | Musical Theatre History (3) | |
| | THEA 4993 | Senior Project in Performance (3) | |
| ACTING MODULE COURSES | | | |
| | THEA 1113 | Voice and Speech I (3) | |
| | THEA 2033 | Acting II (3) | |
| | THEA 2127 | Voiceover Acting (3) | |
| | THEA 2131 | Movement for the Actor I (3) | |
| | THEA 3033 | Acting III (3) [1] | |
| | THEA 3113 | Acting for Film (3) | |
| | THEA 3116 | Auditioning - BA (3) | |
| | THEA 3133 | Stage Combat (3) [1] | |
| | THEA 319R | Performance Practicum for Stage and Screen (1) | |
| | THEA 4993 | Senior Project in Performance (3) | |
| AREA OF STUDY B: PRODUCTION. Complete 12 approved credits from the following courses. At least 9 of the 12 credits must be at the 3000 level or above. To ensure a higher level of rigor and focus, students are strongly advised to complete their requirements in the Production Area of Study in a single module: Design or Technical Production. See advisor for the specifics of each module. | | | 12 |
| DESIGN MODULE COURSES | | | |
| | ART 1020 | Basic Drawing for Non-Majors (3) | |
| | THEA 1223 | Makeup I (3) | |
| | THEA 2531 | Introduction to Lighting and Sound (3) | |
| | THEA 2541 | Costume History (3) | |
| | THEA 2574 | Drafting for Theatre Design (3) | |
| | THEA 3223 | Makeup II (3) | |
| | THEA 3514 | Period Styles for Theatre Design (3) [1] | |
| | THEA 3521 | Sound Design I (3) | |
| | THEA 3531 | Lighting Design I (3) | |
| | THEA 3534 | Lighting Design II (3) | |
| | THEA 3535 | Lighting Design I Lab (1) | |
| | THEA 3541 | Costume Design I (3) | |
| | THEA 3543 | Costume Design II (3) | |
| | THEA 3545 | Costume Design I Lab (1) | |
| | THEA 3571 | Scenic Design I (3) | |
| | THEA 3572 | Scenic Design II (3) | |
| | THEA 3575 | Scenic Design I Lab (1) | |

| | | | |
|---|---|---|---|
| | THEA 4522 | Sound Design II (3) | |
| | THEA 457R | Practical Design (1) [1] | |
| TECHNICAL PRODUCTION MODULE COURSES | | | |
| | DGM 2130 | Digital Audio Essentials (3) | |
| | THEA 2203 | Costume Construction I (3) | |
| | THEA 2204 | Costume Construction I Lab (1) | |
| | THEA 2531 | Introduction to Lighting and Sound (3) | |
| | THEA 2574 | Drafting for Theatre Design (3) | |
| | THEA 3511 | Stagecraft II (3) | |
| | THEA 3542 | Costume Construction II (3) | |
| | THEA 3565 | Technical Direction for the Stage (3) | |
| | THEA 3573 | Scenic Painting (3) | |
| | THEA 454R | Special Topics in Costume Construction (1) | |
| | THEA 4561 | Stage Management II (3) | |
| | THEA 481R | Theatre Internship (1) | |
| AREA OF STUDY C: SPECIALTY. Complete 12 approved credits from the following courses. At least 9 of the 12 credits must be at the 3000 level or above. To ensure a higher level of rigor and focus, students are strongly advised to complete their requirements in the Specialty Area of Study in a single module: Theatre for Children and Youth, Scriptwriting, Dramaturgy, Film Studies, or Theatre Administration. See advisor for the specifics of each module. | | | 12 |
| THEATRE FOR CHILDREN AND YOUTH MODULE COURSES | | | |
| | THEA 2100 | Teaching Theatre For Children (3) | |
| | THEA 222R | Theatre for Young Audiences Tour (3) | |
| | THEA 272R | BA Seminar (1) | |
| | THEA 2741 | Scriptwriting for Stage (3) | |
| | THEA 3211 | Applied Theatre (3) | |
| | THEA 3231 | Creative Drama (3) | |
| | THEA 3241 | Storytelling (3) | |
| | THEA 3251 | Puppetry (3) | |
| | THEA 3731 | Dramaturgy (3) | |
| | THEA 374R | New Script Workshop (3) | |
| | THEA 4994 | Senior Project in Theatre (3) | |
| SCRIPTWRITING MODULE COURSES | | | |
| | THEA 272R | BA Seminar (1) | |
| | THEA 2741 | Scriptwriting for Stage (3) | |
| | THEA 2742 | Scriptwriting for the Screen WE (3) | |
| | THEA 3731 | Dramaturgy (3) | |
| | THEA 3741 | Script Writing II (3) | |
| | THEA 374R | New Script Workshop (3) | |
| | THEA 4741 | Scriptwriting III (3) | |
| | THEA 474R | New Play Practicum (1) | |
| | THEA 4994 | Senior Project in Theatre (3) | |
| DRAMATURGY MODULE COURSES | | | |
| | THEA 272R | BA Seminar (1) | |
| | THEA 2741 | Scriptwriting for Stage (3) | |
| | THEA 3731 | Dramaturgy (3) | |
| | THEA 374R | New Script Workshop (3) | |
| | THEA 474R | New Play Practicum (1) | |
| | THEA 4994 | Senior Project in Theatre (3) | |
| FILM STUDIES MODULE COURSES | | | |
| | DGM 1520 | Digital Cinema Production I (3) | |
| | DGM 302R | Digital Cinema Production Lecture Series-CineSkype (1) (Maximum of 3credits toward graduation) | |
| | DGM 3570 | Storytelling for Digital Media II (3) | |
| | THEA 1023 | Introduction to Film (3) | |
| | THEA 2311 | Film History I (3) | |
| | THEA 2312 | Film History II (3) | |
| | THEA 272R | BA Seminar (1) | |
| | THEA 2742 | Scriptwriting for the Screen WE (3) | |
| | THEA 3110 | Non-Fiction Cinema History (3) | |
| | THEA 314G | Global Cinema History (3) | |
| | THEA 416R | Special Topics in Film Studies (3) | |
| | THEA 4994 | Senior Project in Theatre (3) | |
| THEATRE ADMINISTRATION MODULE COURSES | | | |
| | ACC 3000 | Financial Managerial and Cost Accounting Concepts (3) | |
| | THEA 272R | BA Seminar (1) | |
| | THEA 3625 | Development and Fundraising for the Arts (3) | |
| | THEA 4621 | Theatre Administration I (3) | |
| | THEA 4622 | Theatre Administration II (3) | |
| Elective Requirements: | | | 18 Credits |
| | One Foreign Language (Foreign Language 202G/2020* course fulfills Humanities Distribution) | | 12 |
| | Any courses 1000 or higher | | 6 |

**Graduation Requirements:**

1. Completion of a minimum of 120 semester credits, 40 of which must be upper division.
2. Overall grade point average of 2.5 (C+) or above.
3. Residency hours - minimum of 30 credit hours through course attendance at UVU, with at least 10 hours in the last 45 hours.
4. Successful completion of at least one Global/Intercultural course.

| Footnotes |
|---|
| [1] Requires additional pre-requisite courses not already included in the degree, but they could fill elective credits. |

# Transportation Technologies

## Transporation Technologies

The Transportation Technologies department is in the College of Engineering & Technology. To find the most up-to-date information from the Transportation Technologies department, visit their website.

Transporation Technologies department

**DEPARTMENT CHAIR**

**WILSON, Don** *Associate Professor*

**FACULTY**

**BEAN, Paul** *Associate Professor*
**BOGGESS, Cris Dee** *Associate Professor*
**BOHL, Dean** *Associate Professor*
**HASARA, Matthew** *Assistant Professor*
**HOLM, Jeff** *Professional In Residence*
**JENNINGS, Trent** *Assistant Professor*
**LOW, Todd** *Professor*
**MOORE, Thomas** *Lecturer*
**ORR, Terrance** *Associate Professor*
**TAYLOR, Zachery** *Assistant Professor*
**WALKER, Kent** *Associate Professor*
**WILSON, Don** *Associate Professor*

## Course Descriptions

Auto Mechanics....498
Collision Repair Technology....546
Diesel Mechanics....579
Automotive Power Sports....755

## Degrees & Programs

### Automotive Power Sports, A.A.S.

#### *Requirements*

The AAS in Automotive Power Sports is designed to train technicians in the field of maintenance and repair of personal transportation craft and multi person transportation vehicles that are currently outside the realm of automotive. The degree includes: on road alternative vehicles (side by sides), personal watercraft, All Terrain Vehicle (ATV) and Utility Terrain Vehicle (UTV), snow machines, lawn and garden systems, and motorcycle technology. Graduates will gain an in-depth understanding of alternative transportation vehicles utilizing hands-on, performance based training.

A sales and service business skills course will also aid students to acclimate from school training to a live repair facility. Students will receive training in four-stroke and two-stroke engines, continuous variable transmissions (CVT), suspension and braking systems, composite repairs, and small engine electronic systems.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 17 Credits |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| or | MAT 1010 | Intermediate Algebra (4) | |
| Complete one of the following: | | | 3 |
| | MKTG 220G | Written Business Communication WE (3) | |
| | ENGL 1010 | Introduction to Academic Writing (3) | |
| | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 3 |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety, or Environment Course | | 2 |
| Discipline Core Requirements: | | | 46 Credits |
| | AUT 1110 | Brake Systems | 2 |
| | AUT 111L | Brake Systems Lab | 1 |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 1170 | Engine Electrical Systems | 2 |
| | AUT 117L | Engine Electrical Systems Lab | 1 |
| | AUT 1210 | Suspension and Steering Systems | 2 |
| | AUT 121L | Suspension and Steering Systems Lab | 1 |
| | CRT 2400 | Plastic Paintless Dent Repair | 2 |
| | CRT 240L | Plastic Paintless Dent Repair | 1 |
| | CRT 1230 | Welding and Cutting | 2 |
| | CRT 123L | Welding and Cutting Lab | 1 |
| | PST 1110 | Two Stroke Engine Systems | 2 |
| | PST 1115 | Two Stroke Engine Systems Lab | 1 |
| | PST 1210 | Four Stroke Small Engine Systems | 2 |
| | PST 1215 | Four Stroke Small Engine Systems Lab | 1 |
| | PST 1120 | Constant Velocity Transmissions and Drive Systems | 2 |
| | PST 1125 | Constant Velocity Transmissions and Drive Systems Lab | 1 |
| | PST 2110 | Snowmobile Systems | 2 |
| | PST 2115 | Snowmobile Systems Lab | 1 |
| | PST 2120 | ATV and UTV Systems | 2 |
| | PST 2125 | ATV and UTV Systems Lab | 1 |
| | PST 2130 | Small Motorcycles and Scooters | 2 |
| | PST 2135 | Small Motorcycles and Scooters Lab | 1 |
| | PST 2230 | Street and Sport Motorcycles | 2 |
| | PST 2235 | Street and Sport Motorcycle Lab | 1 |
| | PST 2240 | Outdoor Power Equipment | 2 |
| | PST 2245 | Outdoor Power Equipment Systems Lab | 1 |
| | PST 2250 | Personal Watercraft | 2 |
| | PST 2255 | Personal Watercraft Systems Lab | 1 |
| | AUT 285R | Cooperative Correlated Class [1] | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits

2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 20 credit hours through course attendance at UVU
4. Completion of GE and specified departmental requirements

| Footnote: |
|---|
| 1 Cooperative Education courses may be used in place of some of the laboratory or shop classes for completion of AAS requirements. Approval of the program coordinator must be secured before class enrollment. |

## Automotive Technology, A.A.S.

### *Requirements*

Five options are available: a One-Year Certificate, a Two-Year Diploma, an Associated in applied Science Degree, an Associate in Science, and the Bachelor of Science in Technology Management degree.

**Total Program Credits: 64**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 16 Credits |
| | MKTG 220G | Written Business Communication WE | 3 |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 3 |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety, or Environment Course | | 1 |
| Discipline Core Requirements: | | | 48 Credits |
| | AUT 1110 | Brake Systems | 2 |
| | AUT 111L | Brake Systems Lab | 1 |
| | AUT 1120 | Manual Power Trains | 2 |
| | AUT 112L | Manual Power Trains Lab | 1 |
| | AUT 1130 | Engine Repair | 2 |
| | AUT 113L | Engine Repair Lab | 1 |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 1170 | Engine Electrical Systems | 2 |
| | AUT 117L | Engine Electrical Systems Lab | 1 |
| | AUT 1210 | Suspension and Steering Systems | 2 |
| | AUT 121L | Suspension and Steering Systems Lab | 1 |
| | AUT 1220 | Automatic Transmissions and Transaxles | 2 |
| | AUT 122L | Automatic Transmissions and Transaxles Lab | 1 |
| | AUT 1230 | Engine Performance | 2 |
| | AUT 123L | Engine Performance Lab | 1 |
| | AUT 2110 | Advanced Steering Suspension and Alignment | 2 |
| | AUT 211L | Automotive Service Practicum Steering, Suspension and Alignment Lab | 1 |
| | AUT 2120 | Advanced Engine Performance | 2 |
| | AUT 212L | Automotive Service Practicum Engine Performance Lab | 1 |
| | AUT 2130 | Advanced Emission Control Systems | 2 |
| | AUT 213L | Automotive Service Practicum Emission Controls Lab | 1 |
| | AUT 2140 | Chassis Electrical and Electronics Systems | 2 |
| | AUT 214L | Automotive Service Practicum Chassis Electrical and Electronics Lab | 1 |
| | AUT 2210 | Advanced Braking and Control Systems | 2 |
| | AUT 221L | Automotive Service Practicum Brake Systems Lab | 1 |
| | AUT 2220 | Automatic Transmissions and Electronic Controls | 2 |
| | AUT 222L | Automotive Service Practicum Transmission Controls Lab | 1 |
| | AUT 2240 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | AUT 224L | Automotive HVAC Lab | 1 |
| | AUT 2250 | Electronic Fuel Management Systems (2) | |
| or | AUT 2350 | Electronic Diesel Fuel Management Systems | 2 |
| | AUT 225L | Automotive Service Practicum Fuel Management Systems Lab | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 64 semester credits
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 20 credit hours through course attendance at UVU
4. Completion of GE and specified departmental requirements

## Automotive Technology, A.S.

### *Requirements*

Five options are available: a One-Year Certificate, a Two-Year Diploma, an Associated in applied Science Degree, an Associate in Science, and the Bachelor of Science in Technology Management degree.

**Total Program Credits: 60**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 35 Credits |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Context (5.0) | |
| | ENGL 2010 | Intermediate Writing/Academic Writing and Research | 3 |
| Complete one of the following: | | | 3 |
| | MAT 1030 | Quantitative Reasoning (3.0) | |

| | | | |
|---|---|---|---|
| | MAT 1035 | Quantitative Reasoning with Integrated Algebra (6.0) | |
| | STAT 1040 | Introduction to Statistics (3.0) | |
| | STAT 1045 | Introduction to Statistics with Algebra (5.0) | |
| | MATH 1050 | College Algebra (4.0) | |
| | MATH 1055 | College Algebra with Preliminaries (5.0) | |
| | MATH 1090 | College Algebra for Business (3.0) | |
| Complete one of the following: | | | 3 |
| | POLS 1000 | American Heritage (3.0) | |
| | HIST 2700 | US History to 1877 (3.0) | |
| and | HIST 2710 | US History since 1877 (3.0) | |
| | HIST 1700 | American Civilization (3.0) | |
| | HIST 1740 | US Economic History (3.0) | |
| | POLS 1100 | American National Government (3.0) | |
| Complete the following: | | | |
| | PHIL 2050 | Ethics and Values | 3 |
| | HLTH 1100 | Personal Health and Wellness (2.0) | |
| or | PES 1097 | Fitness for Life | 2 |
| Distribution Courses | | | |
| | Biology | | 3 |
| | Physical Science | | 3 |
| | Additional Biology or Physical Science | | 3 |
| | Humanities Distribution | | 3 |
| | Fine Arts Distribution | | 3 |
| | Social/Behavioral Science | | 3 |
| Discipline Core Requirements: | | | 16 Credits |
| | Choose from AUT or related 1000 level or higher courses | | 16 |
| Elective Requirements: | | | 9 Credits |
| | Choose electives from 1000 level or higher courses | | 9 |

**Graduation Requirements:**

1. Completion of a minimum of 60 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require higher GPA.)
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Collision Repair Technology - Collision Repair Emphasis, A.A.S.

### *Requirements*

One-Year Certificate, a Diploma, the Associate in Applied Science Degree, and the Bachelor of Science in Technology Management Degree. See graduation requirements in the catalog for more information.

**Total Program Credits: 64**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 16 Credits |
| | MKTG 220G | Written Business Communication WE | 3 |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 3 |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety or Environment Course | | 1 |
| Discipline Core Requirements: | | | 24 Credits |
| Complete the following: | | | |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 2240 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | AUT 224L | Automotive HVAC Lab | 1 |
| | CRT 1110 | Surface Preparation | 2 |
| | CRT 111L | Surface Preparation Lab | 1 |
| | CRT 1120 | Nonstructural Repair | 2 |
| | CRT 112L | Nonstructural Repair Lab | 1 |
| | CRT 1130 | Overall Refinishing and Problem Solving | 2 |
| | CRT 113L | Overall Refinishing and Problem Solving Lab | 1 |
| | CRT 1140 | Panel Replacement and Adjustment | 2 |
| | CRT 114L | Panel Replacement and Adjustment Lab | 1 |
| | CRT 1210 | Blending Tinting and Detailing | 2 |
| | CRT 121L | Blending Tinting and Detailing Lab | 1 |
| | CRT 1230 | Welding and Cutting | 2 |
| | CRT 123L | Welding and Cutting Lab | 1 |
| | CRT 281R | Cooperative Work Experience (1) [1] | |
| | CRT 285R | Cooperative Correlated Class (1) [1] | |
| | CRT 299R | Skills USA(optional) (1) | |
| Emphasis Requirements: | | | 24 Credits |
| | CRT 2310 | Collision Damage Reporting | 2 |
| | CRT 2320 | Structural Damage Analysis | 2 |
| | CRT 2330 | Structural Repair | 2 |
| | CRT 2340 | Full and Partial Panel Replacement | 2 |
| | CRT 2400 | Plastic Paintless Dent Repair | 2 |
| | CRT 2440 | Mechanical Advanced Vehicle Systems | 2 |
| | CRT 2450 | Bags Brakes Steering | 2 |
| | CRT 2630 | Detailing and Custom Painting | 2 |
| | CRT 231L | Collision Damage Reporting Lab | 1 |
| | CRT 232L | Structural Damage Analysis Lab | 1 |
| | CRT 233L | Structural Repair Lab | 1 |

| | | | |
|---|---|---|---|
| | CRT 234L | Full and Partial Panel Replacement Lab | 1 |
| | CRT 240L | Plastic PaintLess Dent Repair Lab | 1 |
| | CRT 244L | Mechanical Advanced Vehicle Systems Lab | 1 |
| | CRT 245L | Bags Brakes Steering Lab | 1 |
| | CRT 263L | Detailing and Custom Painting Lab | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 64 semester credits
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 20 credit hours through course attendance at UVU
4. Completion of GE and specified departmental requirements

| Footnote |
|---|
| 1- Cooperative Education courses may be used in place of some of the laboratory or shop classes for completion of AAS requirements. Approval of the program coordinator must be secured before class enrollment.. |

## Collision Repair Technology - Street Rod Emphasis, A.A.S.

### *Requirements*

One-Year Certificate, a Diploma, the Associate in Applied Science Degree, and the Bachelor of Science in Technology Management Degree. See graduation requirements in the catalog for more information.

**Total Program Credits: 64**

| General Education Requirements: | | | 16 Credits |
|---|---|---|---|
| | MKTG 220G | Written Business Communication WE | 3 |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| | Any approved Humanities, Fine Arts, or Foreign Language Distribution Course | | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 3 |
| | Any approved Biology or Physical Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety or Environment Course | | 1 |
| Discipline Core Requirements: | | | 24 Credits |
| Complete the following: | | | |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 2240 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | AUT 224L | Automotive HVAC Lab | 1 |
| | CRT 1110 | Surface Preparation | 2 |
| | CRT 111L | Surface Preparation Lab | 1 |
| | CRT 1120 | Nonstructural Repair | 2 |
| | CRT 112L | Nonstructural Repair Lab | 1 |
| | CRT 1130 | Overall Refinishing and Problem Solving | 2 |
| | CRT 113L | Overall Refinishing and Problem Solving Lab | 1 |
| | CRT 1140 | Panel Replacement and Adjustment | 2 |
| | CRT 114L | Panel Replacement and Adjustment Lab | 1 |
| | CRT 1210 | Blending Tinting and Detailing | 2 |
| | CRT 121L | Blending Tinting and Detailing Lab | 1 |
| | CRT 1230 | Welding and Cutting | 2 |
| | CRT 123L | Welding and Cutting Lab | 1 |
| | CRT 281R | Cooperative Work Experience (1) [1] | |
| | CRT 285R | Cooperative Correlated Class (1) [1] | |
| | CRT 299R | Skills USA (optional) (1) | |
| Emphasis Requirements: | | | 24 Credits |
| Complete the following: | | | |
| | CRT 2510 | Custom Welding | 2 |
| | CRT 251L | Custom Welding Lab | 1 |
| | CRT 2530 | Panel Fabrication | 2 |
| | CRT 253L | Panel Fabrication Lab | 1 |
| | CRT 2520 | Customizing | 2 |
| | CRT 252L | Customizing Lab | 1 |
| | CRT 2640 | Panel Fabrication of Aluminum | 2 |
| | CRT 264L | Panel Fabrication of Aluminum Lab | 1 |
| | CRT 2610 | Top Chopping Sectioning and Channeling | 2 |
| | CRT 261L | Top Chopping Sectioning and Channeling Lab | 1 |
| | CRT 2620 | Frames | 2 |
| | CRT 262L | Frames Lab | 1 |
| | CRT 2630 | Detailing and Custom Painting | 2 |
| | CRT 263L | Detailing and Custom Painting Lab | 1 |
| | CRT 2650 | Automotive Interior Design | 2 |
| | CRT 265L | Automotive Interior Design Lab | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 64 semester credits
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 20 credit hours through course attendance at UVU
4. Completion of GE and specified departmental requirements.

| Footnote |
|---|
| 1- Cooperative Education courses may be used in place of some of the laboratory or shop classes for completion of AAS requirements. Approval of the program coordinator must be secured before class enrollment.. |

## Diesel Mechanics Technology, A.A.S.

### *Requirements*

One-Year Certificate, a Diploma, the Associate in Applied Science Degree, and the Bachelor of Science in Technology Management Degree.

**Total Program Credits: 63**

| | | | |
|---|---|---|---|
| General Education Requirements: | | | 10 Credits |
| | MKTG 220G | Written Business Communication WE | 3 |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| or | MAT 1000 | Integrated Beginning and Intermediate Algebra (5.0) | |
| or | Any higher MAT or MATH course | | |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 3 |
| | Any approved Physical Education, Health, Safety or Environment Course | | 1 |
| Discipline Core Requirements: | | | 53 Credits |
| | DMT 1005 | Basic Shop and Safety Skills | 2 |
| | DMT 1110 | Diesel Engine Overhaul | 4 |
| | DMT 111L | Diesel Engine Overhaul Lab | 2 |
| | DMT 1120 | Diesel Engine Operation Tune Up | 4 |
| | DMT 112L | Diesel Engine Operation Tune Up Lab | 2 |
| | DMT 1510 | Electrical Systems I | 4 |
| | DMT 151L | Electrical Systems I Lab | 2 |
| | DMT 1520 | Electrical Systems II | 2 |
| | DMT 152L | Electrical Systems II Lab | 1 |
| | DMT 2230 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | DMT 223L | Heating Ventilation Air Conditioning and Refrigeration Lab | 1 |
| | DMT 2310 | Fluid Power I Theory | 4 |
| | DMT 231L | Fluid Power I Lab | 2 |
| | DMT 2320 | Fluid Power II Theory | 4 |
| | DMT 232L | Fluid Power II Lab | 2 |
| | DMT 2410 | Chassis Theory | 4 |
| | DMT 241L | Chassis Lab | 2 |
| | DMT 2420 | Power Train Theory | 4 |
| | DMT 242L | Power Train Lab | 2 |
| | DMT 2530 | Electronic Engine Management | 2 |
| | DMT 253L | Electronic Engine Management Lab | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours--minimum of 20 credit hours through course attendance at UVU.
4. Completion of GE and specified departmental requirements.

## Automotive Technology, Certificate of Completion

### *Requirements*

Five options are available: a One-Year Certificate, a Two-Year Diploma, an Associated in applied Science Degree, an Associate in Science, and the Bachelor of Science in Technology Management degree.

**Total Program Credits: 31**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 31 Credits |
| | AUT 1110 | Brake Systems | 2 |
| | AUT 111L | Brake Systems Lab | 1 |
| | AUT 1120 | Manual Power Trains | 2 |
| | AUT 112L | Manual Power Trains Lab | 1 |
| | AUT 1130 | Engine Repair | 2 |
| | AUT 113L | Engine Repair Lab | 1 |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 1170 | Engine Electrical Systems | 2 |
| | AUT 117L | Engine Electrical Systems Lab | 1 |
| | AUT 1210 | Suspension and Steering Systems | 2 |
| | AUT 121L | Suspension and Steering Systems Lab | 1 |
| | AUT 1220 | Automatic Transmissions and Transaxles | 2 |
| | AUT 122L | Automatic Transmissions and Transaxles Lab | 1 |
| | AUT 1230 | Engine Performance | 2 |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution course | | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 31 semester credits
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 10 credit hours through course attendance at UVU
4. Completion of specified departmental requirements

## Collision Repair Technology, Certificate of Completion

### *Requirements*

One-Year Certificate, a Diploma, the Associate in Applied Science Degree, and the Bachelor of Science in Technology Management Degree. See graduation requirements in the catalog for more information.

**Total Program Credits: 32**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 32 Credits |
| Complete the following: | | | |
| | AUT 1260 | Tech Math for Mechanics | 3 |

| | | | |
|---|---|---|---|
| | MKTG 220G | Written Business Communication WE | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 2 |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 2240 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | AUT 224L | Automotive HVAC Lab | 1 |
| | CRT 1110 | Surface Preparation | 2 |
| | CRT 111L | Surface Preparation Lab | 1 |
| | CRT 1120 | Nonstructural Repair | 2 |
| | CRT 112L | Nonstructural Repair Lab | 1 |
| | CRT 1230 | Welding and Cutting | 2 |
| | CRT 123L | Welding and Cutting Lab | 1 |
| | CRT 1140 | Panel Replacement and Adjustment | 2 |
| | CRT 114L | Panel Replacement and Adjustment Lab | 1 |
| | CRT 1130 | Overall Refinishing and Problem Solving | 2 |
| | CRT 113L | Overall Refinishing and Problem Solving Lab | 1 |
| | CRT 1210 | Blending Tinting and Detailing | 2 |
| | CRT 121L | Blending Tinting and Detailing Lab | 1 |

**Graduation Requirements:**

1. Completion of a minimum of 32 semester credits
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 10 credit hours through course attendance at UVU

Note: Cooperative Education courses may be used in place of some of the laboratory or shop classes for completion of diploma requirements.

## Diesel Mechanics Technology, Certificate of Completion

### *Requirements*

One-Year Certificate, a Diploma, the Associate in Applied Science Degree, and the Bachelor of Science in Technology Management Degree.

**Total Program Credits: 32**

| Discipline Core Requirements: | | | 32 Credits |
|---|---|---|---|
| | DMT 1110 | Diesel Engine Overhaul | 4 |
| | DMT 111L | Diesel Engine Overhaul Lab | 2 |
| | DMT 1120 | Diesel Engine Operation Tune Up | 4 |
| | DMT 112L | Diesel Engine Operation Tune Up Lab | 2 |
| | DMT 2410 | Chassis Theory | 4 |
| | DMT 241L | Chassis Lab | 2 |
| | DMT 2420 | Power Train Theory | 4 |
| | DMT 242L | Power Train Lab | 2 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| or | MAT 1000 | Integrated Beginning and Intermediate Algebra (5.0) | |
| or | Any higher MAT or MATH course | | |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 32 credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Residency hours -- minimum of 10 credit hours through course attendance at UVU.

## Automotive Technology, Diploma

### *Requirements*

Five options are available: a One-Year Certificate, a Two-Year Diploma, an Associated in applied Science Degree, an Associate in Science, and the Bachelor of Science in Technology Management degree.

**Total Program Credits: 56**

| Discipline Core Requirements: | | | 56 Credits |
|---|---|---|---|
| | AUT 1110 | Brake Systems | 2 |
| | AUT 111L | Brake Systems Lab | 1 |
| | AUT 1120 | Manual Power Trains | 2 |
| | AUT 112L | Manual Power Trains Lab | 1 |
| | AUT 1130 | Engine Repair | 2 |
| | AUT 113L | Engine Repair Lab | 1 |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 1170 | Engine Electrical Systems | 2 |
| | AUT 117L | Engine Electrical Systems Lab | 1 |
| | AUT 1210 | Suspension and Steering Systems | 2 |
| | AUT 121L | Suspension and Steering Systems Lab | 1 |
| | AUT 1220 | Automatic Transmissions and Transaxles | 2 |
| | AUT 122L | Automatic Transmissions and Transaxles Lab | 1 |
| | AUT 1230 | Engine Performance | 2 |
| | AUT 123L | Engine Performance Lab | 1 |
| | AUT 2110 | Advanced Steering Suspension and Alignment | 2 |
| | AUT 211L | Automotive Service Practicum Steering, Suspension and Alignmnet Lab | 1 |
| | AUT 2120 | Advanced Engine Performance | 2 |
| | AUT 212L | Automotive Service Practicum Engine Performance Lab | 1 |
| | AUT 2130 | Advanced Emission Control Systems | 2 |

| | | | |
|---|---|---|---|
| | AUT 213L | Automotive Service Practicum Emission Controls Lab | 1 |
| | AUT 2140 | Chassis Electrical and Electronics Systems | 2 |
| | AUT 214L | Automotive Service Practicum Chassis Electrical and Electronics Lab | 1 |
| | AUT 2210 | Advanced Braking and Control Systems | 2 |
| | AUT 221L | Automotive Service Practicum Brake Systems Lab | 1 |
| | AUT 2220 | Automatic Transmissions and Electronic Controls | 2 |
| | AUT 222L | Automotive Service Practicum Transmission Controls Lab | 1 |
| | AUT 2240 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | AUT 224L | Automotive HVAC Lab | 1 |
| | AUT 2250 | Electronic Fuel Management Systems (2.0) | |
| or | AUT 2350 | Electronic Diesel Fuel Management Systems | 2 |
| | AUT 225L | Automotive Service Practicum Fuel Management Systems Lab | 1 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 2 |
| | AUT 1260 | Tech Math for Mechanics | 3 |

**Graduation Requirements:**

1. Completion of a minimum of 56 semester hours.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Completion of specified departmental requirements.

## Collision Repair Technology - Collision Repair Emphasis, Diploma

### *Requirements*

One-Year Certificate, a Diploma, the Associate in Applied Science Degree, and the Bachelor of Science in Technology Management Degree. See graduation requirements in the catalog for more information.

**Total Program Credits: 56**

| Discipline Core Requirements: | | | 32 Credits |
|---|---|---|---|
| Complete the following: | | | |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 2 |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 2240 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | AUT 224L | Automotive HVAC Lab | 1 |
| | CRT 1110 | Surface Preparation | 2 |
| | CRT 111L | Surface Preparation Lab | 1 |
| | CRT 1120 | Nonstructural Repair | 2 |
| | CRT 112L | Nonstructural Repair Lab | 1 |
| | CRT 1130 | Overall Refinishing and Problem Solving | 2 |
| | CRT 113L | Overall Refinishing and Problem Solving Lab | 1 |
| | CRT 1140 | Panel Replacement and Adjustment | 2 |
| | CRT 114L | Panel Replacement and Adjustment Lab | 1 |
| | CRT 1210 | Blending Tinting and Detailing | 2 |
| | CRT 121L | Blending Tinting and Detailing Lab | 1 |
| | CRT 1230 | Welding and Cutting | 2 |
| | CRT 123L | Welding and Cutting Lab | 1 |
| | CRT 281R | Cooperative Work Experience (1.0) [1] | |
| | CRT 285R | Cooperative Correlated Class (1.0) [1] | |
| | CRT 299R | Skills USA (1.0) (optional) | |
| Emphasis Requirements: | | | 24 Credits |
| | CRT 2310 | Collision Damage Reporting | 2 |
| | CRT 231L | Collision Damage Reporting Lab | 1 |
| | CRT 2320 | Structural Damage Analysis | 2 |
| | CRT 232L | Structural Damage Analysis Lab | 1 |
| | CRT 2330 | Structural Repair | 2 |
| | CRT 233L | Structural Repair Lab | 1 |
| | CRT 2340 | Full and Partial Panel Replacement | 2 |
| | CRT 234L | Full and Partial Panel Replacement Lab | 1 |
| | CRT 2400 | Plastic Paintless Dent Repair | 2 |
| | CRT 240L | Plastic PaintLess Dent Repair Lab | 1 |
| | CRT 2440 | Mechanical Advanced Vehicle Systems | 2 |
| | CRT 244L | Mechanical Advanced Vehicle Systems Lab | 1 |
| | CRT 2450 | Bags Brakes Steering | 2 |
| | CRT 245L | Bags Brakes Steering Lab | 1 |
| | CRT 2630 | Detailing and Custom Painting | 2 |
| | CRT 263L | Detailing and Custom Painting Lab | 1 |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)

[1] NOTE: Cooperative Education courses may be used in place of some of the laboratory or shop classes for completion of diploma requirements. Approval of the program coordinator must be secured before class enrollment.

## Collision Repair Technology - Street Rod Emphasis, Diploma

### *Requirements*

One-Year Certificate, a Diploma, the Associate in Applied Science Degree, and the Bachelor of Science in Technology Management Degree. See graduation requirements in the catalog for more information.

**Total Program Credits: 56**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 32 Credits |
| Complete the following: | | | |
| | AUT 1260 | Tech Math for Mechanics | 3 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | | 2 |
| | AUT 1160 | Automotive Electrical Systems | 2 |
| | AUT 116L | Automotive Electrical Systems Lab | 1 |
| | AUT 2240 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | AUT 224L | Automotive HVAC Lab | 1 |
| | CRT 1110 | Surface Preparation | 2 |
| | CRT 111L | Surface Preparation Lab | 1 |
| | CRT 1120 | Nonstructural Repair | 2 |
| | CRT 112L | Nonstructural Repair Lab | 1 |
| | CRT 1130 | Overall Refinishing and Problem Solving | 2 |
| | CRT 113L | Overall Refinishing and Problem Solving Lab | 1 |
| | CRT 1140 | Panel Replacement and Adjustment | 2 |
| | CRT 114L | Panel Replacement and Adjustment Lab | 1 |
| | CRT 1210 | Blending Tinting and Detailing | 2 |
| | CRT 121L | Blending Tinting and Detailing Lab | 1 |
| | CRT 1230 | Welding and Cutting | 2 |
| | CRT 123L | Welding and Cutting Lab | 1 |
| | CRT 281R | Cooperative Work Experience (1.0) [1] | |
| | CRT 285R | Cooperative Correlated Class (1.0) [1] | |
| | CRT 299R | Skills USA (1.0) (Optional) | |
| Emphasis Requirements: | | | 24 Credits |
| | CRT 2510 | Custom Welding | 2 |
| | CRT 251L | Custom Welding Lab | 1 |
| | CRT 2520 | Customizing | 2 |
| | CRT 252L | Customizing Lab | 1 |
| | CRT 2530 | Panel Fabrication | 2 |
| | CRT 253L | Panel Fabrication Lab | 1 |
| | CRT 2610 | Top Chopping Sectioning and Channeling | 2 |
| | CRT 261L | Top Chopping Sectioning and Channeling Lab | 1 |
| | CRT 2620 | Frames | 2 |
| | CRT 262L | Frames Lab | 1 |
| | CRT 2630 | Detailing and Custom Painting | 2 |
| | CRT 263L | Detailing and Custom Painting Lab | 1 |
| | CRT 2640 | Panel Fabrication of Aluminum | 2 |
| | CRT 264L | Panel Fabrication of Aluminum Lab | 1 |
| | CRT 2650 | Automotive Interior Design | 2 |
| | CRT 265L | Automotive Interior Design Lab | 1 |

**Graduation Requirements:**

1. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)

[1] NOTE: Cooperative Education courses may be used in place of some of the laboratory or shop classes for completion of diploma requirements. Approval of the program coordinator must be secured before class enrollment.

## Diesel Mechanics Technology, Diploma

### *Requirements*

One-Year Certificate, a Diploma, the Associate in Applied Science Degree, and the Bachelor of Science in Technology Management Degree.

**Total Program Credits: 61**

| | | | |
|---|---|---|---|
| Discipline Core Requirements: | | | 61 Credits |
| | DMT 1005 | Basic Shop and Safety Skill | 2 |
| | DMT 1110 | Diesel Engine Overhaul | 4 |
| | DMT 111L | Diesel Engine Overhaul Lab | 2 |
| | DMT 1120 | Diesel Engine Operation Tune Up | 4 |
| | DMT 112L | Diesel Engine Operation/Tune Up Lab | 2 |
| | DMT 1510 | Electrical Systems I | 4 |
| | DMT 151L | Electrical Systems I Lab | 2 |
| | DMT 1520 | Electrical Systems II | 2 |
| | DMT 152L | Electrical Systems II Lab | 1 |
| | DMT 2230 | Heating Ventilation Air Conditioning and Refrigeration Theory | 2 |
| | DMT 223L | Heating Ventilation Air Conditioning and Refrigeration Lab | 1 |
| | DMT 2310 | Fluid Power I Theory | 4 |
| | DMT 231L | Fluid Power I Lab | 2 |
| | DMT 2320 | Fluid Power II Theory | 4 |
| | DMT 232L | Fluid Power II Lab | 2 |
| | DMT 2410 | Chassis Theory | 4 |
| | DMT 241L | Chassis Lab | 2 |
| | DMT 2420 | Power Train Theory | 4 |
| | DMT 242L | Power Train Lab | 2 |
| | DMT 2530 | Electronic Engine Management | 2 |
| | DMT 253L | Electronic Engine Management Lab | 1 |
| | MKTG 220G | Written Business Communication WE | 3 |
| | AUT 1260 | Tech Math for Mechanics | 3 |

| | | |
|---|---|---|
| | Any approved Behavioral Science, Social, or Political Science Distribution Course | 2 |

**Graduation Requirements:**

1. Completion of a minimum of 61 semester credits.
2. Overall grade point average of 2.0 (C) or above. (Departments may require a higher GPA.)
3. Completion of specified departmental requirements.
4. Residency hours--minimum of 20 credit hours through course attendance at UVU.

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# Course Descriptions

## Accounting (ACC)

**ACC 1150**
**Fundamentals of Business Math**
**3**
* Prerequisite(s): MAT 0950 or equivalent

Designed for the business student as a review of mathematical principles, techniques, computations, and their applications to business problems. Topics include: checking accounts and bank reconciliations, percents, solving for the "unknown," discounts, markups and markdowns, payroll, simple interest, discounting notes, present and future value, depreciation, inventory, taxes, insurance, stocks and bonds, annuities, sinking funds, and calculator procedures. Lab access fee of $25 for computers applies. Canvas Course Mats $78/ McGraw applies

**ACC 1750**
**Applied Accounting**
**4**
* Prerequisite(s): Appropriate placement scores or (ENGH 1005 or ENGL 1010 with a grade of C- or higher)

Designed for non-accounting majors in Executive Assistant and Paralegal. Provides comprehensive coverage of the accounting cycle for services and merchandising organizations. Topics include: Journalizing, posting, financial statements, closing, accounting systems, internal control, accounts receivable, accounts payable, inventory control, and payroll. Taught in a computer environment. Lab access fee of $25 for computers applies.

**ACC 2010**
**Financial Accounting**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 or higher with a minimum grade of C-, MAT 1000 or higher with a minimum grade of C-, or appropriate test scores.
* Corequisite(s): ACC 1150 recommended if required for your degree

Teaches concepts and methods underlying preparation of financial statements utilizing generally accepted accounting principles (GAAP). Includes the accounting cycle; income determination for service and merchandising operations; and the reporting of assets, liabilities, and owner's equity for sole proprietorships and corporations. May be delivered online. Lab access fee of $25 for computers applies. Canvas Course Mats $78/ McGraw applies.

**ACC 2020**
**Managerial Accounting**
**3**
* Prerequisite(s): ACC 2010

Focuses on the methods and tools used to generate information for decision making by managers within an organization and integrates decision-making throughout the course. Addresses five primary topics: determining the cost of products, services, and segments of the organization; short-term/ long-term role of planning in management; the control function of management. May be delivered hybrid and/or online. Lab access fee of $25 for computers applies. Canvas Course Mats $78/McGraw applies.

**ACC 2110**
**Principles of Accounting I**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 or higher with a minimum grade of C-, MAT 1000 or higher with a minimum grade of C-, or appropriate test scores.

Teaches basic accounting methods and tools for business decision making. Incorporates financial and managerial accounting to provide basic understanding of generally accepted accounting principles (GAAP). Applies analytical tools to assess profitability, relevant costs, and investment decisions. Canvas Course Mats of $111/McGraw applies.

**ACC 2120**
**Principles of Accounting II**
**3**
* Prerequisite(s): ACC 2110 with a B- or higher

Teaches technical accounting concepts from both financial and managerial accounting. Includes generally accepted accounting principles (GAAP) to support understanding of the accounting cycle and financial statements. Includes managerial accounting topics such as costing methods, budget preparation, and performance evaluation tools. Canvas Course Mats of $111/McGraw applies.

**ACC 2125**
**Introduction to the Accounting Profession**
**1**

Teaches topics related to the accounting profession, including career options in accounting, certifications in accounting (CPA, CMA, CIA, CFE, etc.), ethics in the profession, current issues in accounting, professional standards, and professionalism skills. Discusses the educational requirements for the accounting undergraduate and graduate degrees.

**ACC 2250**
**Accounting for Entrepreneurs**
**3**

Addresses accounting issues from the perspective of an entrepreneur or small business owner. Includes choice of business entity, payroll preparation, internal control systems, and the basic application of applicable income and sales taxes. Teaches accounting software to classify, record, summarize, and report transactions and to generate financial statements.

**ACC 2500**
**Data Analytics in Accounting**
**3**
* Prerequisite(s): ACC 2110 with a B- or higher or ACC 2010 with a B- or higher
* Prerequisite(s) or Corequisite(s): ACC 2120 or ACC 2020

Introduces data analytics and data visualization tools and techniques in accounting. Provides hands-on experience in analyzing accounting data, creating visuals, and interpreting results using various data analytics and visualization software.

**ACC 2600**
**Business Law and Ethics**
**3**
* Prerequisite(s): ENGL 1010
* Prerequisite(s) or Corequisite(s): ACC 2110 or ACC 2010

Examines legal and ethical issues needed to make sound business decisions. Provides an overview of the legal system, constitutional law, ethical decision-making frameworks, business entities, contract law, business crimes and torts, compliance and regulatory issues, agency law, and bankruptcy law.

**ACC 281R**
**Cooperative Work Experience**
**2 to 8**
* Prerequisite(s): Approval of School of Business Career and Corporate Manager

Designed for accounting majors to provide on-the-job work experience that will utilize the student's skills and abilities in the field of accounting. Requires a portfolio of acquired work experience and enhanced skills. Includes student, employer, and coordinator evaluations; on-site coordinator visits; written assignments; and oral presentations. Provides experience in formulating and completing individualized work experience objectives. A maximum of 3 credits may apply toward graduation. May be graded credit/no credit.

**ACC 3000**
**Financial Managerial and Cost Accounting Concepts**
**3**
* Prerequisite(s): ENGL 2010, MAT 1010 or higher, and University Advanced Standing

Provide students in computer science and the technologies with knowledge of financial, managerial, and cost accounting concepts and applications. Prepares students to utilize accounting information in making business decisions. May be delivered online. Lab access fee of $25 for computers applies.

**ACC 3010**
**Intermediate Accounting I**
**3**
* Prerequisite(s): (ACC 2010 and ACC 2020) or (ACC 2110 and ACC 2120) each with a B- or higher, (MATH 1050, MATH 1055, or MATH 1090) with a C- or higher, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): (MGMT 2240 or MATH 1100), ACC 2125, and (ACC 2500 or IM 2600)

Reviews and expands on fundamental accounting material learned in beginning classes. Covers an overview of the primary financial statements, revenue recognition, and the accounts on the asset portion of the balance sheet. Introduces the Conceptual Framework and current accounting standards to provide a theoretical foundation upon which practical applications are based. Lab access fee of $25 applies. Canvas Course Mats $78/McGraw applies

**ACC 3020**
**Intermediate Accounting II**
**3**
* Prerequisite(s): ACC 3010, MKTG 220G, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ACC 3300

Addresses debt and equity financing, investments in debt and equity securities, leases, deferred income taxes, employee compensation (payroll and pensions), earnings per share, accounting changes, and error corrections. Lab access fee of $25 for computers applies. Canvas Course Mats $78/ McGraw applies

**ACC 3030**
**Intermediate Accounting for Non-Accounting Majors**
**3**
* Prerequisite(s): (ACC 2110 AND ACC 2120) or (ACC 2010 AND ACC 2020) and University Advanced Standing

An intermediate accounting course for non-accounting majors with emphasis on interpretation and use of general-purpose financial statements and the related disclosure notes. Addresses understanding interrelationships among the various financial statements and analyzing the effects of transactions on the financial statements. Analyzes common and significant accounts/ transactions, especially those relating to the liability and equity sections of the financial statements. Canvas Course Mats $76/Wiley applies.

**ACC 3120**
**Internal Auditing**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005), (MATH 1050 or MATH 1055 or MATH 1090 or higher), junior standing, minimum cumulative GPA of 3.0, and University Advanced Standing

Introduces students to the theories of governance, risk, and control concepts; internal auditing standards; audit techniques; and reporting practices. Applicable across disciplines.

**ACC 312G**
**International Internal Auditing**
**3**
* Prerequisite(s): (ACC 2110 and ACC 2120) or (ACC 2010 and ACC 2020), University Advanced Standing

Introduces students to the international internal auditing standards; global auditing case studies; theories of governance, risk, and control concepts; audit techniques; and reporting practices. Applicable across disciplines.

**ACC 3300**
**Cost Management**
**3**
* Prerequisite(s): (ACC 2010 AND ACC 2020) OR (ACC 2110 AND ACC 2120) each with a B- or higher and University Advanced Standing

Provides a strategic approach to cost management and the development and use of relevant information for management decision making. Builds a foundation by discussing the various concepts of cost, cost behavior, and cost estimation techniques. Addresses costing of products and other cost objects using job order and process costing, activity-based costing, and cost allocation. Introduces management control topics of budgeting and performance evaluation through variance analysis. Concludes with current topics in cost management. Lab access fee of $25 for computers applies.

**ACC 3400**
**Individual Income Tax**
**3**
* Prerequisite(s): (ACC 2110 AND ACC 2120) OR (ACC 2010 AND ACC 2020), and University Advanced Standing

Studies federal individual income taxes. Covers the accounting theory and practices of federal individual income taxation based on a study of the laws, regulations, and income tax decisions. Lab access fee of $25 for computers applies. Canvas Course Mats $116/Pearson applies.

**ACC 3510**
**Accounting Information Systems**
**3**
* Prerequisite(s): (ACC 3010 or ACC 3030) and (ACC 2500 or IM 2600) and University Advanced Standing

Teaches analysis design and implementation of accounting information systems. Emphasizes accounting cycles, internal controls, and computerized environments. Lab access fee of $25 applies. Canvas Course Mats $78/McGraw applies

**ACC 4030**
**Governmental and Not For Profit Accounting**
**3**
* Prerequisite(s): ACC 3010 or ACC 3030, Matriculation into the Woodbury School of Business, and University Advanced Standing

Covers areas of governmental and not-for-profit accounting and reporting. Includes fund accounting, the budgetary process, governmental financial reporting, not-for-profit organizations, health care organizations, colleges and universities, and public sector auditing. Lab access fee of $25 for computers applies.

**ACC 4050**
**Financial Statement Analysis**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ACC 3020

Teaches financial statement analysis techniques and practices, such as financial metrics, footnote disclosures, and business profitability. Informs decision making based on practical analysis of financial statement information.

**ACC 4110**
**Auditing**
**3**
* Prerequisite(s): ACC 312G, Matriculation into the Woodbury School of Business, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ACC 3020

Provides an introduction to independent audits of financial statements in accordance with generally accepted auditing standards, the environment in which audits are performed, and professional ethics. Includes basic audit concepts and procedures related to planning, testing internal controls, investigating reported financial results of business process cycles, and required auditor communications. May be delivered online. Lab access fee of $25 for computers applies. Canvas Course Mats $78/ McGraw applies

**ACC 4140**
**Advanced Internal Auditing**
**3**
* Prerequisite(s): Matriculation into the BS Accounting degree program, and University Advanced Standing or Instructor Approval.

Covers advanced topics in the theories of governance, risk, and control concepts; internal auditing standards; and audit techniques.

**ACC 4310**
**Advanced Management Accounting**
**3**
* Prerequisite(s): ACC 3300, Matriculation into any Woodbury School of Business bachelor degree program, and University Advanced Standing

Studies and applies advanced topics in Cost Management such as value chain analysis, activity-based management, and other current topics and issues in management accounting. Teaches the principles of management control including strategic planning, budgeting, performance measurement. Includes active class discussion, case analysis, and student presentations.

**ACC 4400**
**Taxation of Business Entities**
**3**
* Prerequisite(s): ACC 3400, Matriculation into the Woodbury School of Business, and University Advanced Standing

For accounting majors and other business students. Provides an introduction and understanding of the construct and application of the federal tax laws. Studies the federal taxation of corporations, partnerships/LLCs, estates and trusts, gifts, and exempt entities based on the laws, regulations, and associated tax decisions. Covers the professional rules, regulations, and ethical considerations imposed on tax professionals. Lab access fee of $25 for computers applies. Canvas Course Mats $78/ Cengage applies.

**ACC 4410**
**Tax Research**
**3**
* Prerequisite(s): ACC 3010, ACC 3400, Matriculation into the BS Accounting degree program, and University Advanced Standing

Studies theory and practice of tax research as it applies to federal income taxation laws, rules and regulations. Applies ethical considerations and standards to tax practice. Emphasizes computerized tax research techniques which will be explored through cases dealing with administrative aspects of the IRS, court cases, client communications and a wide variety of tax topics.

**ACC 4510**
**Information Systems Auditing**
**3**
* Prerequisite(s): ACC 3510, ACC 312G, Matriculation into any Woodbury School of Business program, and University Advanced Standing

Provides students a project course covering IT audit and its impact on the financial statement audit. Covers information security, social engineering, and fraud data mining are also covered as they relate to accounting information systems and the associated data. May be delivered hybrid. Lab access fee of $25 for computers applies.

**ACC 470R**
**Current Topics in Accounting**
**1 to 3**
* Prerequisite(s): ACC 3010, Matriculation into the Woodbury School of Business, and University Advanced Standing

Provides opportunities for students to become exposed to emerging technology and topics of current interest and demand in Accounting. Topics vary from semester to semester. Repeatable for a maximum of 3 credits toward graduation.

**ACC 481R**
**Internship**
**2 to 8**
* Prerequisite(s): ACC 3010, Matriculation into the Woodbury School of Business, Approval of Accounting Department Internship Coordinator and University Advanced Standing

Provides accounting majors a transition from school to work where learned theory is applied to actual practice through meaningful on-the-job paid experience commensurate with upper-division classroom instruction. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and oral presentations. May be repeated for a maximum of 6 credits toward graduation. May be graded credit/no credit.

**ACC 490R**
**Accounting Seminar**
**1 to 3**
* Prerequisite(s): Matriculation into the BS Accounting degree program, Department Chair Approval, and University Advanced Standing

Designed to provide short courses, workshops, and special programs on accounting-related topics. May be repeated for a maximum of 3 credits toward graduation.

**ACC 491R**
**Independent Study**
**1 to 4**
* Prerequisite(s): Department Chair approval and University Advanced Standing

For bachelor's degree students and other interested persons. Offers independent study as directed in reading, individual projects, etc., at the discretion and approval of the department chairperson. Repeatable for a maximum of 3 credits toward graduation.

**ACC 5020**
**Advanced Financial Accounting**
**3**
* Prerequisite(s): ACC 3020, Matriculation into the BS Accounting degree program, and University Advanced Standing

Presents accounting concepts and methods for business combinations, foreign currency transactions, foreign statement translation, and partnerships. Canvas Course Mats $78/ McGraw applies.

**ACC 5130**
**Case Studies in Internal Auditing**
**3**
* Prerequisite(s): ACC 312G

Teaches student to design policies and procedures for internal audit operations by using risk based audit plans and developing audit plans. May be delivered hybrid.

**ACC 5140**
**Fraud Examination**
**3**
* Prerequisite(s): ACC 3010 and University Advanced Standing

Examines the seriousness of fraud and its impact on business and society. Includes forensic accounting and fraud prevention, detection, and resolution.

**ACC 6020**
**Advanced Financial Accounting Applications**
**3**
* Prerequisite(s): Admission to Master of Accountancy program

Presents accounting concepts, methods, and applications for business combinations, foreign currency transactions, foreign statement translation, and partnerships. Canvas Course Mats $78/McGraw applies.

**ACC 6030**
**Financial Accounting and Reporting**
**3**
* Prerequisite(s): Acceptance into the Master of Accountancy program

Focuses on understanding the nature and financial reporting aspects of complex business transactions such as corporate acquisitions, mergers, and other strategic alliances. Includes accounting for business combinations and the various reporting requirements leading to consolidated financial statements.

**ACC 6060**
**Professionalism and Leadership**
**3**
* Prerequisite(s): Admission to Master of Accountancy program

Enhances the ability to interact and communicate with others in the professional world. Builds skill development in oral and written communication, interviewing, networking, and leadership. Explores and enhances emotional intelligence.

**ACC 6130**
**Case Studies in Auditing**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration Program

Teaches policies and procedures for internal audit operations by creating risk based audit plans, developing audit objectives, and evaluating audit results.

**ACC 6140**
**Fraud Examination and Forensic Accounting**
**3**
* Prerequisite(s): Admission to Master of Accountancy or the Master of Business Administration Program

Evaluates the seriousness of fraud and its impact on individuals, businesses and society. Formulates fraud prevention, detection, and resolution methods using cases.

**ACC 6150**
**Information Systems Auditing**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration Program.

Provides projects covering information systems audit and its impact on the financial statement audit. Covers information security, social engineering, and fraud data mining as they relate to accounting information systems and the associated data. Canvas Course Mats $78/ McGraw applies.

**ACC 6350**
**Management Control Systems**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration Program.

Evaluates the design of management control systems through case studies to enable the successful implementation of accounting strategies in a variety of for-profit entities. Emphasizes the development of the students' analytical and decision-making skills. Canvas Course Mats $134/Pearson applies

**ACC 6410**
**Tax Research and Procedure**
**3**
* Prerequisite(s): Admission to the Master of Accountancy or Master of Business Administration Program

Practices the necessary skills to thoroughly research and analyze a tax problem, as well as to report research analysis and conclusions accurately. Explores computerized tax research methods, and the organization of the I.R.S. with some of the procedural aspects of tax compliance and practice, tax related penalties, professional responsibility and tax ethics.

**ACC 6420**
**Principles of Corporate Tax**
**3**
* Prerequisite(s): Admission to Master of Accountancy program

Covers accounting theory and practices of the federal income taxation laws, rules and regulations relating to sales and exchanges of assets and the formation and operation of corporations and S corporations, and their effects upon the corporation's shareholders. Canvas Course Mats $78/Cengage applies.

**ACC 6430**
**Advanced Corporate Tax**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration Program

Assesses the appropriate federal income tax for a corporation based on relevant accounting and business data. Analyzes the tax implications related to the form of entity and the location of the entity.

**ACC 6440**
**Partnership Tax**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration Program.

Examines accounting theory and practices of the federal income taxation laws, rules and regulations relating to the formation and operation of partnerships, and their effects upon partners.

**ACC 6460**
**Estate and Gift Tax**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration Program.

Examines the law and theory of federal taxation of estates and gifts based on Federal code, I.R.S. regulations, and digest of official income tax decisions.

**ACC 6500**
**Advanced Accounting Information Systems**
**3**
* Prerequisite(s): Acceptance in the MBA program

Develops the background necessary to plan, design and implement an accounting information system.

**ACC 6510**
**Financial Auditing**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration Program.

Examines current auditing standards for independent audits of financial statements. Explores proposed auditing standards, relevant legislation, and selected contemporary advanced topics in auditing.

**ACC 6560**
**Accounting Theory and Research**
**3**
* Prerequisite(s): Acceptance into the Master of Accountancy or Master of Business Administration program

Evaluates the financial reporting environment. Integrates accounting theory and practical research methodology in the resolution of financial reporting problems.

**ACC 6600**
**Business Regulation**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration Program.

Examines contemporary issues in business law, with an emphasis in accountancy. Studies secured transactions, negotiable instruments, business associations, investor protection, consumer protection and government regulation in an increasingly global and interconnected business environment.

**ACC 6610**
**Financial Statement Research and Analysis**
**3**
* Prerequisite(s): Admission to Master of Accountancy or Master of Business Administration program.

Teaches financial statement research and analysis, improving decision making based on theoretical and practical research of financial statement information.

**ACC 679R**
**Special Topics in Accounting**
**3**
* Prerequisite(s): Admission to Master of Accountancy program

Varies from semester to semester. Provides opportunities for students to become exposed to emerging technology and topics of current interest and demand in accounting, taxation, auditing, and accounting information systems. May be repeated for a maximum of 6 credits toward graduation.

# Aerospace Studies (AERO)

**AERO 1000**
**Leadership Laboratory 1A**
**.5**

Studies basic fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility.

**AERO 1010**
**Leadership Laboratory 1B**
**.5**

Studies basic fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility.

**AERO 1100**
**The Air Force Today**
**1**
* Corequisite(s): AERO 1000

Teaches development, organization, and doctrine of the U.S. Air Force. Emphasizes Strategic Force requirements.

**AERO 1110**
**Aerospace Defense General Purpose and Support Forces**
**1**
* Corequisite(s): AERO 1010

Studies U.S. Air Force Defensive Forces, General Purpose Forces, and Tactical Air Forces.

**AERO 143R**
**Air Force Physical Training**
**.5**
* Corequisite(s): AERO 1000

Prepares students for the physical demands placed upon them at Air Force Field Training encampment normally attended between their sophomore and junior years. Provides leadership opportunities and tests a cadet's physical fitness. Repeats are allowed. See advisor for details. May be repeated for a maximum of four credits.

**AERO 2000**
**Leadership Laboratory 2A**
**.5**

Teaches fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility. Increased emphasis on performance level.

**AERO 2010**
**Leadership Laboratory 2B**
**.5**

Teaches fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility. Increased emphasis on performance level.

**AERO 2100**
**The Developmental Growth of Air Power A**
**1**
* Corequisite(s): AERO 2000

Studies development of various concepts of air power employment, emphasizing factors that have prompted research and technological change.

**AERO 2110**
**The Development and Growth of Air Power B**
**1**
* Corequisite(s): AERO 2010

Studies development of various concepts of air power employment. Emphasizes factors that have prompted research and technological change.

**AERO 3000**
**Leadership Laboratory 3A**
**.5**
* Prerequisite(s): University Advanced Standing

Teaches basic fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility. Students perform as cadet officers. Emphasizes leadership development.

**AERO 3010**
**Leadership Laboratory 3B**
**.5**
* Prerequisite(s): University Advanced Standing

Teaches basic fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility. Students perform as cadet officers. Emphasizes leadership development.

**AERO 305R**
**Leadership Laboratory Honor Guard**
**1**
* Prerequisite(s): University Advanced Standing

Teaches basic fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility. Emphasizes leadership development. Students perform as cadet officers. Repeats are allowed. See advisor for details. May be repeated for a maximum of 8 credits.

**AERO 3100**
**Management and Leadership A**
**3**
* Prerequisite(s): University Advanced Standing

Introduces students to the United States Air Force (USAF) and the Reserve Officer Training Corps (ROTC). Includes conflict management, followership, leadership responsibility, officership, and process improvement.

**AERO 3110**
**Management and Leadership B**
**3**
* Prerequisite(s): University Advanced Standing

Introduces students to the United States Air Force (USAF) and the Reserve Officer Training Corps (ROTC). Includes conflict management, followership, leadership responsibility, officership, and process improvement.

**AERO 3200**
**Jet Pilot Introduction**
**2**
* Prerequisite(s): University Advanced Standing

Studies principles of flight and accompanying issues. Introduces meteorology. Presents FARs as they apply to the private pilot. Provides orientation, understanding, and preparation of the US Air Force Undergraduate Pilot Training (UPT).

**AERO 399R**
**Academic Internship Leadership Intern Program**
**4**
* Prerequisite(s): Instructor Approval for Air Force ROTC Cadets only and University Advanced Standing

Provides advanced fundamentals of military leadership, planning, organizing, and team building at various levels of responsibility. May be repeated for a maximum of 4 credits toward graduation. May be graded credit/no credit.

**AERO 400R**
**Leadership Laboratory 4A**
**.5**
* Prerequisite(s): University Advanced Standing

Presents basic fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility. Students perform as cadet officers. Emphasizes leadership development. May be repeated for a maximum of 2 credits.

**AERO 401R**
**Leadership Laboratory 4B**
**.5**
* Prerequisite(s): University Advanced Standing

Presents basic fundamentals of military leadership: drill, courtesy, planning, and organizing at various levels of responsibility. Students perform as cadet officers. Emphasizes leadership development. May be repeated for a maximum of 2 credits.

**AERO 4100**
**National Security Affairs A**
**3**
* Prerequisite(s): University Advanced Standing

Studies the military profession, civil-military interaction, and the forming of defense strategy.

**AERO 4110**
**National Security Affairs B**
**3**
* Prerequisite(s): University Advanced Standing

Studies the military profession, civil-military interaction, and the forming of defense strategy.

# Automation and Electrical Tech (AET)

**AET 1050**
**DC Electrical Math**
**2**
* Prerequisite(s): MAT 1010 or Departmental Approval

Utilizes algebraic formulas and methods to solve electrical problems related to DC electrical systems. Covers the calculation of voltage, current, resistance, power, and efficiency for DC circuits. Teaches circuit analysis techniques such as superposition, source transformations, Thevenin's theorem, mesh and nodal analysis. Introduces wire sizing and resistance calculations pertaining to the National Electrical Code. Software fee of $20 applies.

**AET 1060**
**AC Electrical Math**
**2**
* Prerequisite(s): AET 1050

Utilizes algebraic formulas and methods to solve electrical problems related to AC electrical systems. Covers the calculation of voltage, current, resistance, reactance, impedance, power, VARs, volt-amperes and efficiency for single phase and three phase AC systems. Applies trigonometry, complex numbers, and phasors to circuit analysis techniques. Analyzes sine waves, transformers, transformer connections and power factor for single phase and three phase electrical systems. Covers three phase balanced systems.

**AET 1130**
**Applied DC Theory**
**1**
* Prerequisite(s): MAT 1010
* Corequisite(s): AET 1135, AET 1150, AET 1155
* Prerequisite(s) or Corequisite(s): AET 1050

Reviews basic DC theory involving voltage, current, resistance, batteries, magnetism, power and the use of digital meters. Covers troubleshooting techniques and applications of DC circuits. Software fee of $20 applies. Lab access fee of $45 for computers applies.

**AET 1135**
**Applied DC Lab**
**1**
* Prerequisite(s): MAT 1010
* Corequisite(s): AET 1130, AET 1150, AET 1155
* Prerequisite(s) or Corequisite(s): AET 1050

Reviews basic DC theory involving voltage, current, resistance, batteries, magnetism, power and the use of digital meters. Engages in troubleshooting techniques and applications of DC circuits in a lab-environment.

**AET 1140**
**Applied AC Theory**
**1**
* Prerequisite(s): AET 1130, AET 1135, AET 1150, AET 1155
* Corequisite(s): AET 1145
* Prerequisite(s) or Corequisite(s): AET 1060

Reviews basic AC theory involving voltage, current, resistance, reactance, impedance, magnetism, power and the use of digital meters. Discusses operation of inductors, capacitors, and transformers. Discusses troubleshooting techniques and applications of AC circuits.

**AET 1145**
**Applied AC Lab**
**2**
* Prerequisite(s): AET 1130, AET 1135, AET 1150, AET 1155
* Corequisite(s): AET 1140
* Prerequisite(s) or Corequisite(s): AET 1060

Reviews basic AC theory involving voltage, current, resistance, reactance, impedance, magnetism, power and the use of digital meters. Discusses operation of inductors, capacitors, and transformers. Engages in troubleshooting techniques and applications of DC circuits in a lab environment.

**AET 1150**
**Industrial Logic**
**1**
* Prerequisite(s): MAT 1010
* Corequisite(s): AET 1155, AET 1130, AET 1135
* Prerequisite(s) or Corequisite(s): AET 1050

Introduces digital logic and relay logic theory and industrial applications of logic circuits. Discusses numbering systems, boolean algebra, circuit simplification techniques, and logic devices such as latches, one-shots, timers, counters, flip flops, and shift registers. Emphasizes the relationship between ladder logic and digital logic and focuses on conversion between both formats. Discusses application and troubleshooting of logic circuits and introduces basic concepts of state machines.

**AET 1155**
**Industrial Logic Lab**
**1**
* Prerequisite(s): MAT 1010
* Corequisite(s): AET 1150, AET 1130, AET 1135
* Prerequisite(s) or Corequisite(s): AET 1050

Applies digital logic and relay logic theory to industrial circuits in a hands-on setting. Utilizes boolean algebra and circuit simplification techniques when building logic circuits. Implements control circuits with relays, logic gates, and other applicable digital devices. Applies troubleshooting techniques to industrial control circuits.

**AET 1250**
**Industrial Electrical Code**
**2**
* Prerequisite(s): AET 1060, AET 1140, AET 1145

Covers pertinent topics within the National Electrical Code related to commercial and industrial environments. Covers code related to electrical plans, specifications, wiring and installation methods, feeder load calculations, motor installation, motor controllers, panelboards, hazardous locations, protective devices, and grounding for commercial and industrial applications. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**AET 1280**
**Electric Motor Control**
**4**
* Prerequisite(s): AET 1060, AET 1140, AET 1145
* Corequisite(s): AET 1285
* Prerequisite(s) or Corequisite(s): AET 1250

Covers installation, troubleshooting, preventive maintenance, and theory on DC/AC motors, generators, and associated industrial control circuitry. Expands on ladder logic, controls, sensors, motor starters, overloads, and electronic devices used to control and protect DC/AC Machines. Describes three phase systems, transformers, and delta-wye connections. Introduces AC variable speed drives. Supports hands-on labs and projects in AET 1285. Software fee of $20 applies. Lab access fee of $45 for computers applies.

**AET 1285**
**Electric Motor Control Lab**
**4**
* Prerequisite(s): AET 1060, AET 1140, AET 1145
* Corequisite(s): AET 1280
* Prerequisite(s) or Corequisite(s): AET 1250

Covers the proper use of tools and test equipment needed to maintain motors and their controllers. Emphasizes the use of schematics, line diagrams, ladder logic, and wiring diagrams. Covers DC/AC, single phase, and three phase motors. Integrates logic design, motor protection, and wiring of motor control centers. Includes the workings of single phase and three phase transformers including delta and wye configurations. Course Lab fee of $14 for supplies/materials applies. Lab access fee of $45 for computers applies. Software fee of $20 applies.

**AET 2010**
**Manufacturing Technology**
**1**
* Prerequisite(s): MAT 1010, EGDT 1040 or EGDT 1071 or departmental approval
* Corequisite(s): AET 2015

Provides exposure to manufacturing technology and equipment that is used to fabricate industrial components utilizing machine shop technology. Covers safety and basic machining principles on a manual lathe and mill. Presents fundamental concepts of CNC programming and 3D modeling as it relates to a CAD/CAM system. Discusses basics of measuring and cutting tools, and shop mathematics as it relates to manufacturing. Covers fundamental principles from the machinery's handbook.

**AET 2015**
**Manufacturing Technology Lab**
**2**
* Prerequisite(s): MAT 1010, EGDT 1040 or EGDT 1071 or departmental approval
* Corequisite(s): AET 2010

Provides exposure with a hands-on approach to manufacturing technology and equipment that is used to fabricate industrial components utilizing machine shop technology. Covers safety, and basic machining principles on a manual lathe and mill. Presents fundamental concepts of CNC programming and 3D modeling as it relates to a CAD/CAM system. Discusses basics of measuring and cutting tools, and shop mathematics as it relates to manufacturing. Covers fundamental principles from the machinery's handbook to manufacture and assembly.

**AET 2110**
**Industrial Electronics I**
**4**
* Prerequisite(s): AET 1280, AET 1285, AET 1250
* Corequisite(s): AET 2115
* Prerequisite(s) or Corequisite(s): AET 2250, AET 2255

Introduces semiconductor theory. Covers the concepts of PN junctions, transistors, voltage amplifiers, operational amplifiers, diodes, power electronics, and other special semiconductor and industrial electronics. Includes lecture and demonstrations. Course lab fee of $29 for materials applies. Lab access fee of $45 for computers applies.

**AET 2115**
**Industrial Electronics I Lab**
**2**
* Prerequisite(s): AET 1280, AET 1285, AET 1250
* Corequisite(s): AET 2110
* Prerequisite(s) or Corequisite(s): AET 2250, AET 2255

Introduces semiconductor theory. Covers the concepts of PN junctions, transistors, operational amplifiers, voltage amplifiers, diodes, and other special semiconductor and industrial electronic components. Includes practical hands-on labs. Software fee of $20 applies. Lab access fee of $45 applies.

**AET 2150**
**Introduction to Fluid Power Systems**
**2**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115
* Corequisite(s): AET 2155

Covers the fundamentals of hydraulic and pneumatic components and systems used in industrial applications. Studies pumps, motors, directional and flow control valves, cylinders, transmission, and fluids. Emphasizes maintenance, safety, and environmental problems. Examines troubleshooting techniques and blueprint/print reading. Course Lab fee of $15 for supplies/materials applies. Lab access fee of $45 computers applies.

**AET 2155**
**Introduction to Fluid Power Systems Lab**
**1**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115
* Corequisite(s): AET 2150

Covers the fundamentals of hydraulic and pneumatic components and systems used in industrial applications. Studies pumps, motors, directional and flow control valves, cylinders, transmission, and fluids. Emphasizes maintenance, safety, and environmental problems. Examines troubleshooting techniques and blueprint/print reading. Software fee of $20 applies. Lab access fee of $45 applies.

**AET 2160**
**Industrial Electronics II**
**2**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115
* Corequisite(s): AET 2165

Explains the theory and operation of industrial solid state thyristor devices, power circuits, integrated circuits, and DC/AC electronic motor controls. Covers basic electronic components found in variable speed drives. Introduces stepper and servo motor theory. Includes lecture and demonstration. Course Lab fee of $11 for materials applies. Lab access fee of $45 computers applies.

**AET 2165**
**Industrial Electronics II Lab**
**1**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115
* Corequisite(s): AET 2160

Teaches the theory and operation of industrial solid state thyristor devices, power circuits, integrated circuits, and DC/AC electronic motor controls. Emphasizes practical application of electronics found in variable speed drives. Implements stepper and servo motors. Includes hands-on labs. Software fee of $20 applies. Lab access fee of $45 applies.

**AET 2250**
**Industrial Programmable Logic Controllers--PLCs**
**4**
* Prerequisite(s): AET 1280, AET 1285, AET 1250
* Corequisite(s): AET 2255
* Prerequisite(s) or Corequisite(s): AET 2110, AET 2115

Covers the theory, programming, and industrial control system applications of small and medium sized programmable logic controllers (PLCs). Studies basic maintenance, operation, troubleshooting, and programming instructions / techniques for industrial PLCs. Concentrates on interfacing analog and digital I/O to the PLC. Covers human machine interface (HMI) configuration, programming and PLC integration. Includes lecture, demonstration, print reading, and industry examples. Course lab fee of $90 for equipment applies. Lab access fee of $45 for computers applies. Canvas Course Mats $78/McGraw applies.

**AET 2255**
**Industrial Programmable Logic Controllers--PLCs Lab**
**2**
* Prerequisite(s): AET 1280, AET 1285, AET 1250
* Corequisite(s): AET 2250
* Prerequisite(s) or Corequisite(s): AET 2110, AET 2115

Covers the theory, programming, and industrial control system applications of small and medium-sized programmable logic controllers (PLCs). Examines basic maintenance, programming, and troubleshooting techniques for industrial PLCs. Covers human-machine interface (HMI) configuration, programming, and PLC integration. Includes PLC communications via serial and industrial Ethernet. Includes hands-on labs and projects. Software fee of $20 applies. Lab access fee of $45 applies.

**AET 2270**
**Industrial Programmable Automation Controllers--PACs**
**2**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115
* Corequisite(s): AET 2275

Introduces the theory and application of advanced industrial programmable automation controller (PAC) instructions, user-defined data types, add-on instructions, and advanced programming techniques. Studies PAC programming languages including ladder logic and function block pertaining to industrial control applications. Covers theory related to PAC integration of devices to variable speed drives, analog / digital sensors, and encoders. Includes advanced Human Machine Interface (HMI) programming concepts and introduces basic concepts of programmable safety relays. Includes lecture and demonstration. Course lab fee of $90 for equipment applies. Lab access fee of $45 for computers applies.

**AET 2275**
**Industrial Programmable Automation Controllers--PACs Lab**
**1**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115
* Corequisite(s): AET 2270

Covers the implementation and application of advanced industrial programmable automation controller (PAC) instructions, user-defined data types, add-on instructions, and advanced programming techniques. Develops PAC programs using ladder logic and function blocks to control systems and machines. Covers PAC integration of devices to variable speed drives, sensors, and encoders. Implements advanced human-machine interface (HMI) programming. Integrates programmable safety relays into class projects. Includes hands-on labs and projects. Software fee of $20 applies. Lab access fee of $45 applies.

**AET 2280**
**Process Control Instrumentation**
**2**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115
* Corequisite(s): AET 2285

Covers basic theory on measuring process variables such as temperature, pressure, level, and flow. Discusses open loop and closed loop control including PID loops. Introduces instrumentation maintenance, installation, and device specifications. Discusses basic calibrations, safety instruments and standards, classified areas, and intrinsically safe systems. Presents competency in process and instrumentation diagrams (P&ID). Covers HART and modbus communications in industrial instrumentation.

**AET 2285**
**Process Control Instrumentation Lab**
**1**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115
* Corequisite(s): AET 2280

Implements process control instrumentation on class projects. Integrates open loop and closed loop control including PID loops with industrial instrumentation and a PLC. Explores basic calibrations, safety instruments and standards, classified areas, and intrinsically safe systems. Implements process and instrumentation diagrams (P&ID) on industrial systems. Integrates HART and modbus communications into applicable industrial projects. Covers programming and troubleshooting of industrial instruments in a hands-on environment. Course lab fee of $90 applies. Lab access fee of $45 applies.

**AET 281R**
**Cooperative Work Experience**
**1 to 8**
* Prerequisite(s): Approval of Department Chair

Provides paid on-the-job work experience that relates to the electrical and automation field. Implements and executes goals/learning objectives based on the job description from their work assignment. Reports on goals and learning objectives at the end of the experience. Work experience, the related class, and enrollment are coordinated by the AET Cooperative Coordinator. May be graded credit/no credit. May be repeated for a maximum of 16 credits toward graduation

**AET 285R**
**Cooperative Correlated Class**
**1**
* Prerequisite(s): Approval of Department Chair

Designed to identify on-the-job problems and to remedy those problems through in-class discussion and study. Focuses on preparing for, participating in, and utilizing the experiences available from working in a cooperative education/internship program. May be graded credit/no credit. May be repeated for a maximum of 8 credits toward graduation.

**AET 2900**
**Capstone Project**
**3**
* Prerequisite(s): AET 2010, AET 2015

Integrates the concepts of Automation and Electrical Technology curriculum into a semester-long project that will be designed, built, and presented at the Engineering Technology Fair.

**AET 291R**
**Special Topics in Industrial Systems**
**3**
* Prerequisite(s): AET 2250, AET 2255, AET 2110, AET 2115

Explores special topics in the electrical, power, and automation fields. Offers topics depending on demand and industry needs. May be repeated for a maximum of 6 credits toward graduation. Lab access fee of $45 applies.

# American Indian Studies (AIST)

**AIST 180G (Cross-listed with: ANTH 180G) SS**
**Introduction to American Indian Studies**
**3**

Provides an overview of modern and historical American Indian communities in the United States. Explores political and historical issues of major tribes and Indian communities by region. Provides students with information and perspectives on key social and cultural issues: spirituality, relations with the Federal government, notable individuals, art, literature, dance, media, health, education and activism.

**AIST 327G**
**Indians of Utah**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Investigates the history of Utah's five principal cultural groups from the pre-Columbian period to the present. Considers how economic processes, cross-cultural influences, and changing Federal and State policies have shaped American Indian communities and individuals in and around Utah. Examines how identity and culture in native communities have been defined and redefined through the processes of migration (both native and non-native), conquest, assimilation efforts, and cultural persistence.

**AIST 3360**
**American Indian Education Policy**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Discusses the Federal Indian Policies that dictated the educational philosophies and practices of native people. Offers a historic overview of Indian education from first contact with European settlers through contemporary American Indian/Alaskan Native education. Examines the effects of Federal Indian Policies related to the use of boarding schools and the long-term effects the experience had on Native students.

**AIST 358G**
**American Indian Health Policy**
**3**
* Prerequisite(s): ENGL 2010, University Advanced Standing, and one of the following: POLS 1000, POLS 1100, HIST 1700, HIST 1740, HIST 2700, HIST 2710

Explores the history, political economy, and epidemiology of American Indian health issues in the United States. Examines the effects of the pandemics brought by the European conquest, the changing Native views and practices in health, the Federal government's practical and legal assumption of responsibility for Native health, and the development of the administration and organization for Native health. Considers modern health issues ranging from diabetes to domestic violence, and the policy responses to them.

**AIST 3590**
**American Indian Law**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and (POLS 1000 or POLS 1010 or POLS 1100) and University Advanced Standing

Introduces students to the important and unique body of law known as American Indian Law. Covers the history of federal Indian law and policy; the federal-tribal relationship; tribal sovereignty and self-government; state authority in Indian country; Indian religion and culture; concepts of property in Indian law; and hunting, fishing, and water rights.

**AIST 3600**
**American Indian Policy and Tribal Government**
**3**
* Prerequisite(s): ENGL 2010 or instructor approval and University Advanced Standing

Examines American Indian law in treaties, statutes, case law, regulations, and executive orders. Analyzes various policy approaches to the federal trust relationship, tribal sovereignty over internal affairs, civil jurisdiction over tribal lands, management of natural resources of tribal lands, and cultural preservation. Studies the traditional and modern forms of various Indian tribal governments.

**AIST 3810**
**Precolumbian America**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and AIST 180G and University Advanced Standing

Examines evidence of the first Americans, origins of agriculture, and development of cultures and civilizations in North, Central, and South America. Surveys the most recent archaeological research on major American societies, emphasizing the balance between Native and Euro-American perspectives on history and science. Examines the effects of the European conquest of the Americas on Native populations and cultures, and on global historical processes.

**AIST 3830**
**Indians of the Great Plains**
**3**
* Prerequisite(s): (HIST 1700 or HIST 2700 or HIST 2710 or AIST 180G) and (ENGL 1010 or ENGH 1005) and University Advanced Standing

Surveys the histories of native communities of the Great Plains. Emphasizes geopolitical relations of the eighteenth and nineteenth centuries and the conditions of resistance to conquest. Highlights the identification and use of primary sources, both for scholarly activity and making sources available to native peoples.

**AIST 384G**
**Indians of the Southwest**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and HIST 1700 and AIST 180G and University Advanced Standing

Surveys the cultural geography and social institutions of Indians of the American Southwest and their antecedents. Compares Southwestern Indian cultures and other social groups in the United States. Focuses on historic and contemporary relations among Indian cultures and with the United States federal and state governments.

**AIST 3850**
**The Struggle for Self-determination American Indians 1891 to present**
**3**
* Prerequisite(s): (HIST 1700 or HIST 2700 or HIST 2710 or AIST 180G) and (ENGL 1010 or ENGH 1005) and University Advanced Standing

Surveys American Indian history from the Wounded Knee Massacre of 1891 to the present. Examines how American Indians shifted from armed conflict to the employment of legal and political strategies for achieving self-determination.

**AIST 4600**
**Contemporary American Indian Political and Social Issues**
**3**
* Prerequisite(s): (AIST 358G or AIST 3600) and University Advanced Standing

Surveys current research and perspectives on contemporary American Indian issues. Utilizes a seminar approach in which each student will prepare summaries of books and articles to be distributed to the other class members. Includes identity, political activism, historiography, health, political, and cultural issues.

**AIST 490R**
**Special Topics in American Indian Studies**
**3**
* Prerequisite(s): ENGL 2010 and [POLS 1000 or POLS 1100 or HIST 1700 or HIST 1740 or (HIST 2700 and HIST 2710)] and University Advanced Standing

Explores special topics in American Indian Studies and related subjects. Examples of special topics may include health, specific tribal communities, education, political issues, the humanities in Native culture, economic and community development, comparative studies, social science perspectives, or other areas of student and faculty interest. May be repeated for a maximum of 6 credits.

# American Studies (AMST)

**AMST 2000** **HH**
**Introduction to American Studies**
**3**
* Prerequisite(s): ENGL 2010

Introduces students to the interdisciplinary study of American culture. Employs insights and approaches from literature, history, art, sociology, anthropology, and political science. Analyzes a variety of texts and artifacts. Explores selected themes and issues central to American Studies.

**AMST 300R**
**Topics in American Studies**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Uses an interdisciplinary approach to study various topics and themes in American Studies. Topics might include Western American Culture, Nature and Culture, Popular Culture in America, Mass Media in America, etc. May be repeated for up to 6 credits toward graduation.

# Anthropology (ANTH)

**ANTH 101G** **SS**
**Social Cultural Anthropology**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 with a grade of C+ or higher

Introduces students to the variability of human behavior cross-culturally and provides an understanding of the holistic approach to human behavior. Explores interrelationships, in a variety of cultural contexts, between beliefs, economic structures, sexuality, eating habits, ecology, politics, living arrangements, psychology, symbolism, and kinship. May be delivered hybrid.

**ANTH 1020 (Cross-listed with: BIOL 1500)** **SS**
**Biological Anthropology**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and (ANTH 101G or BIOL 1010)

For students with special interests in Anthropology or the Life Sciences. Studies fossils and living primates, primate biology and behavior. Surveys humanoid fossils. Investigates human evolution and variations of basic biology as it pertains to human development. Stresses the importance of the distribution and diversity of humankind.

**ANTH 103G** **SS**
**World Prehistory**
**3**

Introduces the archaeological record of human prehistory. Explores the earliest fossil remains, and follows the development of humans throughout prehistory. Examines techniques used by archaeologists to find, recover, date, and analyze prehistoric artifacts.

**ANTH 180G (Cross-listed with: AIST 180G)** **SS**
**Introduction to American Indian Studies**
**3**

Provides an overview of modern and historical American Indian communities in the United States. Explores political and historical issues of major tribes and Indian communities by region. Provides students with information and perspectives on key social and cultural issues: spirituality, relations with the Federal government, notable individuals, art, literature, dance, media, health, education and activism.

**ANTH 2030**
**Archeological Method and Theory**
**3**

Explores the history, goals, theories, and methods of anthropological and archaeological research, especially as influenced by the natural sciences. Examines variations in prehistoric human behavior by analyzing the physical remains of ancient peoples throughout diverse time periods and geographical locations.

**ANTH 2880**
**Introduction to Theory and Ethnography**
**WE**
**3**

Provides foundational skills for analytic reading and writing in anthropology. Explores how to apply theory to ethnographic data. Teaches how to write argumentative essays that engage with anthropological texts.

**ANTH 3000 (Cross-listed with: LANG 3000)**
**Language and Culture LH**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005, (ANTH 101G or any foreign language 2010 course), Sophomore status, and University Advanced Standing

Introduces cultural linguistics. Analyzes features of human languages that make possible semantic universality. Examines distinction between phonetic and phonemic units. Explores relationship between language and culture. Studies how language shapes culture and how culture shapes language.

**ANTH 3050**
**Intro to Ethnomusicology**
**3**
* Prerequisite(s): University Advanced Standing

Introduces a comparative study of music traditions from a variety of cultural settings. Presents concepts and research methods of ethnomusicology. Provides opportunities to develop skills of listening, observation, analysis, and demonstration. Utilizes ethnography, archaeology, and personal observation.

**ANTH 3150**
**Culture Ecology and Health**
**3**
* Prerequisite(s): University Advanced Standing

Examines reciprocal roles of culture, environment, and disease in human health. Covers nutrition, stress, and traditional non-Western treatments. Explores cultures' use of their own global medicine to sustain health and welfare.

**ANTH 3200**
**Food and Culture**
**3**
* Prerequisite(s): University Advanced Standing

Explores the complex relationships between food, culture, and human action. Examines the cultural underpinning of human nutrition. Discusses the selected social, cultural, medical, political, and ideological uses of food. Examines the symbolism of food to better understand taboo, fasting and feasting, class and social stratification, sacrifice, hosting, cannibalism, and narrative grotesque.

**ANTH 3210**
**Islam in the Modern World**
**3**
* Prerequisite(s): University Advanced Standing

Explores the different ways anthropologists have studied Muslim social life, including attempts to apply Muslim ethical frameworks to the domains of finance, politics, leisure, and the modern domestic sphere. Addresses the variety of ways Islam is practiced and interpreted. Covers Islam in Africa, the Middle East, Central and Southeast Asia, Europe and the United States. Explores issues in interfaith relations, such as the challenges Muslims face when living in a Christian-majority society.

**ANTH 3300**
**Culture Development and International Aid**
**3**
* Prerequisite(s): University Advanced Standing

Provides an overview of the anthropological study of international development. Analyzes development practices and anthropological critiques of these practices. Explores the way anthropological approaches can increase the likelihood of development project success. Explores peasant studies and the many concerns of rural development. Discusses poverty and how it relates to economic, social, and political development. Appraises ways to ameliorate poverty and the role of governmental and non-governmental organizations in the process.

**ANTH 3315**
**Great Basin Archaeology**
**3**
* Prerequisite(s): (ANTH 1030 or ANTH 2030) and (ENGL 2010 with a minimum grade of C+) and University Advanced Standing

Investigates the prehistoric and ethnographic peoples of the Great Basin of North America through the study of their archaeological remains. Examines how the analysis of ancient technology, subsistence, skeletal material, rock art, settlement patterning, the environment, and archaeological theory shapes our understanding of cultures in the region. May include a field trip to an archaeological site.

**ANTH 3340**
**Peoples and Cultures of Mexico**
**3**
* Prerequisite(s): University Advanced Standing

Explores the people and cultures of Mexico. Discusses borders and immigration, indigenous cultures, rural/peasant societies, urban societies, and historical/political issues specific to Mexico. Emphasizes awareness of cultural relativity and global connectivity among the diverse peoples of Mexico.

**ANTH 3350**
**Andean Prehistory**
**3**
* Prerequisite(s): ANTH 101G and (ENGL 2010 with a minimum grade of C+) and (ANTH 103G or instructor approval) and University Advanced Standing

Offers an updated synthesis of the development, key achievements, material, organizational and ideological features of pre-Hispanic cultures of the Andean region of western South America. Spans around 12,000 years of pre-Hispanic cultural developments, from the earliest hunters-gatherers to the Spanish conquest of the Inca Empire. Focuses on the modern nation of Peru with an emphasis on the Paijan, Cupisnique, Chavín, Paracas, Nasca, Gallinazo Moche, Recuay, Tiwanaku, Wari, Cajamarca, Sicán, Chimú, and Inka.

**ANTH 3360**
**Contemporary Issues in American Culture**
**3**
* Prerequisite(s): University Advanced Standing

Examines key aspects of contemporary American culture. Discusses American values and popular culture, ethnicity, gender, childhood, food, reproduction, technology, crime, and globalization. Highlights aspects of American culture that may not be explored in other Behavioral Science curricula.

**ANTH 3365**
**Gender and Sexuality**
**3**
* Prerequisite(s): University Advanced Standing

Examines theories on the biological and cultural construction of sex and gender. Covers how different communities organize their lives around gender distinctions and sexual practices. Utilizes anthropological theories to analyze cultural practices and concepts pertaining to the following: differences between men and women, perceived sexual deviance and accepted sexual practices, non-binary people and third genders. Explores the way contradictory gender norms coexist and compete within the same culture.

**ANTH 3370**
**History and Ethnography of Andean Societies**
**3**
* Prerequisite(s): University Advanced Standing

Explores the social and cultural processes that characterize the societies that descend from the Inca Empire--Bolivia, Ecuador, and Peru--as they have developed since the Spanish invasion. Discusses contemporary political, economic, and social problems in these countries in the context of global society.

**ANTH 3400**
**Myth Magic and Religion**
**3**
* Prerequisite(s): University Advanced Standing

Explores the many aspects of religion, including its history, diversity, and how it relates to social science studies. Examines terms such as myth, magic, religion, ritual and shamanism, among others. Covers how these terms are used to discuss religious and spiritual practices around the world.

**ANTH 3420**
**Andean Religion**
**3**
* Prerequisite(s): University Advanced Standing

Explores religion prior to the Spanish conquest in the countries that were part of the Inca Empire--Bolivia, Ecuador, and Peru. Surveys the nature of Catholicism that was recreated after colonial conquest. Discusses the contemporary religious issues of Andean societies, such as secularity, and how Andean religious categories differ from categories that guide academic research on religion.

**ANTH 3450**
**Shamanism and Indigenous Religion**
**3**
* Prerequisite(s): University Advanced Standing

Explores the religious systems of indigenous peoples, particularly those which have been called shamanic. Focuses on the classical study of shamanism and the literature on indigenous shamanism. Locates the study of shamanism within a social context that includes social relational and political economic contexts of the groups within which shamanism is found. Poses questions of how shamanism is different from the expanding world religions and compares and contrasts shamanism with non-shamanic indigenous religions. Analyzes at the current marketing of shamanism in New Age contexts.

**ANTH 3460**
**Anthropology of Mormonism**
**3**
* Prerequisite(s): University Advanced Standing.

Explores how an anthropological approach can enable a more in-depth comprehension of Mormonism as a religious tradition and cultural phenomena.

**ANTH 3480**
**Global Christianity**
**3**
* Prerequisite(s): University Advanced Standing

Explores the key issues that have arisen in the literature that explores Christianity from an anthropological perspective. Examines the development of Christianity from its historical origins to its current status as a "world religion." Discusses how Christianity becomes relevant to different cultural contexts in the modern world. Analyzes Pentecostal, Evangelical Protestant, Eastern Orthodox, and Catholic forms of Christianity.

**ANTH 3500**
**Discourse Semiotics and Representation**
**3**
* Prerequisite(s): University Advanced Standing

Explores classical theoretical positions on representation, meaning, discourse, and poetics. Examines performance of culture and the implications of performance theory for scientific epistemology and methodology. Surveys recent work by anthropologists who grapple with these theoretical concerns in empirical research in a range of global settings.

**ANTH 3550**
**Memory and History**
**3**
* Prerequisite(s): University Advanced Standing

Studies how societies remember and represent their past and present in various contexts. Examines how societies employ different senses of temporality in these processes. Explores the relationships with historiography and ethnohistory and how anthropologists and historians have dealt with these issues.

**ANTH 3560**
**Peace Violence and Human Morality**
**3**
* Prerequisite(s): University Advanced Standing

Explores the cultural patterning of violence and nonviolence. Draws on theories of human values and ethics to understand how people morally justify different types of violent action, such as riots, genocide, warfare, and ritual violence. Explores cultural processes of pacifism, self-sacrifice, and reconciliation.

**ANTH 3660**
**Globalized Society**
**3**
* Prerequisite(s): University Advanced Standing

Explores the development and reactions to globalization. Traces the formation of community of nation-states and multilateral agencies called "global society." Explores the implications of global society for peoples far removed from this sphere of social organization. Provides an understanding of the world in which nation-states and their citizens are enmeshed.

**ANTH 3700**
**Culture Psychology and Mental Health**
**3**
* Prerequisite(s): University Advanced Standing

Explores interrelationships of individual personality to elements of Western and non-Western sociocultural systems. Examines relations of sociocultural contexts to self, motives, values, personal adjustment, stress and pathology using case histories and ethnography. Discusses the idea of self and personality, normality and deviance, and mental health and mental illness across social and cultural boundaries.

**ANTH 3720**
**Applied Anthropology**
**3**
* Prerequisite(s): ANTH 101G, ENGL 2010, and University Advanced Standing

Surveys the ethics and methods used by applied anthropologists. Surveys a range of areas where applied work is performed, including development anthropology, anthropology and health, industrial anthropology, anthropology and marketing, etc. Also explores the political, social, and theoretical implications of applied work.

**ANTH 3750**
**Bioarchaeology**
**3**
* Prerequisite(s): [(ANTH 1020 or BIOL 1500) and (ENGL 2010 with a minimum C+ grade) or Instructor approval] and University Advanced Standing

Focuses on the biological and contextual study of human remains recovered from archaeological sites. Presents an updated synthesis of bio-archaeological science dealing with the study of the human skeleton to reconstruct patterns of biological stress, infectious disease, lifestyle and physical activity, diet, violent death, and genetic relationships in the past. Temporal coverage principally falls on the last 10,000 years of history, and the spatial scope is global. Involves the dynamic nature of skeletal tissues and the influences of environment and culture on human variation. Acquired skills will be of value to any students interested in skeletal studies including archaeology, bioarchaeology, paleopathology, forensic science, vertebrate biology, biomedical sciences, and behavioral science.

**ANTH 3830**
**Biology and Culture**
**3**
* Prerequisite(s): (ANTH 101G or ANTH 1020) and (ENGL 2010 with a minimum grade of C+) and University Advanced Standing

Explores the interactions of nature and nurture as a complex whole, rather than as mutually exclusive possibilities or separate streams of influence. Includes a significant research project.

**ANTH 3850**
**Ethnographic Methods WE**
**3**
* Prerequisite(s): ANTH 101G and University Advanced Standing

Examines the utility of ethnographic research techniques for answering different research questions. Formulates research ethics protocols. Engages in participant observation research and teaches techniques for recording observations in field notes. Employs ethnographic writing genres to compose reports on original research. Develops skills in qualitative interview techniques and the analysis of qualitative data.

**ANTH 3870**
**Political Anthropology**
**3**
* Prerequisite(s): University Advanced Standing

Explores anthropological theories of politics and power in relation to human events and social institutions. Provides a critical history of anthropological approaches to understanding processes of regulating and controlling populations, of justifying and executing power, of coaxing populations into self-governance, and of disciplining deviance. Analyzes political processes in non-state societies and the workings of nation-states.

**ANTH 4120**
**History of Anthropological Thought**
**3**
* Prerequisite(s): ANTH 101G and (ENGL 2010 with a minimum C+ grade) and University Advanced Standing

Surveys anthropological thought, theory and its philosophical roots from the nineteenth to the twentieth centuries. Focuses on the concepts and theoretical paradigms deployed in different social and intellectual conjunctures, as well as on the major debates that have formed the field and separated it from other social science disciplines.

**ANTH 4130**
**Contemporary Theory and Debates**
**3**
* Prerequisite(s): ANTH 101G, ANTH 4120, and University Advanced Standing

Explores social theory and other disciplines. Surveys current debate through exploration of the conceptual apparatuses that are deployed and the issues that motivate current research. Analyzes contemporary anthropological writings.

**ANTH 4310**
**Kinship and the Family**
**3**
* Prerequisite(s): University Advanced Standing

Explores anthropological thinking on familial relationships and uses theoretical concepts to analyze a variety of kinship practices. Covers the history of the anthropology of kinship. Evaluates the adequacy of different anthropological approaches to kinship for understanding the distinct ways humans organize themselves into family groups.

**ANTH 475R**
**Current Topics in Anthropology**
**1 to 3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Presents selected topics in Anthropology and will vary each semester. May be repeated for a maximum of 15 credits toward graduation.

**ANTH 482R**
**Archaeological Field Methods Practicum**
**1 to 9**
* Prerequisite(s): [ANTH 2030 and (ENGL 2010 with a minimum grade of C+) or instructor approval] and University Advanced Standing

Introduces students to archaeological field technique and a critical approach to the methods by which archaeology is conducted. Provides involvement in all phases of field excavation, lab processing, curation and preservation of archaeological remains, and data analysis. Provides students with hands-on training in archaeological, historical, bio-archaeological, and environmental research. Explores how to conduct archaeological survey, large-scale site excavation, date cultural materials, excavate mortuary sites and human burials, and document patterns of social complexity, subsistence, and material culture. Students must be prepared for strenuous outdoor work, including hiking, digging, carrying heavy loads, and processing field collections in laboratory settings. Includes day activities such as survey and excavation. Evenings are dedicated to seminar-style discussion and laboratory work. Involves periodic field trips to nearby archaeological and historic sites. May be repeated for a maximum of 27 credits. May be graded Credit/No Credit.

**ANTH 490R**
**Independent Studies**
**1 to 3**
* Prerequisite(s): For Behavioral Science Bachelor Degree students only; Instructor approval and University Advanced Standing

For qualified students who wish to undertake a well-defined project or directed study related to an area of special interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. Projects may include writing a publishable paper, passing a competency exam, producing an annotated bibliography, an oral presentation, or other options as approved by instructor. May be repeated for a maximum of 6 credits.

# Apprentice (APPR)

**APPR 281R**
**Cooperative Work Experience**
**1 to 8**
* Corequisite(s): APPR 285R

Designed for electrical construction apprentice majors. Provides paid, on-the-job work experience in the student's major. Work experience, the correlated class and enrollment are coordinated by the Cooperative Coordinator. Includes student, employer and coordinator evaluations, on-site work visits, written assignments and oral presentations. Provides experience in writing and completing individualized work objectives that improve present work performance. May be graded Credit/No Credit.

**APPR 285R**
**Cooperative Correlated Class**
**1**
* Corequisite(s): APPR 281R

Designed for electrical construction apprentice majors. Identifies on-the-job problems and provides remediation of those problems through in-class discussion and study. Includes the study of identifying and maximizing service opportunities. Students register for this class with approval of the Cooperative Coordinator. Includes lecture, guest speakers, video tapes, role playing, case analysis, oral presentation and written assignments. Completers should be better able to perform in their field of work or study.

# Architecture (ARC)

**ARC 1010**
**Classical Architecture Workshop**
**3**

Provides an understanding of the fundamental principles and language of architecture. Instructs in the design principles that inform classical architecture which are found in the order, proportion, archetypal geometry, and patterns found in nature and the cosmos. Creates a solid foundation for learning and applying architecture's vocabulary and syntax to compose poetic and meaningful buildings.

**ARC 2110**
**Architecture Studio I**
**3**
* Prerequisite(s): EGDT 1020 and ARC 1010 with a grade of C- or higher

Introduces the classical theories of architectural language, design, and craftsmanship in a hands on studio setting. Focuses on the classical vocabulary of the built environment. Investigates the forms, spaces, and ordering systems of design. Produces hand drawings in orthographic, perspective, and axonometric views. Illustrates light through shade and shadows. Applies understanding of classical building forms in the design of increasingly complex projects, Develops skills in traditional rendering and presentation techniques.

**ARC 2210**
**Architecture Studio II**
**3**
* Prerequisite(s): EGDT 1020, ARC 1010, and ARC 2110 with a grade of C- or higher

Exposes students to architectural site analysis and the process of evaluating a particular locations physical, historical, and cultural characteristics to inform design. Develops a building project of significant merit by measuring and documenting a selected site. Analyzes the complex elements of a site such as varying topography, watercourses, vegetation, habitats, weather patterns, and historical data to guide design decisions. Researches elements to determine the building placement, orientation, form and material selection.

**ARC 2220**
**Construction Documents and Specifications**
**3**
* Prerequisite(s): EGDT 1020 and EGDT 1100 with a grade of C- or higher

Prepares for the Construction Documents Technician (CDT) industry certification using standard software to complete working drawings for the architectural, civil, MEP, and structural industries. Develops a project manual and outline specifications, which coordinate with the working drawings of a commercial design.

**ARC 3110**
**Architecture Studio III**
**6**
* Prerequisite(s): Matriculation to the B-Arch Program and University Advanced Standing.

Immerses students into the architecture studio culture and a design thinking environment. Emphasizes the fundamental design skills with attention on site and precedent. Requires research of a site and program necessary to develop cultural, theoretical, environmental, and historical contexts. Follows a Project based approach with a final presentation to a professional jury.

**ARC 3120**
**Architectural Graphic Communication**
**3**
* Prerequisite(s): Matriculation to the B-Arch Program and University Advanced Standing

Enables the student to confidently communicate design ideas to others. Includes involvement in producing complex 3D models and renderings of various project types. Combines traditional drawing techniques and contemporary software to complete assignments and projects.

**ARC 3130**
**Codes and Construction Law**
**3**
* Prerequisite(s): EGDT 2100, EGDT 2610 both with a grade of C- or higher and University Advanced Standing.

Explores the modern building codes and how they affect building design and construction. Examines written specifications and the various jurisdictional requirements for architectural works. Provides in-depth information about the preparation and content necessary for a set of construction documents. Defines and explains the several types of construction contracts, bidding requirements, methods of specifying, substitutions, instructions, and warranties.

**ARC 3210**
**Architecture Studio IV**
**6**
* Prerequisite(s): ARC 3110 with a grade of C- or higher and University Advanced Standing.

Engages in the essential pre-design processes of a project type. Includes the assessment of client and user needs, space analysis, and examination of project site. Follows a project based approach with a final presentation to a professional jury.

**ARC 3220**
**Passive Environmental Systems**
**3**
* Prerequisite(s): Matriculation to the B-Arch degree program, University Advanced Standing.

Examines the principles of environmental systems design and the building envelope's affect on occupant comfort. Investigates passive heating and cooling strategies, natural ventilation, solar geometry, daylighting, climate considerations, thermal comfort, and mechanical systems.

**ARC 3230**
**Global History of Architecture to 1700**
**3**
* Prerequisite(s): Matriculation to the B-Arch degree program, University Advanced Standing.

Explores the history of architecture and urbanism from a global perspective, beginning with the first settlements to roughly 1700 AD. Analyzes buildings and their surroundings through different methods of interpreting history. Presents that architecture is the result of complex interrelationships dealing with aesthetic, cultural, contextual, symbolic, religious, social, economic, political, technological, behavioral, and ecological issues.

**ARC 4110**
**Architecture Studio V**
**6**
* Prerequisite(s): ARC 3210 with a grade of C- or higher and University Advanced Standing.

Produces an architectural design as part of an interdisciplinary team. Integrates a complex architectural program and associated needs of a user. Utilizes collaboration between disciplines such as mechanical, civil, and electrical engineering. Follows a project-based approach with a final presentation to a professional jury.

**ARC 4120**
**Active Environmental Systems**
**3**
* Prerequisite(s): ARC 3220 and University Advanced Standing

Investigates the principles of environmental systems design and the building envelope's affect on occupant comfort and life safety. Investigates HVAC systems, indoor air quality, lighting, communication, security, fire protection, acoustics, vertical transportation, electrical, and plumbing systems.

**ARC 4130**
**Global History of Architecture Since 1700**
**3**
* Prerequisite(s): ARC 3230 with a grade of C- or higher. Matriculation to the B-Arch degree program, and University Advanced Standing

Explores the history of architecture and urbanism from a global perspective beginning with the first settlements since 1700 AD. Analyzes buildings and their surroundings through different methods of interpreting history. Explores architecture’s complex interrelationships dealing with aesthetic, cultural, contextual, symbolic, religious, social, economic, political, technological, behavioral, and ecological issues.

**ARC 4210**
**Architecture Studio VI**
**6**
* Prerequisite(s): ARC 4110 with a grade of C- or higher and University Advanced Standing

Immerses students in the design of an architectural work to fulfill a community need. Encourages networking with community leaders and citizens. Employs project components such as client interviews, research methods, and interdisciplinary study. Explores a complex architectural program and associated needs of the community.

**ARC 4220**
**Building Envelope and Science**
**3**
* Prerequisite(s): ARC 4120 with a grade of C- or higher and University Advanced Standing

Introduces modern architectural materials, methods of construction, and building enclosures including steel, concrete, curtain walls, high-performance materials, and thermal and moisture barriers. Evaluates the inclusion of sustainable systems to save energy and reduce the carbon footprint in building construction.

**ARC 4230**
**Capstone Project Research**
**3**
* Prerequisite(s): ARC 4210 with a grade of C- or higher and University Advanced Standing
* Corequisite(s): ARC 4510, ARC 4540

Applies investigative, pre-design, and research skills towards an independent capstone project. Integrates critical thinking while developing an architectural building program, assessing client-user needs, selecting a project site, analyzing environmental and climatic concerns, understanding building code requirements, analyzing the immediate site context and historic fabric, and planning for site specific zoning regulations.

**ARC 4510**
**Architecture Studio VII**
**6**
* Prerequisite(s): ARC 4210 with a grade of C- or higher and University Advanced Standing

Applies design skills through an architectural work which integrates critical and abstract thinking. Researches building systems, life safety considerations, building envelope, financial, cultural & environmental balance, and construction documentation skills.

**ARC 4520**
**Architectural Theory**
**3**
* Prerequisite(s): ARC 3210, with a grade of C- or better and University Advanced Standing

Surveys contemporary architectural thought and theory. Focuses on key figures, movements, and texts. Provides an overview of the principal theories that have informed or undermined architecture of the past four decades. Considers the changing role of theory with respect to practice. Provides a set of questions, techniques, and tools for criticism and self-reflection.

**ARC 4530**
**Culture and Behavior in Architecture**
**3**
* Prerequisite(s): ARC 4110 with a grade of C- or better and University Advanced Standing

Examines the relationship between architecture, culture, history, economics, and humanity. Explores varying cultures and human behaviors and how they represent and manifest themselves in the built environment.

**ARC 4540**
**Architecture Professional Practice**
**3**
* Prerequisite(s): ARC 4210 with a grade of C- or higher and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ARC 4510, ARC 4230

Examines the fundamentals of running and managing an architectural firm including project management, finances, working with consultants, stakeholder considerations, and ethical issues. Prepares for the Architectural Registration Exam (ARE).

**ARC 459R**
**Special Topics in Architecture**
**3**
* Prerequisite(s): Matriculation to the B-Arch degree program and University Advanced Standing.

Provides exposure to emerging technologies, techniques of design and construction, and the craft of building lasting high quality structures. Varies each semester with a different topic. May be repeated for a maximum of 6 credits towards graduation.

**ARC 4610**
**Architecture Studio VIII**
**7**
* Prerequisite(s): ARC 4510 with a grade of C- or higher and University Advanced Standing

Applies design skills through an architectural work which integrates critical and abstract thinking. Researches building systems, life safety considerations, building envelope, financial, cultural and environmental balance, and construction documentation skills.

# Art (ART)

**ART 1010** **FF**
**Introduction to Visual Arts**
**3**

Develops an appreciation of the visual arts by investigating the elements and principles of art, art criticism, art production, and the history of art. Includes written critiques and assignments. Requires students to identify works of arts and describe their significance in writing. May be delivered hybrid.

**ART 1020** **FF**
**Basic Drawing for Non-Majors**
**3**

For non-majors. Introduces basic drawing techniques and stresses fundamentals of observation-based homework. Includes practice and skill building. Investigates basic black and white media such as graphite and charcoal. Requires sketchbook, in-class and home work assignments.

**ART 1050** **FF**
**Photography I**
**3**

Emphasizes the use of camera operation, including aperture and shutter speed adjustments to control exposure, depth of field, lenses, and camera format. Teaches how to see photographically, using elements of composition and lighting to make stronger images. May be delivered online. Software fee of $12 applies. Course fee of $11 for equpment applies. Lab access fee of $26 for computers applies.

**ART 1110**
**Drawing I**
**3**
* Prerequisite(s): Major in Art and Design or Art Education

For Art and Design and Art Education majors. Introduces fundamental drawing concepts and media. Emphasizes mastery of basic drawing principles and integration of these principles into a personal drawing style through exposure to a variety of structured drawing experiences.

**ART 1120**
**2D Design**
**3**

Introduces skills, techniques, and materials associated with two-dimensional design fundamentals. Studies a variety of media, techniques, and subjects, exploring perceptual and descriptive possibilities regarding design both as a developmental process as well as an artistic end. Provides experience in a range of traditional and non-traditional design media. Projects and critiques examine integration of both visual elements and principles of design according to contemporary standards.

**ART 1130**
**3D Design**
**3**
* Prerequisite(s): ART 1120

Presents a survey of the history and main lines of development and influential factors in three dimensional design. Examines important designers, firms, and decisive turning points in the history of three dimensional design. Emphasizes planning, purpose, and function through project oriented assignments. Teaches proper use of tools and materials. Course fee of $25 for materials applies.

**ART 1210**
**Spatial Drawing**
**3**
* Prerequisite(s) or Corequisite(s): ART 1110

Provides students with essential drawing skills necessary for the correct representation of space. Introduces multiple linear perspective drawing methods, visualization, tonal drawing, and rendering skills. Studies perspective and spatial representation in a historical context.

**ART 1340** **FF**
**Sculpture I**
**3**

Introduces methods and techniques of figurative clay sculpture. Students will construct armatures and build clay head and anatomy studies from the model. Includes firing and finishing techniques. Course fee of $20 for materials applies.

**ART 1350** **FF**
**Ceramics I**
**3**

Studies clay as an expressive medium. Emphasizes techniques of working with clay, including hand building, wheel throwing, glazing, and firing. Course fee of $30 for materials applies.

**ART 1400**
**Graphic Computer Applications**
**3**

Introduces concepts and software related to visual communication and the creation and reproduction of art. Teaches how to create and modify digital images using Adobe Photoshop. Also teaches basic design skills using Adobe Illustrator. Teaches basic page layout skills using InDesign. Covers basic software used in visual communications. May be delivered online. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 1410**
**Typography I**
**3**
* Prerequisite(s): ART 1120, ART 1400. For DGM majors: DGM 1110, DGM 2250.

Teaches the principles of typographic design and communication, type selection, and type terminology. Addresses typographic history and the use of typography in contemporary design including its relationship to layout and grid structure. Teaches skills to allow students to professionally set type using industry standard software.Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 1420**
**Graphic Design I**
**3**
* Prerequisite(s): (ART 1120 and ART 1400) or (DGM 1110 and DGM 2250)

Provides an understanding of basic principles needed for effective visual communication. Presents a survey of graphic design theory and practice. Introduces graphic design processes for creative problem solving, production and critique. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 1630**
**Introduction to Landscape Painting**
**3**

Teaches landscape painting and drawing techniques through direct exposure to area sites. Explores interior and exterior landscapes. Studies color, shape, relationships, light, and space. Emphasizes individual interpretation of subject matter using a variety of media. Community members welcome.

**ART 1650** **FF**
**Watercolor**
**3**

Studies materials, techniques, and compositional methods of watercolor painting at a beginning level. Teaches the application of basic techniques for the use of transparent watercolor materials. Includes lecture/demonstration and studio time for application and evaluation. For majors and non-majors.

**ART 1750**
**Intro to Digital Imaging**
**3**
* Prerequisite(s): Major in Art and Design or Art Education

Emphasizes the use of camera operation, including lens, aperture, and shutter speed adjustments to control exposure and depth of field. Teaches how to see photographically, using elements of composition and lighting to make stronger images. Uses digital captures as the primary focus. Also covers how to light and photograph 2D and 3D artworks as well as create reference photos. Required DSLR or SLR cameras. Software fee of $12 applies. Lab access fee of $26 applies.

**ART 1790**
**Dark Room Techniques**
**3**
* Prerequisite(s): ART 1750

Introduces photography majors to traditional dark room processes, including development and printing methods. Teaches imagery through negative manipulation, diffusion, toning, and multiple exposure. Course lab fee of $19 for equipment applies.

**ART 1810**
**Introduction to Interior Design**
**3**

For individuals wishing to develop interior design skills, be employed in the interior design industry, or develop their own interior design business. Overviews the interior design profession, client profiles and the design process. Covers principles and elements of design, evaluating design, color and lighting, fabric and pattern coordination. Studies American architecture and furniture styles, history and identification, and current design trends.

**ART 1820**
**Interior Space Design**
**3**

For individuals wishing to develop interior design skills, be employed in the interior design industry, or develop their own interior design business. Covers aesthetic and functional home design and space planning, "presentation" drafting and presentation techniques, "universal design," quality furniture selection, and furniture arrangements. Includes kitchen design, architectural details, background materials, color fabric construction and selection. Includes lecture, guest speakers, videos, in-class labs and field trips. Completers have prepared floor plans, color and selection boards, and make client presentations.

**ART 1830**
**Residential Interior Design**
**3**

For individuals wishing to develop interior design skills, be employed in the interior design industry, or develop their own interior design business. Covers conceptualizing, designing, specifying and presenting residential interior client presentations. Includes business practices, building codes, portfolio preparation and advanced interior design concepts. Completers will have knowledge to be competent at mid-level interior design positions.

**ART 200R**
**Art and Design Lecture Series**
**1**
* Prerequisite(s): Declared Art and Design major

Offers weekly lectures exploring art and design. Addresses art education, art history, ceramics, drawing, graphic design, illustration, painting, photography, and sculpture. May be repeated for a maximum of 4 credits toward graduation. Course fee of $50 for support applies.

**ART 2100** **FF**
**Teaching Art for Children**
**3**

Introduces concepts and techniques to teach children art in the home, community, or schools based on state and national art teaching and learning standards. Includes community-based and multicultural engagement, materials management, and content appropriate for young learners. Assists students to become independent, creative, and productive learners as they acquire the knowledge, skills, and experience to teach children ages 5–12. Course Lab fee of $23 for materials applies.

**ART 2110**
**Drawing II**
**3**
* Prerequisite(s): (ART 1110 or ART 1020) and ART 1120

Emphasizes continued mastery of drawing principles and further integration of these principles into a personal drawing style. Provides exposure to a variety of structured drawing experiences. Introduces color drawing media into vocabulary and application in works created.

**ART 219R**
**Special Topics**
**1 to 3**

Elective course for Art and Design students. Presents seminars and workshops from experts in industry. May range from a single weekend to a full semester. Repeatable for offerings of different content. A maximum of 3 credits may apply toward graduation. Lab access fee of $15 for computers applies.

**ART 2220**
**Imagination and Visual Literacy**
**3**
* Prerequisite(s) or Corequisite(s): ART 1210

Teaches visual problem solving skills that enable students to effectively find, interpret, evaluate, use, and create images that are original in concept. $25 course fee for support applies.

**ART 2230**
**Illustrative Media and Techniques I**
**3**
* Prerequisite(s): ART 1110, ART 1120
* Prerequisite(s) or Corequisite(s): ART 1210

Introduces the practice, study, and application of a variety of oil painting techniques used in the production of illustration art. Explores the development of mixed media processes and techniques using oil paint in combination with other materials and media will be explored.

**ART 2240**
**Illustrative Media and Techniques II**
**3**
* Prerequisite(s): ART 1210

Introduces the study, practice and application of aqueous painting media used in the production of illustration art. Focuses on acrylic, gouache, casein or watercolor painting techniques. In addition, develops mixed media processes and techniques in combination with aqueous painting media.

**ART 2250**
**Gestural Drawing**
**3**
* Prerequisite(s): ART 1110, ART 1210

Introduces the drawing of basic shapes and forms used to create solidly-constructed, animated characters. Emphasizes understanding and communicating movement of the human form as shapes and drawing imaginatively. Course fee of $100 applies for support.

**ART 2260**
**Digital Painting for Illustration I**
**3**
* Prerequisite(s): ART 1110, ART 1400

Introduces the digital illustrator/painter to the application of various animation software programs such as basic raster, vector, and 3D. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 2270**
**Figure Drawing I**
**3**
* Prerequisite(s): ART 1110, ART 1120, ART 1210, Art and Design major or department approval.

Studies the anatomy of the human figure; dynamics, posing and motion. Emphasizes figure-drawing skills such as extreme foreshortening, perspective and drawing the gestural motion of the human form. Uses live models (draped and/or undraped). Course Lab fee of $120 for support applies.

**ART 2280**
**3D Computer Modeling**
**3**
* Prerequisite(s): ART 1400 or DGM 1110

Teaches basic techniques of computer software-based 3D modeling, focusing primarily on Polygon and Subdivision Surface workflows applicable to virtually all modern 3D software packages. Includes basic lighting, surfacing, and rendering techniques. Includes computer animation techniques. Software fee of $12 applies Lab access fee of $26 for computers applies.

**ART 2340**
**Sculpture II**
**3**
* Prerequisite(s): ART 1340 or Department Approval

Teaches intermediate techniques of clay sculpture, including armature construction, base relief, figurative sculpture based on human and animal forms. Develops the skills to create a sculpture from clay model to finished piece. Course fee of $40 for materials applies.

**ART 2350**
**Ceramics II**
**3**
* Prerequisite(s): ART 1350 or Department Approval

Teaches intermediate and advanced techniques of wheel throwing, hand-building, and glazing. Emphasizes clay as an artistic medium. Includes decoration of clay shapes with engobes, slip, glaze, overglazes, etc. Develops the skills to create a quality finished ceramic piece. Requires students to provide all materials and equipments except wheels. Course fee of $40 for materials applies.

**ART 2400**
**Production Design**
**3**
* Prerequisite(s): ART 1110, ART 1120, ART 1400, ART 1410, ART 1420, formal acceptance to Associate of Applied Science in Graphic Design (AAS) Program by portfolio review, or department approval.

Introduces production techniques used in the graphic design industry. Includes the practical application of learned technical skills through design projects. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 2430**
**Branding I**
**3**
* Prerequisite(s): ART 1110, ART 1120, ART 1400, ART 1410, ART 1420, formal acceptance to Associate of Applied Science in Graphic Design (AAS) Program by portfolio review, or department approval.

Addresses concepts relating to branding campaigns. Teaches research skills and the influence they have on the creation of brand identities. Teaches brainstorming, conceptual skills, and the use of industry-standard software for the design and production of an identity system. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 2440**
**Motion Graphics I**
**3**
* Prerequisite(s): ART 1110, ART 1120, ART 1400, ART 1410, ART 1420, formal acceptance to Associate of Applied Science in Graphic Design (AAS) Program by portfolio review, or department approval

Teaches basic principles and techniques of 2D animation with an emphasis on typography. Includes discussion of creative problem solving in time-based media. Includes learning 2D industry software to render video and audio. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 2480**
**UI/UX Design I**
**3**
* Prerequisite(s): ART 1410, ART 2400

Teaches basic principles and techniques of interface design for the Web. Includes discussion of usability and information architecture to solve client needs. Includes learning HTML tags and CSS styling, image preparation for the Web, and using Adobe Dreamweaver to create and upload web-ready files. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 2620**
**Color Theory**
**3**
* Prerequisite(s): ART 1120

Explores the principles of color theory as related to the visual arts. Introduces theories of color, color systems, and the psychology of color through a sequence of exercises and projects.

**ART 2630**
**Painting I**
**3**

Investigates the character and techniques of oil painting at a beginning level. Emphasizes several approaches (both traditional and modern) on a variety of surfaces.

**ART 2640**
**Painting II**
**3**
* Prerequisite(s): ART 2630, (ART 1120 and ART 2620 recommended)

Presents advanced traditional and non-traditional oil painting techniques. Emphasizes the techniques for personal exploration. Encourages development of individual style and approach to the media.

**ART 2650**
**Watermedia II**
**3**
* Prerequisite(s): ART 1650. ART 2620 recommended

Emphasizes development of technical skills, composition at an intermediate level in a variety of watermedias. Includes lecture, demonstration, and studio time for application and evaluation. Encourages development of personal style in relation to the media.

**ART 2680**
**Printmaking I**
**3**
* Prerequisite(s): ART 1110 or ART 1020

Introduces fine art printmaking and focuses on beginning techniques, processes, and materials. Explores the role of traditional and contemporary printmaking as a fine art medium. Focuses on the development of personal and individual imagery, craftsmanship, the use of tools and materials, and printmaking terminology. Includes intaglio printing and relief printing. Course Lab fee of $32 applies.

**ART 2700**
**Photography II**
**3**
* Prerequisite(s): ART 1790

Extends skills and principles learned in Introduction to Photography. Continues the exploration of light and composition through personal expression to make stronger images. Emphasizes technical control of exposure, development, and aesthetic presentation in the context of the Zone System. Teaches processes of archival printing and presentation. Emphasizes use of large format cameras. Course fee of $19 for equipment applies.

**ART 2710**
**Documentary Photography**
**3**
* Prerequisite(s): ART 1750

Teaches the art of telling stories through lens based media. Studies how to take a story from concept to publication. Explores methods of publication of imagery in magazines, newspapers, web sites, social media, annual reports, etc. Uses historical documentary references to inform contemporary ways of telling a story. Includes the use of still and moving imagery. Course Lab fee of $19 for equipment applies.

**ART 2720**
**Color Photography**
**3**
* Prerequisite(s): ART 1750

Introduces color photography and color theory using digital photography and Adobe Photoshop as well as inkjet printing and scanning. Explores cross processing and other development manipulations. Discusses development of color photography and color perception as applied to specific themes. Encourages creativity and personal expression. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 2730**
**Photographic Lighting I**
**3**
* Prerequisite(s) or Corequisite(s): ART 2720

Teaches the basic skills needed to control and manipulate light as a tool for the photographer in communication of artistic vision. Explores different lighting sources and investigates the effects of direction, quality and quantity. Emphasizes flash photography, tungsten, and natural lighting. Studies photographic studio, location, and mixed lighting techniques. Covers processes and concepts through slide presentations, readings, critiques and class discussions. Course Lab fee of $19 for equipment applies.

**ART 2815** **FF**
**Historical Architecture and Interior Design**
**3**

Studies interior design and its development and change through historical styles from prehistoric civilizations through the Victorian Era. Identifies major historical period styles, major architects, and designers. Covers furniture, lighting, and surface materials.

**ART 281R**
**Art and Design Internship**
**1 to 6**
* Prerequisite(s): Departmental Approval

Combines classroom theory with related, practical job experience. Provides students work experience as employees of a business, agency, or institution while enrolled in classes related to their career/major. Allows for individualized course content with students setting objectives in concert with their internship advisor and their workplace supervisor. Requires pre-approval by the area coordinator and department internship advisor. Offers variable credit determined by the number of hours worked per week. May be repeated for a maximum of 6 credits towards graduation. May be graded credit/no credit.

**ART 2825**
**Modern Architecture Interiors and Furnishings**
**3**
* Prerequisite(s): ART 1810

Studies interior design and its development through historical styles from the Arts and Crafts movement to Deconstructivism. Covers architects, designers, textiles, lighting and surface materials.

**ART 291R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Sophomore and above students only

Provides an opportunity for second year and above students to do individual research and experimentation within the areas of the Art and Design Program. Limited to advanced work beyond that which can be completed in existing available classes. Requires that a proposal be submitted and approved by the department prior to enrollment. May be repeated for a maximum of three credits toward graduation.

**ART 3005**
**Ceramic History Trends and Practices WE**
**3**
* Prerequisite(s): ART 1350, ART 2350, and University Advanced Standing; or department approval

Investigates important movements, approaches, cultures, and techniques in the history of ceramic production. Studies artists, trends, and issues in contemporary ceramics.

**ART 300R**
**Special Topics in Art**
**1 to 3**
* Prerequisite(s): University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, and department approval

Addresses emerging topics, issues, and developments related to the visual arts. Includes lectures, demonstrations, and studio time for application and evaluation. Encourages development of personal style in relation to the topic. May be repeated for a maximum of 9 credits toward graduation.

**ART 311R**
**Drawing III**
**3**
* Prerequisite(s): ART 2110 and University Advanced Standing; or department approval

Continues the exploration of the technical skills and conceptual development of drawing as a creative medium. Focuses on the mastery of drawing skills and includes demonstrations, lectures and active participation in the critical process. Emphasizes cultivating personal expression and independent serial work. May be repeated for a maximum of 6 credits toward graduation.

**ART 3210**
**Narrative Illustration**
**3**
* Prerequisite(s): (Matriculated into the BFA in Art and Design: Illustration emphasis program) and University Advanced Standing
* Prerequisite(s) or Corequisite(s): (ART 2230 or ART 2240) and ART 2270

Provides experiences in creating mood through visual elements and controlling the pictorial space. Emphasizes composition, creativity and technical ability. Addresses narrative illustration and visual storytelling. Course fee of $20 for support applies.

**ART 321R**
**Environment Design and Painting**
**3**
* Prerequisite(s): ART 3210 and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Develops and improves skills in designing, rendering and painting environments and landscapes for use in illustration, animation, video games and film. May be repeated for a maximum of 6 credits toward graduation.

**ART 3220**
**Conceptual Illustration**
**3**
* Prerequisite(s): (Matriculated into the BFA in Arts and Visual Communication: Illustration emphasis) and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ART 2270

Introduces conceptual illustration and problem solving through the use of visual symbols, metaphors and icons. Course fee of $20 for support applies.

**ART 322R**
**Advanced Rendering of Forms and Surfaces**
**3**
* Prerequisite(s): ART 2240 and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Studies the accurate depiction of light, shadow, and reflectivity. Focuses on realistic rendering of various objects, textures, and surfaces. Develops advanced skills with a variety of media that may include traditional and/or digital drawing and painting media. May be repeated for a maximum of 6 credits toward graduation.

**ART 324R**
**Childrens Book Illustration**
**3**
* Prerequisite(s): (Matriculated into the BFA in Art and Design: Illustration emphasis) and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ART 2230 or ART 2240

Teaches the processes and techniques used in the execution of children's book illustrations. Emphasizes stylizing, simplifying, exaggerating forms, and organizing pictorial space. Focuses on the art of narrative storytelling and continues the study of media and techniques relative to storybook illustration. May be repeated for a maximum of 6 credits toward graduation.

**ART 325R**
**2D Animation for Illustration**
**3**
* Prerequisite(s): (ART 1110 and ART 1400 or DGM 1620) and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Provides the student of illustration a firm foundation to create simple to moderately complex 2D animations. Develops skills using animation basics including tweening, squash and stretch, anticipation, staging and timing. May be repeated for a maximum of 6 credits toward graduation. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 3260**
**Digital Painting for Illustration II**
**3**
* Prerequisite(s): ART 2260 and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Focuses on creating quality digital paintings/ illustrations in a studio setting. Studies the more subtle features of the software applications. Practices advanced conceptual and problem solving skills. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 3270**
**Digital Illustration**
**3**
* Prerequisite(s): ART 1110, ART 1400, ART 2260 and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Develops advanced skills in producing pixel-based, computer-generated artwork for use as illustrations and other graphic communications. Emphasizes digitally painted images created from scratch rather than the creation of images produced through the digital manipulation of existing, found, or photographic resources. Develops conceptually based and communicative images that will be a vital aspect of each course project. Employs industry-standard software, and techniques including layers, compositing, channels, selection masks and color adjustments. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 327R**
**Rendering the Human Head**
**3**
* Prerequisite(s): ART 1110, ART 1120, and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Develops proficiency in rendering the human head in a variety of approaches and techniques. Addresses geometric and planar construction, proportion, lighting, features, and expression. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $93 for support applies.

**ART 3280**
**3D Computer Rendering**
**3**
* Prerequisite(s): (ART 1400 or DGM 1110) and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval; ART 2280 recommended

Teaches techniques in lighting, texturing, and rendering of 3D models and scenes with a special emphasis upon aesthetics and composition. Includes HDRI lighting, UV mapping, and texture painting, in addition to the standard techniques. Designed as a companion class to the modeling class, ART 2280, but can be explored as a stand-alone experience. Provides models, as needed, or students may use their own models as approved. Software fee of $12 applies. Lab access fee of $26 applies for computers.

**ART 328R**
**Painting the Human Head**
**3**
* Prerequisite(s): ART 327R and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Continues the development of rendering skills acquired in ART 327R (Head Drawing). Emphasizes mixing flesh tones, managing values, and investigates a variety of approaches to painting the human head. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $93 for computers applies.

**ART 334R**
**Sculpture III**
**3**
* Prerequisite(s): ART 2340 and University Advanced Standing; or department approval

Investigates studio problems based on concepts applied to various three-dimensional materials. Places special emphasis on the development of individual expression in the students chosen medium. Encourages the development of individual style and exploration of alternative media. May be repeated for a maximum 6 credits toward graduation. Course fee of $27 for materials applies.

**ART 335R**
**Ceramics III**
**3**
* Prerequisite(s): ART 2350 and University Advanced Standing; or department approval

Continuation of concepts developed in Ceramics I and II. Addresses advanced skills in hand building, wheel throwing, glaze formulation and kiln firing. May be repeated for a maximum of 6 credits toward graduation. Course fee of $40 for materials applies

**ART 3420**
**Typography II**
**3**
* Prerequisite(s): ART 2400, ART 2430, University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval.

Develops advanced skills in the use of typography and layout. Examines editorial practices and executes designs that are appropriate for the intended audience. Teaches industry-standard page layout software. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 3440**
**Motion Graphics II**
**3**
* Prerequisite(s): ART 2280, ART 2440, University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval.

Teaches principles and techniques of 3D animation with an emphasis on typography. Includes discussion of creative problem solving in time-based media. Includes learning 2D and 3D industry software to render video with audio. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 3450**
**Branding II**
**3**
* Prerequisite(s): ART 2400, ART 2430, University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval.

Teaches concept and theory behind brand identity and package design. Covers how to conduct research to ensure designs are conceptually appropriate and targeted. Includes creation of collateral that supports campaign criteria. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 3480**
**UI/UX Design II**
**3**
* Prerequisite(s): DGM 2120, University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval.

Teaches advanced principles and techniques to develop interactive experiences. Includes discussion of usability and user-centered design to solve client needs. Includes learning user interface (UI) and user experience (UX) design principles. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 3500**
**Secondary Art Education Methods I WE**
**3**
* Prerequisite(s): ART 1110, ART 1120, University Advanced Standing and Matriculation into Art Education.
* Corequisite(s): EDSC 455G

Introduces students to the materials, methods, and resources related to teaching middle school and high school visual arts. Emphasizes the characteristics and components of a quality art program. Designed for the art major pursuing teacher licensure for grades 7-12. Course Lab fee of $16 for materials applies.

**ART 3510**
**Secondary Art Education Methods II WE**
**3**
* Prerequisite(s): University Advanced Standing. Art Education Majors Only.

Investigates theories and models of curriculum development in the visual arts for middle school and high school students. Includes implementation of curriculum development, unit/lesson planning, and evaluation strategies in the visual arts. Prepares prospective art teachers to plan, organize, and promote quality art programs and curricula. Course Lab fee of $22 for materials applies.

**ART 361R**
**Figure Drawing II**
**3**
* Prerequisite(s): ART 2270 and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Presents skills and techniques related to drawing the human figure. Uses live models (draped and undraped). May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $150 for support applies.

**ART 363R**
**Painting III**
**3**
* Prerequisite(s): ART 2640 and University Advanced Standing; or department approval

Introduces theoretical issues in contemporary painting and their application to personal approaches to painting. Emphasizes individual problem solving and independent growth within a conceptual setting. May be repeated for a maximum of 6 credits toward graduation.

**ART 364R**
**Figure Painting**
**3**
* Prerequisite(s): (ART 361R, matriculated into the BFA in Art and Design: Illustration emphasis program or area coordinator approval) and University Advanced Standing

Explores fundamental methods and techniques of oil painting from the figure using live models (draped and undraped). Emphasizes mastery of representational depictions of the figure. Includes themes of abstraction, interpretation, and narrative uses of the figure. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $150 for support applies.

**ART 365R**
**Watermedia III**
**3**
* Prerequisite(s): ART 2650 and University Advanced Standing; or department approval

Emphasizes experimental approach to watermedia. Provides opportunity for independent exploration and development of personal style coupled with refinement of technical skills. May be repeated for a maximum of 6 credits toward graduation.

**ART 366R**
**Life Drawing**
**3**
* Prerequisite(s): ART 1110, ART 1120, or department approval and University Advanced Standing

Studies fundamental human anatomy, structure, value representation, proportion, shape, and gesture from a fine arts vantage point in a range of drawing media. Draws from observation of live models (clothed and unclothed). Serves as a foundation for advanced courses in drawing and painting the human form as found in traditional, modern, and contemporary fine arts movements. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $135 applies.

**ART 367R**
**Printmaking II**
**3**
* Prerequisite(s): (ART 1110 or ART 1020), ART 2680, University Advanced Standing, or department approval

Continues to develop, enhance, and create proficiency in printmaking skills through intermediate techniques, processes, and materials. Establishes the role of traditional and contemporary printmaking as a fine art medium. Includes challenging and complex projects with more advanced technical skills than Printmaking I. Strengthens the development of personal and individual imagery, including the importance of craftsmanship, the usage of additional tools/materials, and an expanding printmaking vocabulary. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $34 for materials applies.

**ART 368R**
**Printmaking III**
**3**
* Prerequisite(s): (ART 1110 or ART 1020), ART 2680, University Advanced Standing, or departmental approval

Continues the exploration of fine art printmaking through advanced techniques, processes, and materials including the mixing/printing of color inks and multiple plate registration. Strengthens the development of personal and individual imagery, including the importance of craftsmanship, the usage of new tools/materials, and an expanding printmaking vocabulary. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $34 for materials, equipment applies.

**ART 369R**
**Contemporary Figure Painting**
**3**
* Prerequisite(s): (ART 366R or ART 2270), ART 2630, and University Advanced Standing; or department approval. ART 2620 recommended.

Studies the human form from a fine arts vantage point at an advanced level in various painting media (oil, acrylic, mixed, etc.). Explores historical and contemporary modes of media/ image use and interpretation in conceiving and expressing the human form in a range of stylistic contexts. Painting is done from observation of live models (draped and undraped). Course Lab fee of $135 applies.

**ART 371R**
**Historical Photographic Processes**
**3**
* Prerequisite(s): University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval

Teaches alternative photographic processes with an emphasis on early photographic printing techniques. Includes preparation and exposure of paper using various alternative techniques through a variety of hands-on projects. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $50 for equipment applies.

**ART 3730**
**Photographic Lighting II**
**3**
* Prerequisite(s): University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval

Focuses on product lighting and camera techniques. Develops artistic skill through the creation of images that can be used in commercial settings, specifically in advertising. Course Lab fee of $19 for equipment applies.

**ART 3740**
**Fine Art Photography WE**
**3**
* Prerequisite(s): ART 1750 and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Integrates previously taught image-making skills, and encourages students to further develop their personal vision through a more developed project. Examines contemporary trends, styles, and critical issues through slide presentations, readings, critiques, critical writing and class discussions. Course Lab fee of $19 for equipment applies.

**ART 3750**
**Advanced Digital Imaging**
**3**
* Prerequisite(s): ART 2720 and University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

Integrates Photoshop as a development and manipulation tool for image making. Investigates technical concerns of digital workflow, capture, and output for commercial and fine art applications. Strong emphasis on using Photoshop as a creative tool in personal artistic expression. Discusses more advanced uses of selection tools, color correction, layer and channel manipulations. Teaches processes and concepts through slide presentations, readings, critiques and class discussions. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 3800**
**Low-Fire Ceramics**
**3**
* Prerequisite(s): ART 1350, ART 2350, and University Advanced Standing; or department approval

Explores low-temperature clay and glazing techniques, as well as the practical and aesthetic considerations of their use. Addresses the operation and maintenance of electric kilns.

**ART 3810**
**Ceramic Technologies**
**3**
* Prerequisite(s): ART 1350, ART 2350, and University Advanced Standing; or department approval

Teaches proper practices in the ceramic studio. Includes kiln operation, maintenance and design, basic clay and glaze formulation, understanding ceramic materials, ceramic tool making, and studio practices and safety.

**ART 382R**
**Sculpting the Human Form**
**3**
* Prerequisite(s): [(ART 1110 or ART 1020), ART 1130, ART 1340] and University Advanced Standing

Teaches sculpting principles and techniques related to the human form. Explores skeletal and muscular anatomy studies through the creation of an écorché sculpture. Sculpting will be done from live models (clothed and unclothed) to improve observation and rendering skills. Emphasizes armature design and creation. May be repeated for a maximum of 6 credits toward graduation. Course lab fee of $72 for illustration applies.

**ART 411R**
**Drawing IV**
**3**
* Prerequisite(s): (ART 311R or department approval) and University Advanced Standing

Emphasizes individual exploration in a variety of drawing media. Variably engages "process" as a creative methodology. Continues with conceptual development of drawing as a creative medium. Encourages active participation in the critical process and refinement of a personal approach to the medium. May be repeated for a maximum of 6 credits toward graduation.

**ART 421R**
**Advanced Illustration**
**3**
* Prerequisite(s): (Matriculated into the BFA in Art and Design: Illustration emphasis program) and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ART 3220

Provides advanced studies in producing a senior level portfolio. Encourages students to find a personal style and voice in communicating images. Requires advanced problem solving skills and advanced abilities in the creation of images. May be repeated for a maximum of 6 credits toward graduation. Course fee of $50 for support applies.

**ART 426R**
**Concept Design**
**3**
* Prerequisite(s): ART 1210, ART 327R, ART 361R, matriculated into the BFA in Art and Design: Illustration emphasis program or area coordinator approval) and University Advanced Standing

Teaches how to create original and compelling concept designs and environments for use in film, video games, graphic novels, and children's books. May be repeated for a maximum of 6 credits toward graduation. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 427R**
**Concept Design II**
**3**
* Prerequisite(s): (ART 426R, matriculated into the BFA in Art and Design: Illustration emphasis program or area coordinator approval) and University Advanced Standing

Offers advanced training in the creation of original and compelling character designs for artistic use and as icons for private and corporate use. May be repeated for a maximum of 6 credits toward graduation.

**ART 428R**
**Sequential Illustration**
**3**
* Prerequisite(s): (ART 3210, matriculated into the BFA in Art and Design: Illustration emphasis program or area coordinator approval) and University Advanced Standing

Studies the practice and execution of drawings and lettering in pencil, ink or digital mediums to create visual narratives in sequence, commonly referred to in popular culture as comics or graphic novels. May be repeated for a maximum of 6 credits toward graduation. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 429R**
**3D Illustration**
**3**
* Prerequisite(s): (ART 3280, matriculated into the BFA in Art and Design: Illustration emphasis program or area coordinator approval) and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ART 427R

Teaches 3D digital sculpting techniques needed to create finished 3D illustrations and/or 3D assets to be used as reference for 2D illustration. Studies model detailing, texture mapping, lighting, and rendering of 3D computer reference or as standalone 3D illustration. May be repeated for a maximum of 6 credits toward graduation. Software fee of $12 applies. Lab access fee of $26 applies for computers.

**ART 4360**
**Mold Making and Casting**
**3**
* Prerequisite(s): ART 1120, ART 1130, ART 2340, and University Advanced Standing; or department approval

Covers the basic process of casting and the construction of molds. Emphasizes the use of molds in the development of sculptural ideas. Course lab fee of $70 for materials applies.

**ART 4370**
**Hand Building Ceramics**
**3**
* Prerequisite(s): ART 1350 and University Advanced Standing; or department approval

Designed for students interested in three-dimensional art forms. Emphasizes hand building design and techniques in creating both sculptural and vessel projects in water-based clay. Teaches advanced methods of coil, slab, and pinch construction. Utilizes slump molding, rolled slab, cylinders, and molds in creation of finished clay products. Course fee of $30 for materials applies.

**ART 443R**
**Design Studio**
**3**
* Prerequisite(s): ART 3420, ART 3450, and University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval

Addresses emerging topics, issues, and technology relevant to graphic design. Addresses these issues through research and collaborative project development. May be repeated for a maximum of 6 credits toward graduation. Software fee of $12 applies. Lab access fee of $26 applies for computers.

**ART 4440**
**Motion Graphics Studio**
**3**
* Prerequisite(s): ART 3440, and University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval.

Addresses emerging topics, issues, and technology relevant to motion design. Addresses these issues through research and collaborative project development. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 4480**
**UI/UX Studio**
**3**
* Prerequisite(s): ART 3480, and University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval.

Addresses emerging topics, issues and technology relevant to UI/UX design. Addresses these issues through research and collaborative project development. Software fee of $12 applies. Lab access fee of $26 for computers applies.

**ART 4490**
**Portfolio II**
**3**
* Prerequisite(s): ART 341R, ART 343R, and University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval

Presents advanced instruction in the execution of a variety of graphic design projects (advertising, collateral, editorial, package and web design) aimed at building an exit portfolio. Assists students to improve and refine their portfolios in preparation for employment. Provides students the skills to develop a brand identity for themselves to further enhance their employability.

**ART 463R**
**Painting IV**
**3**
* Prerequisite(s): ART 363R and University Advanced Standing; or department approval

Emphasizes independent and creative development as a painter. Provides an opportunity for students to solidify and expand their ideas while working within a class context. May be repeated for a maximum of 6 credits toward graduation.

**ART 466R**
**Advanced Life Drawing**
**3**
* Prerequisite(s): (ART 366R or ART 2270), and University Advanced Standing; or department approval

Studies fundamental human anatomy, structure, value representation, shape and gesture from a fine arts vantage point at an advanced level. Explores historical and contemporary modes of media/image use and application in conceiving and expressing the human form in a range of stylistic contexts. Includes observational drawing of live models (clothed and unclothed). Serves as a platform for advanced development in drawing the human form in a range of drawing media as found in traditional, modern and contemporary fine arts movements. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $150 for Illustration applies.

**ART 468R**
**Printmaking IV**
**3**
* Prerequisite(s): (ART 1110 or ART 1020), ART 2680, University Advanced Standing, or departmental approval

Expands the exploration of fine art printmaking through advanced techniques, processes, and materials. Continues to view the role of traditional and contemporary printmaking as a fine art medium. Includes more challenging and complex projects with more advanced technical skills than in Printmaking I, II, & III. Encourages the ability to detect and diagnose printing errors and to collaborate with peers in the making and critiquing of artworks. Strengthens the development of personal and individual imagery, including the importance of craftsmanship, the usage of new tools/materials, and an expanding printmaking vocabulary. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $34 for materials applies.

**ART 470R**
**Figure Drawing III**
**3**
* Prerequisite(s): (ART 361R, Art and Visual Communication BFA Students, or Instructor approval) and University Advanced Standing

Offers a senior-level drawing experience, emphasizing drawing from imagination. Continues skill development in proper character structure and scene layout. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $125 for support applies.

**ART 471R**
**Photographic Illustration**
**3**
* Prerequisite(s): University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval

Develops skills in illustrating concepts through photographic processes. Encourages students to work through assignments from their own personal emphasis of commercial or fine art image making styles. Explores contemporary trends, styles, and critical issues through slide presentations, readings, critiques and class discussions. Focuses on the development of interpretation and conceptual image making. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $19 for equipment applies.

**ART 474R**
**Advanced Photo Studies**
**3**
* Prerequisite(s): University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval

Integrates all previous image making skills acquired into the students' visual vocabulary. Encourages students to further develop their own personal vision through more developed projects. Examines contemporary trends, styles, and critical issues through slide presentations, readings, critiques and class discussions. Investigates needed skills in running a business as a commercial and Fine Art photographer. Emphasizes conceptual image making. May be repeated for a maximum of 6 credits toward graduation. Course Lab fee of $19 for equipment applies.

**ART 4750**
**Exploratory Photographic Processes**
**3**
* Prerequisite(s): University Advanced Standing; formal acceptance to Bachelor of Fine Arts (BFA) Program by portfolio review, or department approval

Explores deconstruction of the image in both a formal and conceptual process. Analyzes liquid emulsions, mixed media, encaustic, and alternative surfaces and materials. Examines the possibilities of the image beyond two-dimensional traditional photography. Course Lab fee of $19 for equipment applies.

**ART 481R**
**Art and Design Internship**
**1 to 6**
* Prerequisite(s): University Advanced Standing; formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree and departmental approval

Combines classroom theory with related, practical job experience. Students works as employees of a business, agency, or institution while enrolled in classes related to their career/major. Course content is individualized with students setting objectives in concert with their internship advisor and their workplace supervisor. Internship enrollment must be pre-approved by the area coordinator and department internship advisor. Number of hours worked per week will determine number of credits granted. May apply a maximum of 6 credits toward graduation. May be graded credit/no credit.

**ART 4820**
**Professional Practices for the Visual Arts I WE**
**1**
* Prerequisite(s): University Advanced Standing; declared Art & Design major; junior or senior status or department approval

For Art and Design majors. Covers business topics related to visual arts professions, including standard policies and procedures, basic contracts and pricing methods, trade customs, ethical standards, and general business practices.

**ART 4830**
**Professional Practices for the Visual Arts II WE**
**1**
* Prerequisite(s): University Advanced Standing; declared Art & Design major; junior or senior status or department approval

For Art and Design majors. Introduces students to legal topics relevant to professions in the visual arts, including the principles of copyright, trademark, and contract law, as well as policies and laws that impact the production of creative work.

**ART 4840**
**Professional Presentation for the Visual Arts WE**
**1**
* Prerequisite(s): University Advanced Standing; declared Art & Design major; junior or senior status or department approval

For Art and Design majors. Covers topics related to preparing work for presentation and marketing work within visual arts professions, including building a professional website, preparing a professional portfolio, getting work ready for exhibition, and advertising/marketing work.

**ART 4850**
**Professional Writing for the Visual Arts WE**
**1**
* Prerequisite(s): University Advanced Standing; declared Art & Design major; junior or senior status or department approval

For Art and Design majors. Focuses on the development of advanced writing skills for visual arts professionals, including writing artists statements, biographies, critiques, critical reviews, exhibition labels, and content for social media platforms. Also focuses on understanding and tailoring communication for specific audiences.

**ART 4890**
**Senior Seminar**
**3**
* Prerequisite(s): University Advanced Standing; Senior status and formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, or department approval

For Art and Design majors. Covers standard policies and procedures used in the creation and marketing of visual arts. Includes estimating, pricing, trade customs, ethical standards, contracts, and other legal rights and issues. Explores job opportunities and self-employment options for visual artists.

**ART 491R**
**Independent Study**
**1 to 3**
* Prerequisite(s): University Advanced Standing, formal acceptance to the Art and Design Bachelor of Arts (BA), Bachelor of Science (BS), or Bachelor of Fine Arts (BFA) degree, and department approval

Provides an opportunity for upper division students to do individual research and experimentation within the areas of the Art and Design Program. Study is limited to advanced work beyond that which can be completed in existing available classes. A proposal must be submitted and approved by the department prior to enrollment. May be repeated for a maximum of 3 credits toward graduation.

**ART 4990**
**Senior Studio**
**3**
* Prerequisite(s): University Advanced Standing, Senior status, formal acceptance to the Art and Design Bachelor of Arts (BA) or Bachelor of Science (BS), and department approval

For Art and Design majors with senior status. Combines and integrates concepts, methodologies and skills developed in previous Art and Design course work, through the completion of a comprehensive project. Requires students to develop their own project/portfolio in consultation with a faculty advisor. Finished projects will demonstrate individual student skills and interests.

**ART 499R**
**BFA Project WE**
**3**
* Prerequisite(s): University Advanced Standing; Senior status and formal acceptance to Bachelor of Fine Arts (BFA) program by portfolio review or department approval

Focuses on the development and execution of a gallery exhibition or professional portfolio. Includes collaborative work with a gallery/ museum professional in preparation of the exhibition's public viewing. May be repeated for a maximum of 6 credits toward graduation. Software fee of $12 applies. Lab access fee of $26 for computers applies.

# Art History (ARTH)

**ARTH 2710** **FF**
**History of Art to the Renaissance**
**3**

Covers major trends in Western art from the Paleolithic period to the Gothic era, including elements of political, religious, cultural, literary, and philosophical elements as they impacted the development of art. Canvas Course Mats $54/Cengage applies

**ARTH 271H** **FF**
**History of Art to the Renaissance**
**3**

Covers major trends in Western art from the Paleolithic period to the Gothic era, including elements of political, religious, cultural, literary, and philosophical elements as they impacted the development of art.

**ARTH 2720** **FF**
**History of Art from the Renaissance**
**3**

Covers major trends in Western art, from the Renaissance through the Modern era, including elements of political, religious, cultural, literary, and philosophical elements as they impacted the creation of art. Canvas Course Mats $54/ Cengage applies

**ARTH 272H** **FF**
**History of Art from the Renaissance**
**3**

Covers major trends in Western art, from the Renaissance through the Modern era, including elements of political, religious, cultural, literary, and philosophical elements as they impacted the creation of art. Canvas Course Mats $54/ Cengage applies

**ARTH 2800**
**Introduction to Art History Research and Methodology WE**
**3**
* Prerequisite(s): ARTH 2720 (ARTH 2710 recommended), ENGL 1010 or ENGH 1005

Develops needed skills to research in various fields related to the visual arts. Teaches how to prepare and organize a research paper. Focuses on historical methodologies. Studies critical reading, thinking, and writing. It is strongly recommended that students take this class by their second year or before taking upper-division Art History courses.

**ARTH 300R**
**Special Topics in Art History**
**3**
* Prerequisite(s): ARTH 2710 or ARTH 2720 and University Advanced Standing

Explores topics within art and architectural history. Topics will change each semester to reflect the research activities and interests of the instructor (e.g., "The History of Victorian Art & Design", "The History of Rococo Painting & Sculpture"). May be repeated for a maximum of 6 credits toward graduation.

**ARTH 3010**
**History of Design and Visual Arts**
**3**
* Prerequisite(s): ARTH 2710, (ENGL 1010 or ENGH 1005), (Art and Design Sophomore status or departmental approval), and University Advanced Standing

Presents a history of graphic design, illustration, and photography apart from the study of traditional art history. Explores the impact of major movements, technologies, and innovations on present-day graphic design. Includes lectures, group projects, and field trips.

**ARTH 3015**
**Ancient Art of Egypt and the Near East**
**3**
* Prerequisite(s): ARTH 2710 (ARTH 2720 recommended), (ENGL 1010 or ENGH 1005), and University Advanced Standing

Studies the art and architecture of ancient Egypt and various cultures of the Mesopotamian region. Explores the broader cultural, historical, and religious events and developments of the cultures and periods covered. Includes lectures and class discussions.

**ARTH 3020**
**Classical Art and Architecture History**
**3**
* Prerequisite(s): ARTH 2710 (ARTH 2720 recommended), ENGL 1010 or ENGH 1005, and University Advanced Standing

Studies the art and architecture of Ancient Greece, Etruria, and Rome. Explores the influences on classical culture as well as the influences of Greco-Roman culture over the centuries. Includes lectures and class discussion about classical art within its broad cultural framework.

**ARTH 3030**
**Medieval Art and Architecture History**
**3**
* Prerequisite(s): ARTH 2710 (ARTH 2720 recommended), ENGL 1010 or ENGH 1005, and University Advanced Standing

Studies major styles, cultural influences, and developments in the arts of the middle ages. After an introduction to the aftermath of the fall of Rome and the rise of Christianity, the Romanesque and Gothic periods are investigated in detail. Includes lecture and class discussions

**ARTH 3040**
**Renaissance Art History**
**3**
* Prerequisite(s): ARTH 2710 (ARTH 2720 recommended), ENGL 1010 or ENGH 1005, and University Advanced Standing

Studies art and architecture in Italy between 1250 and 1550, and explores artistic style, patronage, historical influences, and broad cultural influences on art. Includes lectures and class discussion on the major art works and artists in Florence, Rome and Venice.

**ARTH 3050**
**Baroque Art and Architecture History**
**3**
* Prerequisite(s): ARTH 2720 (ARTH 2710 recommended), ENGL 1010 or ENGH 1005, and University Advanced Standing

Studies major art works and artists in Italy, Spain, and France during the 17th Century. Explores the artistic, historical, religious, and broad cultural influences on the art of this period.

**ARTH 3055**
**Northern Baroque Art History**
**3**
* Prerequisite(s): ARTH 2720, ENGL 1010 or ENGH 1005, and University Advanced Standing

Studies major artists and artworks of northern Europe during the 17th century. Explores the artistic, historical, religious, and broad cultural influences on the art of this period, primarily focusing on artists working in Flanders and the Dutch Republic, as well as those from surrounding northern regions.

**ARTH 3060**
**Nineteenth-Century Art History**
**3**
* Prerequisite(s): ARTH 2720 (ARTH 2710 recommended), ENGL 1010 or ENGH 1005, and University Advanced Standing

Studies leading artists and movements of the 19th century, emphasizing artistic developments in Europe between 1750 and 1900, primarily in France. Explores the broad historical, social, cultural, and philosophical changes that took place and influenced the visual arts of the century. Includes lecture and class discussions.

**ARTH 3070**
**Modern Art and Architecture History WE**
**3**
* Prerequisite(s): ARTH 2720, ENGL 1010 or ENGH 1005, and University Advanced Standing

Studies leading artists, artworks, and movements. Explores the broad cultural, historical, and philosophical influences on modern art and architecture. Includes lectures and class discussions on modern art and architecture.

**ARTH 3080**
**History of Architecture**
**3**
* Prerequisite(s): (ARTH 2710 or ARTH 2720 or B-ARCH degree student with department approval), (ENGL 1010 or ENGH 1005), and University Advanced Standing

Surveys developments in architecture over the centuries, focusing on a variety of periods and leading innovators. Includes the role of technology as well as the broad cultural background in which the architecture was created.

**ARTH 309G**
**Introduction to Non Western Ancient Art**
**3**
* Prerequisite(s): (ARTH 2710 or ARTH 2720), (ENGL 1010 or ENGH 1005), and University Advanced Standing

Introduces students to the art and architecture of the non-western cultures of East Asia, Southeast Asia, Sub-Saharan Africa, Islam, Oceania and the Americas from before the period of Western Colonialism and domination (the course may focus on all or only one of these areas depending on faculty expertise). Places Non-Western art into its native context and discusses the religious, cultural, political, and philosophical world views in which art and architecture were produced in contrast to Western stereotypes or biases of Non-Western cultures. Canvas Course Mats $54/Cengage applies.

**ARTH 3100**
**History of American Art and Architecture**
**3**
* Prerequisite(s): (ARTH 2710 or ARTH 2720 or B-ARCH degree student with department approval), (ENGL 1010 or ENGH 1005), and University Advanced Standing

Studies leading artists, architects and movements in America from the colonial era to the 1950s. Explores the aesthetic, social, political, and technological changes that impacted the development of art and architecture in America, with an emphasis on the styles and movements of the nineteenth and twentieth centuries. Includes lecture and class discussions.

**ARTH 3110**
**The History of Illustration WE**
**3**
* Prerequisite(s): University Advanced Standing

Surveys the history of illustration as visual communication. Discusses major movements and the influence of technological advancements in printing and broadcast media on the field of illustration. Focuses primarily on the period from 1860 to the present.

**ARTH 3120**
**History of Contemporary Art**
**3**
* Prerequisite(s): (ARTH 2710 or ARTH 2720), (ENGL 1010 or ENGH 1005), and University Advanced Standing

Studies themes and trends related to contemporary art. Explores the diverse influences that impacted art from late modernism to the twenty-first century. Emphasis will be given to understanding the pluralism of international contemporary art from the last three decades. Includes lecture and class discussions.

**ARTH 3200**
**The History of Photography**
**3**
* Prerequisite(s): (ARTH 2710 or ARTH 2720) and University Advanced Standing

Traces the different directions photography has taken since its inception, using the social and cultural environment as a context. Investigates the ever-increasing use of photography by artists in the creative process from the first uses of the camera obscura to the present. Discusses the developments that set the stage for the "invention" of photography and how photography changed the role of artists in the 19th and 20th centuries. Covers documentary photography and the rise of fine art photography as separate art forms.

**ARTH 3300**
**Introduction to Museum Studies**
**3**
* Prerequisite(s): Students must be a declared Art and Design major (or admittance to class by instructor) and have taken either ARTH 2710 or ARTH 2720, University Advanced Standing.

Introduces students to theoretical knowledge and practical skills needed to work in the museum environment. Teaches the basic functions and operations of museums, as well as art historical connections to these nonprofit organizations.

**ARTH 3310**
**Art Theory and Criticism**
**3**
* Prerequisite(s): [ARTH 2710 or ARTH 2720 or (HUM 2010 and HUM 2020)] and University Advanced Standing

Examines art theories, explores ideas related to content and understanding the meaning in art by emphasizing interpretation and judgment. Integrates theories and concepts related to both historical and contemporary art history through critical writings and artist statements.

**ARTH 3400**
**Arts Management**
**3**
* Prerequisite(s): ARTH 2720 and University Advanced Standing

Studies trends, themes, and historical developments related to arts and cultural management. Analyzes the economic, political and social environments in which artists and art organizations operate, including the consideration of legal, ethical, and policy issues. Explores such topics as freedom of expression, arts accessibility, art dealership, corporate partnerships, arts leadership, and globalization of the arts. Investigates the relationships between institutions, businesses, and museums related both to art history and to the contemporary art market.

**ARTH 350G**
**Latin American Art and Architectural History**
**3**
* Prerequisite(s): (ARTH 2710 or ARTH 2720), (ENGL 1010 or ENGH 1005), and University Advanced Standing

Surveys visual culture of the arts and architecture of Latin America, specifically, Mexico, Central America and South America from its Pre-Columbian roots, through the Colonial Period, Independence, and to contemporary trends in Latin American Art in the 21st century. Concentrates on the complicated interactions between indigenous cultures and imported styles, particularly during the colonial and independence periods, documenting the emergence of a truly unique Latin American identity forged in the synthesis of these sometimes complimentary and often competing cultures.

**ARTH 400R**
**Art History Seminar WE**
**3**
* Prerequisite(s): ARTH 2710, ARTH 2720, 6-credits upper-division ARTH, (ENGL 1010 or ENGH 1005), and University Advanced Standing

Explores topics within Art and Architectural History. Topics will change each semester to reflect the research activities and interests of the instructor (e.g., "The Life and Art of Michelangelo," "The Current State of Gender Studies in Art History"). May be repeated for a maximum of 12 credits toward graduation.

# American Sign Language (ASL)

**ASL 1000**
**Introduction to the Deaf World**
**3**

Focuses on the nature, make up, and significance of the Deaf-World as a linguistic and cultural minority group. Gives significant attention to the different ways that deaf people form a minority group thereby adding diversity to society at large. Also addresses the diversity within the group and the sociological factors that affect its makeup. Introduces American Sign Language (ASL) and teaches some basic conversational skills. Gives special attention to the differences between the ways hearing and Deaf people construct meanings associated with deaf people. Taught in (or interpreted into) English.

**ASL 1010** **LH**
**Beginning American Sign Language I**
**4**

Introduces American Sign Language (ASL) to students with no previous experience with ASL. Employs an immersion approach to language learning. Emphasizes basic expressive and receptive conversational skills. Includes introduction to American Deaf culture. Requires weekly lab. Canvas Course Mats of $86/True Way applies. Lab access fee of $10 applies.

**ASL 1020** **LH**
**Beginning American Sign Language II**
**4**

* Prerequisite(s): Students should have equivalent knowledge of ASL 1010

Builds on the experiences in ASL 1010. Emphasizes basic expressive and receptive conversational skills through active student participation. Continues introduction to American Deaf culture. Employs an immersion approach to language learning. Requires a weekly lab. Canvas Course Mats of $86/True Way applies. Lab access fee of $10 applies.

**ASL 115R**
**ASL Conversation I**
**1**

Offers novice ASL users opportunities to enhance their proficiency in the target language by focusing on production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen comprehension for natural conversational flow. Contrasts with all other first-year courses which must strive to produce mastery of the whole range of language acquisition components. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of conversational opportunities. Increases mastery of lexical items through increased frequency of use. May be repeated for a maximum of 3 credits toward graduation. Taught in ASL.

**ASL 2010** **LH**
**Intermediate American Sign Language I**
**4**

* Prerequisite(s): Students should have equivalent knowledge of ASL 1020

Reviews and builds upon the grammar and conversation skills learned in the first year courses. Concentrates on understanding and acquiring more advanced conversational proficiency in ASL. Emphasizes the use of various kinds of ASL classifiers in the function of describing objects and in providing locative information. Analyzes Deaf culture with an emphasis on the struggles of this linguistic minority with a majority controlled educational establishment with particular attention to the effects on individual Deaf lives. Canvas Course Mats of $72/True Way applies. Lab access fee of $10 applies.

**ASL 202G** **HH**
**Intermediate American Sign Language II**
**4**

* Prerequisite(s): Students should have equivalent knowledge of ASL 2010

Continues applied conversation use of ASL through literature, narratives, poetry, and creative sign play. Analyzes ASL grammatical principles and Deaf cultural experiences to explore and understand various underlying metaphors found in ASL literature. Requires Deaf community exposure and involvement. Canvas Course Mats of $72/True Way applies. Lab access fee of $10 applies.

**ASL 2030**
**Advanced Fingerspelling**
**1**

* Prerequisite(s): ASL 1020 or equivalent knowledge

Focuses on the patterns of ASL fingerspelling, one of the hardest ASL skills to master. Increases ability to accurately produce and comprehend ASL fingerspelling. Gives attention to the nature and application of fingerspelling within the sociocultural context of the Deaf-World. Taught in ASL.

**ASL 2040**
**ASL Numbers**
**1**

* Prerequisite(s): ASL 1020 or equivalent knowledge

Focuses on the complex rule systems governing ASL numbers as used in a wide range of settings. Increases ability to accurately produce and comprehend contextually situated ASL numbers. Taught in ASL.

**ASL 2050**
**Advanced ASL Grammar**
**3**

* Prerequisite(s): Students should have equivalent knowledge of ASL 202G

Explores the grammar of ASL focusing on areas typically difficult for English speakers, particularly ASL classifiers. Provides extensive instruction and opportunity for students to improve both comprehension and production through regular interaction. Taught in ASL. Lab access fee of $10 applies.

**ASL 2060**
**Using Space in ASL**
**3**

* Prerequisite(s): ASL 2050

Studies the use of space in ASL productions and how to visualize and describe spatial relationships using ASL. Emphasizes skills necessary to describe space from different angles and point of views, focusing on areas typically difficult for English speakers. Provides extensive instruction and opportunity for students to improve both comprehension and production. Taught in ASL.

**ASL 215R**
**ASL Conversation II**
**1**

* Prerequisite(s): Students should have equivalent knowledge of ASL 1020

Offers lower division/novice ASL users opportunities to enhance their proficiency in the target language by focusing on production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, sharpen comprehension, and develop conversational strategies such as circumlocution and managing a conversation with useful expressions for starting a conversation, gaining time to think, helping interlocutors, seeking agreement, etc. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of production opportunities and defusing concern about new vocabulary and grammar. Increases mastery of lexical items through increased frequency of use. May be repeated for a maximum of 3 credits toward graduation.

**ASL 3000**
**Technology for Deaf Studies**
**3**
* Prerequisite(s): It is recommended that students complete ASL 202G or have equivalent skills acquired through classes elsewhere or other through life experiences.

Examines various forms of media that will help Deaf Studies students succeed in both the pursuit of their academic degrees and in real-world work environments. Draws on the theoretical approaches of the Visual Culture field to explore visual theory, museums, memorials, film and video. Gives in-depth instruction in the use of multiple digital technologies used in higher-level Deaf Studies classes and in work environments associated with Deaf people. Taught in ASL.

**ASL 3010**
**Foundations and Theory and Methods of Deaf Studies**
**3**
* Prerequisite(s): (ASL 202G or equivalent) and University Advanced Standing

Provides Deaf Studies students a foundation for further study. Covers three areas: (1) significant persons and events in the Deaf-World which are often referenced in later courses; (2) significant theoretical approaches in the field; and (3) fundamentals of conducting research. Lays the foundation for students to engage in meaningful inquiry in upper-division coursework. Taught in ASL.

**ASL 3050**
**Advanced American Sign Language**
**3**
* Prerequisite(s): It is recommended that students complete ASL 202G or have equivalent skills acquired through classes elsewhere or other through life experiences

Focuses on grammatical and linguistic aspects of ASL, including the following: sign formation, morphological structures, syntactic structures, pronominalization, identification and analysis of subjects and objects, classifiers, depicting verbs, pluralization, time concepts, and social interaction of language and culture within Deaf communities. Lab access fee of $10 applies.

**ASL 315R**
**ASL Conversation III**
**1**
* Prerequisite(s): (ASL 202G or equivalent knowledge) and University Advanced Standing

Offers intermediate ASL users opportunities to enhance their proficiency in the target language by focusing on production. Centers on discussions from a selected reading list in 'book club' form. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen comprehension for natural conversational flow. Contrasts with all other third-year courses which are more content based. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of conversational opportunities. May be repeated for a maximum of 3 credits toward graduation.

**ASL 3310**
**Foundations of Interpreting**
**3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Introduces bidirectional (ASL-to-English and English-to-ASL) interpreting between Deaf and hearing people. Studies the profession and skills necessary to be an interpreter. Includes history, models, and professional certification procedures of interpreting; cognitive processes, physical and psychological factors, intercultural communication, ethics, and situational interpreting. Deaf students are encouraged to enroll. This course may be taught as a hybrid.

**ASL 3320**
**Physiology of Interpreting**
**3**
* Prerequisite(s): ASL 202G and University Advanced Standing

Introduces students to skills and processes required to maintain health and wellbeing in the physically demanding and high stress field of interpreting. Develops cognitive, ergonomic, and dual tasking abilities required to interpret without stress or physical injury. Helps students better understand how a healthly lifestyle and developing good habits can improve thier skills and prevent injury. Lab access fee of $10 applies.

**ASL 3330**
**Cross Cultural Communication and Interpreting**
**3**
* Prerequisite(s): ASL 3310 and University Advanced Standing.

Builds on ASL 3310. Focuses heavily on the practice of interpreting with special emphasis on the dimension of intercultural communication. Requires regular skill-building exercises in both consecutive and simultaneous interpretation, both English-to-ASL and ASL-to-English. Deaf students are encouraged to enroll. Taught in ASL. Lab access fee of $10 applies.

**ASL 3340**
**Interpreting as a Profession**
**3**
* Prerequisite(s): ASL 3310 and University Advanced Standing

Builds on the principles (ASL-to-English and English-to-ASL) for interpreting between Deaf and hearing people taught in Interpreting I. Studies the profession and skills necessary to be an interpreter in more specialized settings such as medical, legal, mental health, and theatre. Includes history, models, and professional certification procedures of interpreting; cognitive processes, physical and psychological factors, intercultural communication, ethics, and situational interpreting. Deaf students are encouraged to enroll. Lab access fee of $10 applies.

**ASL 3350**
**Consecutive Interpreting**
**3**
* Prerequisite(s): ASL 3310, matriculation into the Interpreting Emphasis, and University Advanced Standing

Introduces skills and processes required to produce consecutive interpretations. Focuses on developing basic cognitive, semantic, and dual tasking abilities required to interpret rehearsed and/or spontaneous texts. Teaches to incorporate semantic choice, register, and ethical behavioral decisions and understand how they impact interpretation. Develops sets of technical or field-specific signs and applyies these to interpretative work. Includes one-hour per week lab. Taught in ASL. Lab access fee of $10 applies.

**ASL 3360**
**Simultaneous Interpreting**
**3**
* Prerequisite(s): ASL 3350 and matriculation into the Interpreting Emphasis and University Advanced Standing

Introduces skills and processes required to produce simultaneous interpretations. Focuses on transitioning from consecutive interpreting to time-limited simultaneous interpreting. Develops cognitive, semantic, and dual tasking abilities required to interpret spontaneous texts. Teaches and incorporates more advanced semantic choices and negotiation techniques. Works with a variety of audience sizes and types. Teaches how ethics impact behavioral decisions and interpretations. Gives more consideration to developing sets of technical or field-specific signs and applying these to interpretative work. Includes one-hour per week lab. Taught in ASL. Lab access fee of $10 applies.

**ASL 3365**
**Deaf Interpreting in the Community**
**3**
* Prerequisite(s): ASL 3310 and University Advanced Standing

Examines the roles, responsibilities and benefits of Certified Deaf Interpreters. Prepares Deaf interpreters for certification as Certified Deaf Interpreters (as recognized by the Registry of Interpreters for the Deaf). Prepares hearing interpreters to work in teams with Deaf interpreters. Examines settings, ethics, roles, theory and hands-on exercises.

**ASL 3370**
**Sign to Voice Interpreting**
**3**
* Prerequisite(s): ASL 3360 and matriculation into the Interpreting Emphasis and University Advanced Standing

Introduces skills and processes required to produce conceptually accurate and linguistically appropriate voice interpretations of ASL texts. Develops cognitive, semantic, and dual tasking abilities required to interpret spontaneous texts. Teaches and incorporates more advanced semantic choices and negotiation techniques.Works with a variety of audience sizes and types. Teaches how ethics impact behavioral decisions and interpretations. Gives more consideration to developing sets of technical or field-specific signs and applying these to interpretative work. Includes one-hour per week lab. Lab access fee of $10 applies.

**ASL 3380**
**Transliteration**
**3**
* Prerequisite(s): ASL 3360, matriculation into the Interpreting Emphasis and University Advanced Standing

Introduces skills and processes required to produce conceptually accurate and linguistically appropriate messages using ASL signs in an English word order. Develops cognitive, semantic, and dual tasking abilities required to interpret spontaneous texts. Teaches and incorporates more advanced semantic choices and negotiation techniques. Works with a variety of audience sizes and types. Teaches how ethics impact behavioral decisions and interpretations. Gives more consideration to developing sets of technical or field-specific signs and applying these to interpretative work. Includes one-hour per week lab. Lab access fee of $10 applies.

**ASL 3390**
**Professional Issues in Interpreting**
**3**
* Prerequisite(s): ASL 3310 and University Advanced Standing

Provides students advanced study and skills development in the business and profession of interpreting, decision making while interpreting between Deaf (including Deaf-blind) and hearing populations, and negotiation of the complex and growing field of interpreting. Students develop the understanding of the day to day demands of the work needed become truly professional interpreters. Provides extensive individual feedback. Lab access fee of $10 applies.

**ASL 3510**
**History of Deaf People to 1817**
**3**
* Prerequisite(s): ASL 202G or equivalent knowledge and University Advanced Standing

Explores chronologically to 1817 the formation and treatment of the Deaf community and culture. Emphasizes the rise of deaf education in a European setting and on the links to American Deaf education. Examines perceptions of deaf people and language across this period. Taught in ASL.

**ASL 3520**
**History of Deaf People after 1817**
**3**
* Prerequisite(s): ASL 202G or equivalent and University Advanced Standing

Explores the evolution and treatment of the Deaf community and culture emphasizing activities in the United States chronologically from 1817 onward. Emphasizes the rise of oralism, the development of deaf residential schools, the emergence of American Deaf culture and the recognition of ASL as a true language. Taught in ASL.

**ASL 3530**
**Modern Deaf Culture WE**
**3**
* Prerequisite(s): (ASL 202G or department approval) and University Advanced Standing

Explores the culture of the American Deaf people following the recognition of American Sign Language as a legitimate, naturally-occurring sign language. Examines constructions of Deaf people as a linguistic minority whose mores, beliefs, values and traditions emanate from a shared worldview that differs markedly from the view usually ascribed to them by others. Taught in ASL with a writing component.

**ASL 3610**
**ASL Literature**
**3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Explores the dynamics of ASL literature and its traditions by studying various genres and ASL storytellers. Uses the similarities and differences in the development of traditional oral literature in other cultures to ASL literature as a tool in discussions and critiques. Covers general narratives and the unique aspects and techniques of telling stories in sign language. Teaches how to critique and to produce ASL literature. Taught in ASL. May be delivered hybrid and/or online.

**ASL 3710**
**Deaf View/Image Art--De'VIA**
**3**
* Prerequisite(s): ASL 3050 and (ASL 3510 or 3520 or 3530) and University Advanced Standing

Explores the role of visual arts in the Deaf-World with particular attention to Deaf/View Image Art (De'VIA) whose subject matter and style represent a Deaf worldview. Examines the historical contributions of early Deaf artists in various art periods. Takes as a reference other art movements stemming from oppression. Studies various artworks as well as Deaf artists' descriptions of their work, including their aims, motivations, and challenges. Taught in ASL. May be delivered hybrid.

**ASL 3750**
**Deaf Cinema**
**3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Examines the critical role film plays in Deaf culture and the Deaf community. Uses film as a background to critically think about and address key issues that Deaf people encounter in society. Studies various lenses of Deaf themes and Deaf characters in movies, as well as how Deaf people have been involved with creating movies throughout history and contrasts this with the ways film has been a mold for the ideology and identity of Deaf people. Introduces concepts of film composition and critiquing tools. Taught in ASL. May be delivered hybrid.

**ASL 385G**
**Audism/Linguicism/Oppression**
**3**
* Prerequisite(s): [ASL 3050 and (ASL 3510 or ASL 3520 or ASL 3530) or department approval] and University Advanced Standing

Examines oppression in various forms through a comparative study spanning across cultures and communities. Examines the parallels between widely-understood forms of oppression and those specific to the Deaf-World. Fulfills Global/Intercultural graduation requirement.

**ASL 415R**
**ASL Conversation IV**
**1**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Offers intermediate/advanced ASL users opportunities to enhance their proficiency in the target language by focusing on production. Centers on discussions from a selected reading list in 'book club' form. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen comprehension for natural conversational flow. Contrasts with all other upper division ASL courses which are more content based. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of conversational opportunities. May be repeated for a maximum of 3 credits toward graduation.

**ASL 4330**
**Visual Linguistic Analysis for Interpreters**
**3**
* Prerequisite(s): ASL 3350, matriculation into the Interpreting Emphasis and University Advanced Standing

Teaches necessary processing skills related to interpreting from Sign to spoken languages including ability to concentrate and analyze visual linguistic and non-manual markers. Analyzes discourse focusing on context, linguistics and culture. Lab required. Lab access fee of $10 applies.

**ASL 4360**
**Legal Interpreting**
**3**
* Prerequisite(s): ASL 3350 and matriculation into the Interpreting Emphasis and University Advanced Standing

Provides a conceptual understanding of the American legal system, and the unique cultural challenges related to interpreting for parties within the system. Examines both the law and Deafness and the areas of language and cultural mediation required to effectively facilitate communication between people who are Deaf and people who are hearing in legal settings. Lab access fee of $10 applies.

**ASL 4370**
**Ethics for Interpreters**
**3**
* Prerequisite(s): ASL 3310 and University Advanced Standing

Provides students advanced study and skills development in ethical decision making while interpreting between Deaf (including Deaf-blind) and hearing populations, including interpreting in Educational, Higher Ed. Legal, Mental Health and Medical situations. Helps students develop the ethical understanding needed to become truly professional interpreters. Provides extensive individual feedback to rapidly improve students' interpreting skills and understanding of the complex nature of interpreting ethics. This course may be taught as a hybrid. Lab access fee of $10 applies.

**ASL 4380**
**Applying Interpreting Skills to Coursework--Medical**
**3**
* Prerequisite(s): ASL 3350; ASL 3360, matriculation into the Interpreting Emphasis, and University Advanced Standing.

Guides interpreters through skill sets applied to real life classroom lectures, specifically medical and psychology courses offered online through accredited universities. Requires practical application of specific interpreting skills and techniques as will as course preparation and acquisition of course specific knowledge to develop balanced interpreting practices, including both specific applicable skills in interpretation and a broad based liberal arts knowledge to which the skills are applied.

**ASL 4381**
**Applying Interpreting Skills to Coursework--Law**
**3**
* Prerequisite(s): ASL 3350, ASL 3360, matriculation into the Interpreting Emphasis, and University Advanced Standing.

Guides interpreters through skill sets applied to real life classroom lectures, specifically law and justice courses offered online through accredited universities and sample courtroom scenarios. Requires practical application of specific interpreting skills and techniques as well as course preparation and acquisition of course specific knowledge to develop balanced interpreting practices, including both specific applicable skills in interpretation and a broad based liberal arts knowledge to which the skills are applied.

**ASL 4382**
**Applying Interpreting Skills to Coursework--Education**
**3**
* Prerequisite(s): ASL 3350, ASL 3360, matriculation into the Interpreting Emphasis, and University Advanced Standing.

Guides interpreters through skill sets applied to real life classroom lectures, specifically education and other courses offered online through accredited universities. Requires practical application of specific interpreting skills and techniques as will as course preparation and acquisition of course specific knowledge to develop balanced interpreting practices, including both specific applicable skills in interpretation and a broad based liberal arts knowledge to which the skills are applied.

**ASL 4383**
**Applying Interpreting Skills to Coursework--Community**
**3**
* Prerequisite(s): ASL 3350, ASL 3360, matriculation into the Interpreting Emphasis, and University Advanced Standing.

Guides interpreters through skill sets applied to real life classroom lectures and instruction including business, manufacturing and organizational courses offered online through accredited universities. Requires practical application of specific interpreting skills and techniques as well as course preparation and acquisition of course specific knowledge to develop balanced interpreting practices, including both specific applicable skills in interpretation and a broad based liberal arts knowledge to which the skills are applied.

**ASL 439R**
**Special Topics in Interpreting**
**3**
* Prerequisite(s): ASL 3310 and University Advanced Standing

Provides students advanced study and skills development in interpreting between deaf (including deaf-blind) and hearing populations. Focuses on different topics as deemed appropriate (e.g., variety of academic, business, or social contexts). Provides extensive individual feedback to rapidly improve students' interpreting skills and understanding of the complex nature of the interpreting process. Repeatable for a maximum of 9 credits toward graduation. Lab access fee of $10 applies.

**ASL 4410**
**ASL Linguistics**
**3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Introduces the linguistic study of ASL, including phonology, morphology, syntax, semantics, and discourse structure. Emphasizes grammatical structures of ASL, including sign formation, pronominalization, identification and analysis of subjects and objects, classifiers, depicting verbs, pluralization, time concepts, and social interaction of language and culture within Deaf communities. Taught in ASL.

**ASL 4450**
**Deaf World Discourse**
**3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Examines the discourse practices of the Deaf-World. Studies the ways that Deaf people use discursive forms to accomplish specific social aims. Explores the semiotic connections between discursive forms and various Deaf-World identities. Adopts an anthropological bias toward real-world discourse as primary data, and prepares students to do ethnographic fieldwork in the Deaf-World. Taught in ASL.

**ASL 4520**
**Deaf People and Disability Studies**
**3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Introduces the field of disability studies and shows where Deaf people fit within this field. Explores the historical, social, political, religious, philosophical, and cultural influences that construct and influence the categories of "disability" and "deafness." Examines the complex relation between Deaf and disability rights groups as well as how Deaf persons and persons with disabilities construct their own meanings and identities. Taught in ASL.

**ASL 4530**
**Deaf Peoples of the World**
**3**
* Prerequisite(s): ASL 3530 and University Advanced Standing

Explores the lives of Deaf people in various places around the world. Considers the extent to which the deaf experience is cross-cultural and to what extent it is unique to specific locations. Explores the lifestyles, educational opportunities, political climate and level of community development of deaf people across the globe. Seeks to illuminate areas of overlap and of difference among the worldviews of various communities.

**ASL 4550**
**Multicultural Deaf Lives**
**3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Focuses on cultural issues, values, behaviors, identities and language of Deaf people from diverse backgrounds. Examines autobiographies, documentaries, films, videos, and academic literature to help understand the contributions and historical development of the emerging majority of the Deaf community that is underrepresented in the United States and the world. Taught in ASL. May be delivered online.

**ASL 4560**
**Deaf People and the Law**
**3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Focuses on the impact of laws and the legal system in the lives of people who are Deaf and the role such laws and the legal system play in the general understanding of Deafness in the United States. Explores in detail the rights of persons who are Deaf in a hearing world. Taught in ASL.

**ASL 4610**
**ASL Literature II**
**3**
* Prerequisite(s): ASL 3610 and University Advanced Standing

Explores the dynamics of ASL literature and its traditions by studying various genres and ASL storytellers/poets. Covers stories with handshape constraints, poetry, and songs. Taught in ASL. May be delivered hybrid and/or online.

**ASL 4800**
**Deaf Culture Studies WE**
**3**
* Prerequisite(s): (ASL 3510 or 3520 or 3530) and University Advanced Standing

Explores advanced concepts relative to American Deaf culture, including cultural conflicts, tensions, and contradictions. Provides a comprehensive study of the Deaf-World through analysis of historical events, current issues, writing, and the expressions of Deaf people themselves. Taught in ASL. Lab access fee of $10 applies.

**ASL 4850**
**Advanced Understanding of Oppression and Audism**
**3**
* Prerequisite(s): ASL 385G and University Advanced Standing

Examines the various ways in which hearing people oppress Deaf people. Explores different avenues through which society has built a system of privilege based on an audiocentric center. Also examines how certain members of the Deaf community internalize audist constructions of deafness.

**ASL 4890**
**Deaf Studies Senior Capstone**
**3**
* Prerequisite(s): Senior status and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ASL 4800

Engages students in a synthesis and critical review of what they have learned through coursework. Produces a project or thesis reflecting students' knowledge and passionate interests developed in the course of their study as a Deaf Studies major. Taught in ASL.

**ASL 490R**
**Special Topics in Deaf Studies**
**1 to 3**
* Prerequisite(s): ASL 3050 and University Advanced Standing

Presents selected topics in Deaf Studies. Varies each semester. Topics will reflect the interdisciplinary nature of the Deaf Studies field. Projects and evaluation will vary according to the topic. May be repeated for a maximum of 9 credits with different topics.

**ASL 495R**
**Independent Study in Deaf Studies**
**1 to 3**
* Prerequisite(s): For Deaf Studies students only; Instructor approval, Program Coordinator/Department Chair approval, and University Advanced Standing

Provides independent study as directed in reading and individual projects specifically related to the Deaf Studies field at the discretion and approval of the Dean and/or Department Chair. May be repeated for a maximum of 6 credits toward graduation.

# Astronomy (ASTR)

**ASTR 1040** **PP**
**Elementary Astronomy**
**3**

Introduces astronomy and cosmology. Provides a physics-based overview of the solar system, the lives and deaths of stars, galaxies, and the evolution of the Universe. Explores the basic principles of physics and light, the tools of astronomy, and interesting concepts such as the Big Bang and black holes. Canvas Course Mats $67/Pearson applies

**ASTR 104H** **PP**
**Elementary Astronomy**
**3**
* Prerequisite(s): MATH 1050 or MATH 1055

As an honors section, this course requires a greater level of engagement and greater level of proficiency on the part of the student. Introduces astronomy and cosmology. Provides a physics-based overview of the solar system, the lives and deaths of stars, galaxies, and the evolution of the Universe. Explores the basic principles of physics and light, the tools of astronomy, and interesting concepts such as the Big Bang and black holes.

**ASTR 1050** **PP**
**Investigations of the Solar System**
**3**
* Prerequisite(s): MAT 1030 or any higher mathematics

Offers a descriptive and conceptual survey of the solar system. Describes the probable origin and evolution of the sun and planets, and the workings of the sun. Covers light, optics and spectroscopy, and the mechanics of orbital motion. Compares planets by their origins, structures and atmospheres. While the presentation is primarily qualitative, assumes rudimentary math skills on the part of the student to facilitate comparative studies of solar system objects.

**ASTR 1060** **PP**
**Investigations of Stars and Galaxies**
**3**
* Prerequisite(s): MAT 1030 or any higher mathematics

Describes the origins and evolutions of stars, and collections of stars, galaxies and clusters of galaxies. Includes introduction to cosmology. Teaches the law of gravity and those laws of physics connected with optics and spectroscopy. Emphasizes conceptual learning, and assumes rudimentary mathematical skills on the part of students to facilitate comparative studies.

**ASTR 1070** **PP**
**Cultural Astronomy in Our Lives**
**3**

Explores the visible sky as seen with the naked eye. Presents examples of cultural interpretations of the sun, moon, planets and stars, methods of keeping calendars, and changes that occur through the seasons. Studies the motions of the planets, including the earth, and changes in the sky from different latitudes. Investigates how astronomy has impacted the lives of people throughout the ages and around the world. Includes extensive use of the UVU planetarium, nighttime observation, illustrated lectures, and class demonstrations. Canvas Course Mats $67/Pearson applies

**ASTR 107H** **PP**
**Cultural Astronomy in Our Lives**
**3**

Explores the visible sky as seen with the naked eye. Presents examples of cultural interpretations of the sun, moon, planets and stars, methods of keeping calendars, and changes that occur through the seasons. Studies the motions of the planets, including the earth, and changes in the sky from different latitudes. Investigates how astronomy has impacted the lives of people throughout the ages and around the world. Includes extensive use of the UVU planetarium, nighttime observation, illustrated lectures, and class discussion.

**ASTR 1080** **PP**
**Life in the Universe**
**3**

Presents a general introduction to the scientific method of understanding life, its origins, and its place in the universe. Discusses the philosophy governing the scientific view of learning about life. Treats in detail what life is, the adaptability of life and how it evolves, why Earthlike conditions resulted in life as we know it, what other environmental conditions might sustain life, and where life may be found beyond Earth.

**ASTR 2040**
**Intermediate Astronomy**
**3**
* Prerequisite(s): PHYS 2210

Introduces astronomy and cosmology with an emphasis on the physical principles underlying astronomical phenomena. Provides a physical and mathematical overview of the solar system, the nature and evolution of stars, galaxies, dark matter and dark energy, the large scale structure of the Universe, the Big Bang, and Inflation.

**ASTR 290R**
**Independent Study**
**1 to 5**

For students interested in advanced topics in astronomy and cosmology. Students may choose their own course of study under the guidance of an assigned faculty member.

**ASTR 3050**
**Astrophysics I**
**3**
* Prerequisite(s): PHYS 2220, MATH 1220, and University Advanced Standing

Covers the physics of stars, stellar structure and evolution, and the solar system. Treats in detail the current methods of astronomical data collection and analysis. Discusses the mathematics of the laws of stellar structure and their implications for the birth, life, and death of stars.

**ASTR 3060**
**Astrophysics II**
**3**
* Prerequisite(s): PHYS 2220, MATH 1220, ASTR 3050, and University Advanced Standing

Covers the physics of galaxies and cosmology. Treats in detail the current methods of astronomical data collection and analysis as it relates to these topics. Discusses the mathematics of the Theories of Relativity and its implications for the origin and structure of the Universe.

**ASTR 4100**
**Brown Dwarfs and Exoplanets**
**3**
* Prerequisite(s): PHYS 2220, MATH 1220, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): PHYS 3100

Provides an advanced, calculus-based introduction to the rapidly evolving field of brown dwarfs and extrasolar planets (exoplanets). Includes topics related to the theory of substellar objects, planetary formation, planetary interiors, planetary atmospheres, planetary orbits, and observational methods for detecting and characterizing brown dwarfs and exoplanets.

**ASTR 4350**
**Research Methods in Astronomy**
**3**
* Prerequisite(s): ASTR 3050, University Advanced Standing, and Department and Instructor Approval

Presents directed topics in research methods in astronomy. Prepares students to conduct astronomy research projects. Emphasizes practical methodologies in measurement, software, error analysis, and statistical analysis. Requires a class project. May require use of specialized astronomical image processing software (e.g., IRAF and PyRAF) and other programming languages. Includes practice producing oral presentations, posters and journal articles using contemporary software and LaTeX.

# Auto Mechanics (AUT)

**AUT 1000**
**Survey of Automotive Technology**
**2**

An introductory course for those interested in Automotive Technology. Presents basic automotive repair lessons on ignition and fuel systems, brakes, CV joints, and emissions for state inspections. Discusses electrical accessories, computerized engine controls, and chassis components.

**AUT 100L**
**Survey of Automotive Lab**
**1**
* Corequisite(s): AUT 1000

Introductory course for those interested in Automotive Technology. Offers basic automotive repair lab experiences on proper and safe equipment usage, vehicle construction, engine operation, steering and suspension components, brakes, measuring and diagnostic tools. Tool room fee of $19 for equipemt applies.

**AUT 1010**
**Maintenance and Light Repair**
**2**

Teaches skills in shop safety and basic skills to prepare students for future automotive technology-related courses and placement in high skill, high paying employment. Includes service information systems, precision measurement, tire and wheel service, bearings, headlamp adjustment, lubricants and fluids, cleaning methods, gaskets and sealants, belts and hoses, cooling systems, and other systems.

**AUT 101L**
**Maintenance and Light Repair Lab**
**2**

* Prerequisite(s) or Corequisite(s): AUT 1010

Develops necessary skills in shop safety and basic maintenance skills. Presents basic maintenance and light repair of vehicle systems. Prepares students for future automotive technology related courses and placement in high skill, high paying employment areas. Examines vehicle system operations such as: service information, precision measurement, tires and wheels, bearings, headlamp adjustment, lubricants and fluids, cleaning methods, gaskets and sealants, belts and hoses and cooling systems

**AUT 1110**
**Brake Systems**
**2**

* Corequisite(s): AUT 111L Recommended

For automotive majors and other interested community members. Covers the principles of automotive braking including hydraulic theory, diagnosis, and service of brake systems. Studies drum, disc, and power units. Includes wheel bearing adjustments, packing, and troubleshooting. Discusses tire construction including both lateral and radial run out and wheel balancing techniques. Software fee of $10 applies Lab access fee of $15 for computers applies.

**AUT 111L**
**Brake Systems Lab**
**1**

* Prerequisite(s) or Corequisite(s): AUT 1110

Provides hands on brake systems instruction, including drum, disc, and power units. Includes wheel bearing adjustments, packing, and troubleshooting. Labs include tire construction, both lateral and radial run out and wheel balancing techniques. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for computers applies.

**AUT 1120**
**Manual Power Trains**
**2**

* Corequisite(s): AUT 112L Recommended

For automotive majors and other interested community members. Designed to develop skills and knowledge in the area of manual transmission/transaxles and driveline components. Covers the function, construction, operation, inspection, troubleshooting and servicing of front, rear, and four-wheel drive power transmission devices used in passenger cars and light trucks. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 112L**
**Manual Power Trains Lab**
**1**

* Prerequisite(s) or Corequisite(s): AUT 1120

Define diagnosis and repair of manual transmissions including transaxles, differentials, drive shafts, and four wheel drive components. Operation of clutchs with torque and gear application. Tool room fee of $19 for equipment applies. Course Lab fee of $16 for materials applies.

**AUT 1130**
**Engine Repair**
**2**

* Corequisite(s): AUT 113L Recommended

Offers an in-depth study of design, operation, troubleshooting, and service procedures for modern gasoline and diesel engines. Presents procedures for disassembly and reassembly of engine units, service, and technical data. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 113A**
**Engine Repair**
**2**

For automotive majors and other interested community members. Studies construction, operation, and performance of various types of engines. Covers the theory of combustion, and characteristics of fuels, lubrication systems, cooling systems, timing valves, and wear problems with all other parts of the engine. Includes lab experience. Tool room fee of $10 for equipment applies.

**AUT 113B**
**Engine Repair**
**2**

Designed for anyone interested in small-engine repair. Includes hands hands-on application with shop time. Offers practical information about small engines, theory, operations, and maintenance. Provides information, troubleshooting and service techniques for snowmobiles, 4-wheelers, personal watercraft, mowers, tillers, and other small engine applications.

**AUT 113L**
**Engine Repair Lab**
**1**

* Prerequisite(s) or Corequisite(s): AUT 1130

Provides a laboratory experience enhanced by following the Engine Repair ASE task list. Emphases demonstrations, observations and hands-on participation. Utilizes actual vehicle systems of major manufactures to supplement training. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 1160**
**Automotive Electrical Systems**
**2**

* Corequisite(s): AUT 116L Recommended

Studies electrical and electronic fundamentals found and used on current model automobiles and trucks. Topics of study are: electricity, Ohm's Law, magnetism, inductance, capacitance, electronic devices, schematic user's information, test procedures, test equipment, and batteries.

**AUT 116L**
**Automotive Electrical Systems Lab**
**1**

* Prerequisite(s) or Corequisite(s): AUT 1160

Studies electrical and electronic fundamentals found and used on current model automobiles and trucks. Topics of study are: electricity, Ohm's Law, magnetism, inductance, capacitance, electronic devices, schematic user's information, test procedures, test equipment, and batteries. Lab exercises are correlated with the Automotive Service Excellence (ASE) P1 task list. Lab work will include activities on lab circuitry and live vehicles. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 1170**
**Engine Electrical Systems**
**2**

* Prerequisite(s): AUT 1110, AUT 1120, AUT 1130, and AUT 1160
* Corequisite(s): AUT 117L Recommended

Studies the function, construction, operation, testing, diagnosis and servicing of automotive ignition systems, starting, charging/generator systems and battery testing using a variety of diagnostic test equipment.

**AUT 117L**
**Engine Electrical Systems Lab**
**1**

Studies the function, construction, operation, testing, diagnosis and servicing of automotive ignition systems, starting, charging systems and battery testing using a variety of diagnostic test equipment. Proper use of diagnostic test equipment in the lab and on vehicle systems will stressed. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 1210**
**Suspension and Steering Systems**
**2**
* Corequisite(s): AUT 121L Recommended

Discusses nomenclature, theory of operation, and service procedures for passenger car and light-truck suspensions and computer controlled power steering systems. Includes instruction in two-wheel and four-wheel electronic systems. Presents methods of alignment including computerized alignment and service tools. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 121L**
**Suspension and Steering Systems Lab**
**1**
* Prerequisite(s) or Corequisite(s): AUT 1210

Provides a laboratory experience enhanced by following the Suspension and Steering ASE task list. Emphases demonstrations, observations and hands-on participation. Utilizes actual vehicle systems of major manufactures to supplement training. Tool room fee of $19 for equipment applies.Course Lab fee of $17 for materials applies.

**AUT 1220**
**Automatic Powertrain Systems**
**2**
* Prerequisite(s): AUT 1110, AUT 1120, AUT 1130, and AUT 1160
* Corequisite(s): AUT 122L

Includes the operation, diagnosis, repair, and adjustment of automatic transmissions and transaxles. Covers planetary gearing, strategies for operation, and service procedures of passenger car, SUVs and light-trucks. Software fee of $10 for applies. Lab access fee of $15 for computers applies.

**AUT 122L**
**Automatic Transmissions and Transaxles Lab**
**1**
* Prerequisite(s) or Corequisite(s): AUT 1220

Provides a laboratory experience enhanced by following the Automatic Transmissions and Transaxles ASE task list. Emphasizes demonstrations, observations and hands-on participation. Utilizes actual vehicle systems of major manufactures to supplement training. Tool room fee of $19 for equipment applies. Course Lab fee of $19 for materials applies.

**AUT 1230**
**Engine Performance**
**2**
* Prerequisite(s): AUT 1110, AUT 1120, AUT 1130, and AUT 1160
* Corequisite(s): AUT 123L Recommended

Studies electrical and fuel systems fundamentals found on passenger cars, light-trucks, and marine applications of theory, operation, and construction. Includes solid state electronic ignition systems. Teaches tune-up including diagnosis and troubleshooting. Computerized fuel injection found on gasoline and diesel engines will also be studied. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 123A**
**Engine Performance**
**2**

For automotive majors and other interested community members. Studies electrical and fuel system fundamentals including theory, construction and principles of operation. Covers batteries, lighting, starting, and charging. Includes all solid state electronic and ignition systems. Teaches tune-up including diagnosis and troubleshooting. Studies computerized ignition and fuel injection. Includes lab experience.

**AUT 123B**
**Engine Performance 2nd Half**
**2**

Includes advanced instruction in engine performance, starting systems, charging systems, and indicator ciruits. Discusses all mechanical and electronic parts of the vehicle relative to quality engine tune-up and diagnostic instruction. Includes lab experience.

**AUT 123L**
**Engine Performance Lab**
**1**
* Prerequisite(s) or Corequisite(s): AUT 1230

Provides a laboratory experience enhanced by following the Engine Performance ASE task list. Emphases demonstrations, observations and hands-on participation. Utilizes actual vehicle systems of major manufactures to supplement training. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 1260**
**Tech Math for Mechanics**
**3**

For students in Automotive, Collision Repair, and Diesel Mechanics technology majors. Covers principles of math as required by the industry. Studies pressures, measuring engine and horsepower output, hydraulics, torque, and electrical flow. Includes solving equations in percent, proportion, variation, formula rearrangement, function and graphs with right and oblique triangles. Successful completers should be able to solve problems on the job using technical and mathematical data.

**AUT 201L**
**Automotive Service Practicum Engine Performance and Steering Suspension**
**2**
* Prerequisite(s): AUT 1210, AUT 1230 with a grade of C- or better

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Steering/Suspension and Engine Performance. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 202L**
**Automotive Service Practicum Emission Controls and Chassis Electronics**
**2**
* Prerequisite(s): AUT 1160, AUT 1230 with a grade of C- or better

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Emission Control Systems and Chassis Electrical. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 203L**
**Automotive Service Practicum Brake Systems and Transmission Controls**
**2**
* Prerequisite(s): AUT 1110, AUT 1160, AUT 1220 with a grade of C- or better

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Automatic Transmissions and Brake Systems including Anti-Lock and Traction Control. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 204L**
**Automotive Service Practicum Fuel Management Systems and HVACR**
**2**
* Prerequisite(s): AUT 1160, AUT 1230 with a grade of C- or better

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Engine Performance and Heating, Ventilation and Air Conditioning Systems. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 2110**
**Advanced Steering Suspension and Alignment**
**2**
* Prerequisite(s): AUT 1210, AUT 1160 with a grade of C- or better
* Corequisite(s): AUT 201L Recommended

Discusses advanced theory of two-wheel and four-wheel alignment. Studies nomenclature, theory of operation and service procedures for mechanical, electronic, and electrical parts of automotive steering and suspension systems. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 211L**
**Automotive Service Practicum Steering/ Suspension/Alignment Lab**
**1**
* Prerequisite(s): AUT 1210
* Corequisite(s): AUT 2110

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Steering/Suspension.

**AUT 2120**
**Advanced Engine Performance**
**2**
* Prerequisite(s): AUT 1130, AUT 1230, AUT 1160 with a grade of C- or better
* Corequisite(s): AUT 202L Recommended

Includes advanced instruction in engine performance, indicator circuits and On-Board Diagnostics II (OBD-II). Discusses mechanical and electronic parts of the vehicle relative to quality engine tune-up and diagnostic instruction. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 212L**
**Automotive Service Practicum Engine Performance Lab**
**1**
* Prerequisite(s): AUT 1230
* Corequisite(s): AUT 2120

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Covers tasks related to engine performance.

**AUT 2130**
**Advanced Emission Control Systems**
**2**
* Prerequisite(s): AUT 1130, AUT 1230, AUT 1160 with a grade of C- or better
* Corequisite(s): AUT 202L Recommended

Studies emissions control systems on vehicles. Reviews county emissions certification requirements. Emphasizes the pre and post testing of the different emission systems and the control of the systems as they apply to different types of fuel systems. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 213L**
**Automotive Service Practicum Emission Controls Lab**
**1**
* Prerequisite(s): AUT 1230
* Corequisite(s): AUT 2130

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Emission Control Systems.

**AUT 2140**
**Chassis Electrical and Electronics Systems**
**2**
* Prerequisite(s): AUT 1160, AUT 1170 with a grade of C- or better
* Corequisite(s): AUT 202L Recommended

Studies theory, diagnosis, and repair of chassis electrical and electronic systems. Includes the study of lighting systems, electronic dash circuits, inflatable restraint systems, electronic cruise control systems and other accessories found on vehicles.

**AUT 214L**
**Automotive Service Practicum Chassis Electrical and Electronics Lab**
**1**
* Prerequisite(s): AUT 1160
* Corequisite(s): AUT 2140

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Chassis Electrical.

**AUT 2210**
**Advanced Braking and Control Systems**
**2**
* Prerequisite(s): AUT 1110, AUT 1160 with a grade of C- or better
* Corequisite(s): AUT 221L Recommended

Covers diagnosis and repair of electronic controlled braking systems; including anti-lock brakes, traction control systems, stability control systems and other control systems found on modern vehicles. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 221L**
**Automotive Service Practicum Brake Systems Lab**
**1**
* Prerequisite(s): AUT 1110
* Corequisite(s): AUT 2210

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Brake, Anti-Lock and Traction Control Systems.

**AUT 2220**
**Automatic Transmissions and Electronic Controls**
**2**
* Prerequisite(s): AUT 1160 with a grade of C- or better
* Corequisite(s): AUT 203L Recommended

Includes advanced instruction in rear-wheel drive and transaxle automatic transmissions for passenger cars and trucks (light-duty and medium-duty). Studies computerized transmission controls for shifting and torque converter operation. Stresses service, diagnosis and troubleshooting using electronic test equipment. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 222L**
**Automotive Service Practicum Transmission Controls Lab**
**1**
* Prerequisite(s): AUT 1220
* Corequisite(s): AUT 2220

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Transmission Controls.

**AUT 2240**
**Heating Ventilation Air Conditioning and Refrigeration Theory**
**2**
* Prerequisite(s): AUT 1160 with a grade of C- or better
* Corequisite(s): AUT 204L Recommended

Offers an In-depth study of automotive heating, ventilation, air conditioning (A/C), and refrigeration systems. Includes theory of operation, diagnosis and repair of HVACR systems. Environmental safety issues are stressed including laws and regulations, CFC recovery and recycling, ozone depletion, and new, environmentally friendly, systems. Computerized automatic temperature controlled systems are also covered. Stresses service, diagnosis and troubleshooting using electronic test equipment. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**AUT 224L**
**Automotive HVAC Lab**
**1**
* Corequisite(s): AUT 2240

This course provides a laboratory experience for Heating, Ventilation, and Air Conditioning lecture (AUT 2240). Studies and provides experience with R12 and 134a refrigerants, environmental issues, retrofit assemblies, evacuation and charging AC systems, and problem solving of AC systems. Course Lab fee of $17 for materials applies.

**AUT 2250**
**Electronic Fuel Management Systems**
**2**
* Prerequisite(s): AUT 1230, AUT 1160 with a grade of C- or better
* Corequisite(s): AUT 204L Recommended

Studies automotive fuel controls with particular emphasis placed on micro-processor control systems. Studies electronic and mechanical sensors of fuel and ignition systems. Also covers alternative fuel systems. Stresses service, diagnosis and troubleshooting using electronic test equipment.

**AUT 225L**
**Automotive Service Practicum Fuel Management Systems Lab**
**1**
* Prerequisite(s): AUT 1230
* Corequisite(s): AUT 2250 or AUT 2350

Includes field type service work in an instructional setting. Emphasizes vehicle service needs which are most frequently required in modern commercial service centers. Requires the diagnosis and repair of computerized vehicle systems. Includes standards for quality and quantity of work produced. Studies parts procurement, estimates, repair orders, and customer relations. Follows ASE P2 Performance Tasks for Advanced Engine Performance and Fuel Management Systems.

**AUT 2350**
**Electronic Diesel Fuel Management Systems**
**2**
* Prerequisite(s): AUT 1160 with a grade of C- or better
* Corequisite(s): AUT 204L Recommended

Studies automotive diesel fuel controls with particular emphasis placed on micro-processor control systems. Studies electronic and mechanical sensors of diesel fuel and ignition systems. Covers alternative diesel fuel systems i.e. bio-diesel. Stresses service, diagnosis and troubleshooting using electronic test equipment.

**AUT 281R**
**Cooperative Work Experience**
**1 to 8**
* Corequisite(s): AUT 285R

Designed for Automotive Technology majors. Provides paid, on-the-job work experience in the student's major. Work experience, the correlated class, and enrollment are coordinated by the Cooperative Coordinator. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and oral presentations. Provides experience in writing and completing individualized work objectives that improve present work performance. May be repeated as desired for interest. May be graded credit/no credit.

**AUT 285R**
**Cooperative Correlated Class**
**1**
* Corequisite(s): AUT 281R

Designed for Automotive Technology majors. Identifies on-the-job problems and provides remediation of those problems through in-class discussion and study. Includes the study of identifying and maximizing service opportunities. Students register for this class with approval of the Coop coordinator. Included lecture, guest speakers, video tapes, role playing, case analysis, oral presentations, and written assignments. Completers should be better able to perform in their field of work or study. May be repeated as desired for interest.

**AUT 299R**
**SkillsUSA**
**1**

Designed for Automotive Technology majors. Supports and facilitates the goals and objectives of SkillsUSA. SkillsUSA is a pre-professional student organization that develops social awareness, civic, recreational, and social activities. Students may participate in local, state, and national contests. May be repeated as desired for interest.

**AUT 3230**
**High Performance Engines**
**3**
* Prerequisite(s): AUT 1130, AUT 1230, and University Advanced Standing

Offers a more in-depth study of the design factors that are unique to high output engines and how to modify engines to obtain the desired outcome. Studies the characteristics of various fuels used in high performance engines and their effects. Discusses the implications of service learning and ethics in high performance engine applications. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**AUT 3350**
**Alternative Fuel Systems**
**3**
* Prerequisite(s): University Advanced Standing, Junior Standing, and AUT 2250 or AUT 2260 recommended
* Corequisite(s): AUT 2240 recommended

This course is open to all interested students and community members with departmental approval. Studies current and upcoming alternatives to gasoline as a fuel for the transportation industry that are being promoted, used, and developed by sources within and without the mainstream production system. Includes new alternatives such as CNG/Propane, hydrogen, electric, hybrid (both plug-in and non-plug-in), bio-fuels (both diesel and alcohol), diesel, and fuel cells. Discusses the implications of service learning and ethics in alternative fuel powered vehicles.

# Autism Studies (AUTS)

**AUTS 250G**
**Understanding the Autism Spectrum**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 (with C or higher) or instructor approval.

Discusses autism beginning with the history of the diagnostic category and moving through contemporary issues of etiology, neurobiology, prevalence, assessment, treatment, education, policy, and community impact and inclusion. Emphasizes principles of interdisciplinary care, cultural competence, family centered approaches, and life course perspective.

**AUTS 3810**
**Autism Across the Lifespan I Infants and Children**
**3**
* Prerequisite(s): AUTS 250G and University Advanced Standing

Examines key issues related to infants and children who are diagnosed with an autism spectrum disorder and the impact on family and communities. Emphasizes principles of interdisciplinary care, cultural competence, family-centered approaches, and life course perspective.

**AUTS 382G**
**Autism across the LIfespan II Teens and Adults**
**3**
* Prerequisite(s): University Advanced Standing and AUTS 250G

Examines key issues related to teens and adults diagnosed with an Autism Spectrum Disorder and the impact on family and communities. Emphasizes principles of interdisciplinary care, cultural competence, family-centered approaches, and life course perspective.

**AUTS 3850**
**Autism Assessment and Treatment**
**3**
* Prerequisite(s): University Advanced Standing

Examines best practices in the assessment and treatment of language, adaptive skills, and educational levels. Focuses on the current standards in diagnosing autism. Provides practice opportunities of evidence-based autism treatments.

**AUTS 4650**
**Autism and Applied Behavior Analysis**
**3**
* Prerequisite(s): AUTS 250G or EDSP 340G and University Advanced Standing

Describes the scientific principles of applied behavior analysis and how they relate to autism intervention. Discusses principles of single case designs, antecedents, reinforcement, consequences, and behavior modification.

**AUTS 481R**
**Field Placement**
**1 to 8**
* Prerequisite(s): AUTS 250G, AUTS 3810, AUTS 382G, AUTS 3850, and University Advanced Standing
* Corequisite(s): AUTS 482R

Provides a generalist base for practice that involves an on-site, supervised field agency practicum. Makes connections between classroom learning and learning that takes place in the on-site field practicum. Supports supervised practice hours in a local agency setting. May be repeated for a maximum of 9 credits toward graduation. May be graded credit/no credit.

**AUTS 482R**
**Group Autism Seminar**
**1**
* Prerequisite(s): AUTS 250G and University Advanced Standing
* Corequisite(s): AUTS 481R
* Prerequisite(s) or Corequisite(s): AUTS 3810 or AUTS 382G or AUTS 3850 or AUTS 4650

Provides a generalist base for autism practice in a weekly seminar. Integrates classroom learning with learning that takes place in the on-site field practicum. May be repeated for a maximum of 9 credits toward graduation. May be graded credit/no credit.

**AUTS 485R**
**Board Certified Assistant Behavior Analyst Individual Supervision**
**1**
* Prerequisite(s): Acceptance into Autism Studies program and University Advanced Standing
* Corequisite(s): AUTS 481R and AUTS 482R

Meets the individual supervision requirements designated by the Behavior Analyst Certification Board as part of the Intensive Practicum. Covers all required elements of individual supervision based on the BACB Fourth Edition Task List. May be graded credit/no credit. May be repeated for a maximum of 9 credits toward graduation.

# Aviation Science (AVSC)

**AVSC 1010**
**Survey of Aviation Science**
**3**

Designed for all students interested in aviation careers. Includes a general knowledge of aviation, historical events, and aerospace studies/ development opportunities. Covers aviation and aerospace terminology, how aircraft and spacecraft fly, research and development of future systems, government and industry roles in the growth of aviation. Provides entering students with a first year experience covering critical thinking, time and financial management and collaboration as well as aviation career prospects.

**AVSC 1050**
**Introduction to Aviation Management**
**3**

Discusses aviation industry structure, practices, and administrative career opportunities; emphasizes strategic decision making in aviation transportation, manufacturing, airport, and government administration, and provides an overview of various administrative methods, tools, and responsibilities. Provides a general knowledge of aviation administration career options and the role of administrators within the aviation industry. May be delivered online.

**AVSC 1100**
**Ground I - Private**
**3**
* Prerequisite(s): Departmental Approval

Introduces the entry-level student to the airplane as they prepare for flight training. Stresses airport systems, air traffic control procedures, aviation weather, air navigation, radio communication procedures, and Federal Aviation Regulations. Prepares students for the required FAA Private Pilot Airplane Knowledge Test.

**AVSC 1110**
**Flight I - Private**
**3**
* Prerequisite(s): Department Approval
* Prerequisite(s) or Corequisite(s): AVSC 1100

Covers airplane ground and flight operations, take-off and landing, basic flight maneuvers, cross country methods and emergency procedures. Prepares students for the required FAA Private Pilot Airplane Practical Test. May be delivered online. Course fee of $18,272 for flight applies.

**AVSC 1120**
**Basic Aircraft Systems**
**1**
* Prerequisite(s): AVSC 1100

Designed to provide a more in-depth knowledge of the basic systems used in piston-powered aircraft. Includes an examination of propeller systems, constant speed propellers, retractrable landing gear, electrical systems, cooling, flight control systems, and basic hydraulics. Will help students with oral examinations for the commercial and other flight certificates.

**AVSC 1130**
**Glider Rating**
**1**
* Prerequisite(s): AVSC 1100

Prepares student to transition from powered to unpowered glider flight in preparation for the FAA Private Pilot Glider Rating. Includes ground and flight lessons covering glider towing, launching, powered gliders, thermals, weather, landing, mountain waves, regulations, and emergency procedures. Teaches aerodynamic theory associated with more efficient flight and aircraft control.

**AVSC 1150**
**Mountain and Desert Flying**
**1**
* Prerequisite(s): AVSC 1100 and AVSC 1110

Introduces common flying conditions in mountain and desert areas. Emphasizes flight accident statistics and causes, effects of altitude on aircraft and pilot, mountain associated wake turbulence, techniques for low-altitude search and rescue or photography over mountainous areas, maneuvers, and abnormal or emergency procedures. Includes survival techniques for emergency landings in mountainous or desert terrain.

**AVSC 1160**
**Seaplane Rating**
**1**
* Prerequisite(s): AVSC 1100, AVSC 1110

Provides training to aid in the transition from single-engine land to single-engine sea. Stresses the differences between operating on land and over bodies of water. Introduces regulations for seaplane pilots. Provides training in seaplane aircraft with the capability to land and takeoff from water. Prepares the student for the FAA seaplane rating flight test.

**AVSC 1230**
**Flight II - Instrument I**
**2**
* Prerequisite(s): AVSC 1100, AVSC 1110 and Department Approval

Prepares students to meet FAA Instrument Airplane and Commercial Airplane Pilot cross-country requirements. Introduces extended cross-country flights in both day and night environments with consideration for passenger safety. Includes operational flight performance using all available navigational weather and airplane performance data. Requires proof of completion of cross country airplane pilot in command time. May be delivered online.

**AVSC 1240**
**Ground II - Instrument**
**3**
* Prerequisite(s): AVSC 1100, AVSC 1110 and Department Approval

Examines FAA regulations, meteorology, navigation, radio procedures, instrument departures, en route and approach procedures, the instrument airway, and airspace systems as well as aircraft systems operation. Introduces glass cockpit instrumentation. Covers basic flight instrument construction and operation. Prepares pilots for the required FAA Instrument Pilot Airplane Knowledge Test.

**AVSC 1250**
**Flight II - Instrument II**
**3**
* Prerequisite(s): AVSC 1230 and Department Approval

Stresses attitude instrument flying techniques. Covers instrument departure and approach procedures and instrument en route and cross-country navigation techniques in actual or simulated weather conditions with reference solely to the flight instruments. Prepares students for the required FAA Instrument Airplane Practical Test. Course fee of $17,890 for flight applies.

**AVSC 1260**
**21st Century Avionics and Instrumentation**
**1**
* Prerequisite(s): AVSC 1100

Provides pilots with the knowledge and practical experience using new generation glass cockpit electronic instrumentation and radio navigation devices. Includes glass cockpit system knowledge, functions, safety, flight planning, crew concepts, and the use of GPS technology. Requires flight, flight training device, or computer based instruction and experience to meet FAA standards for transition to this technology. May be delivered online.

**AVSC 1310**
**AMT Procedures and Practices A**
**5**

For Aviation Maintenance Technician Apprentice students. Introduces students to the aviation maintenance environment. Studies common procedures and practices in the industry, the use of tools and measurement devices, and Federal Aviation Regulation related to technician certification and inspections. Includes maintenance forms and record keeping, and weight and balance publications.

**AVSC 1320**
**AMT General Knowledge A**
**5**

For Aviation Maintenance Technician Apprentice students. Introduces general processes used by the Aviation maintenance Technician. Introduces aircraft electrical principles including the devices and procedures used in analyzing aircraft electrical systems. Covers materials and processes used in aircraft maintenance. Develops basic science application skills for aircraft maintenance.

**AVSC 1330**
**AMT Airframe Phase I B**
**5**
* Prerequisite(s): AVSC 1310, AVSC 1320, Must complete all (a) level AMT apprentice courses with grade of C- or better

For Aviation Maintenance Technician Apprentice students. Introduces students to the basic maintenance and procedures involving the airframes of a variety of aircraft. Discusses composite technology, aircraft finishes, sheet metal, basic structures, welding, and other fasteners.

**AVSC 1340**
**AMT Powerplant Phase I B**
**5**
* Prerequisite(s): AVSC 1310, AVSC 1320, Must complete all (a) level AMT apprentice courses with grade of C- or better

For Aviation Maintenance Technician Apprentice Students. Introduces students to the basics of power plant installation, repair, and servicing. Focuses on the reciprocating engine used on certified aircraft. Covers radial engines, basic two- and four-stroke reciprocating engines, engine overhaul, starter and ignition systems, and troubleshooting procedures.

**AVSC 1400**
**Survey of Unmanned Aircraft Systems**
**3**

Introduces Unmanned Aircraft Systems (UAS) history and development, current and future industry and military application, methods for launch and recovery, purpose and use of data-links, operating personnel and mission planning and governmental oversight. May be delivered online.

**AVSC 1410**
**Aeronautical Knowledge for Small Unmanned Aircraft Systems**
**3**

Prepares students for the required FAA sUAS aeronautical knowledge test. Includes applicable regulations, airspace classification and operating requirements, effects of weather, loading and performance, communication and emergency procedures, physiological effects of drugs and alcohol, aeronautical decision-making and judgment and airport operations.

**AVSC 2070**
**Communications for Aviation Professionals**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Teaches the skills necessary to effectively communicate with a variety of aviation stakeholders and professionals. Examines principles of written and verbal communication. Covers the planning, organizing and delivery of positive and negative messages. Teaches effective interpersonal and listening skills as well as techniques for adapting the message to the audience. Includes the effective development and delivery of computer-aided presentations. Explores the hazards and impacts of miscommunication on aviation safety.

**AVSC 2090**
**Air Transport Economics**
**3**
* Prerequisite(s): MAT 1030 or 1035, STAT 1040 or 1045, MATH 1050 or 1055, AVSC 2150

Teaches basic economic concepts as applicable to air transportation. Introduces foundational principles of free enterprise, supply and demand, private and social implications of profit maximization, market structure, resource markets, inflation, economic and industry cycles, inflation and economic growth. Introduces competitive advantage, air transport demand, modeling, pricing, revenue management and supply and route architecture.

**AVSC 2110**
**Aviation Weather**
**3**

Enables the aviation administrator to understand and appreciate the operational and strategic impacts of weather on the aviation industry. Teaches atmospheric composition and structure, climate and synoptic weather, aviation weather reports, forecasts and weather data sources. Requires students to apply these principles in a decision making capacity through weather tracking, planning and decision making activities.

**AVSC 2120**
**Personal Finance for Aviation Professionals**
**3**
* Prerequisite(s): AVSC 1050, AVSC 1100

Covers financial decision making with a view of financial choices/ alternatives and the impact or consequences of these choices during a student's collegiate and professional career. Includes real life scenarios designed around common challenges and issues. Requires students to create a proposed budget and reconcile expenditures monthly as the course progresses. Explores net worth statements, budgets, taxes, insurance alternatives, and life decisions applicable to finance. May be delivered online.

**AVSC 2130**
**Aviation Safety**
**3**
* Prerequisite(s): AVSC 1100

Presents an introduction to aviation safety. Covers agencies overseeing safety at the commercial and general aviation levels as well as the applicable regulations they develop and enforce. Explores general aviation and commercial aviation accident statistics and accident causation models. Discusses airline, airport, aircraft, and air traffic control safety issues. Explores the role of the aviation administrator as a safety advocate and responsible party in a variety of settings.

**AVSC 2150**
**Air Transportation Management**
**3**

Presents the management skills necessary to be a fixed based operator and entry-level manager for scheduled airlines in the national aviation system. Teaches management functions, marketing, financing, organization and administration, flight operations, maintenance, safety, and liability. Provides hands-on experience of management styles through evaluations and critiques of local airlines and airport facilities.

**AVSC 2180**
**Managing Technology in Aviation**
**3**
* Prerequisite(s): AVSC 2150

Introduces airline computer applications. Explores information management in areas of reservations, planning and scheduling, dispatch, maintenance control and crew management. Explores revenue, customer loyalty and cargo management. Discusses training programs, solution implementation and maintenance costs, as well as managing consulting services for aviation applications.

**AVSC 2190**
**Introduction to Dispatch and Scheduling**
**3**
* Prerequisite(s): AVSC 1010

Introduces airline and corporate flight department operations and flight dispatch procedures. Teaches effects of weather, air traffic control and maintenance on fleet logistics. Introduces responsibilities of dispatchers, routers, maintenance controllers, and general system operations. Covers pertinent crew and operational federal aviation regulations. Examines tools and practices of airline system control and corporate flight departments. Explores responsibilities and authority of dispatchers and schedulers.

**AVSC 2200**
**Aviation Marketing**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Teaches principles of aviation marketing and promotional concepts. Covers planning and coordination, advertising and media as well as sales presentations. Explores aviation tradeshows, trade events, and networking as industry marketing tools. Teachers marketing research, financial planning, and transportation methods.

**AVSC 2210**
**AMT Airframe Phase II C**
**5**
* Prerequisite(s): AVSC 1330, AVSC 1340, Must complete all (b) level AMT apprentice courses with grade of C- or better

For Aviation Maintenance Technician Apprentice Students. Prepares students for intermediate level understanding of major airframe components and accompanying devices. Includes lessons on structure alignments, aircraft rigging, flight control balance, communications and navigation equipment, brake systems, anti-skid systems, and landing gear position indication.

**AVSC 2220**
**AMT Airframe Phase III D**
**5**
* Prerequisite(s): AVSC 2210, AVSC 2230, Must complete all (c) level AMT apprentice courses with grade of C- or better

For Aviation Maintenance Technician Apprentice Students. Final airframe class prepares students to take FAA AMT Airframe Examination. Discusses landing gear systems, hydraulics, fuel systems, pneumatics, fuel dumping, pressurization, environmental controls, and indicator systems. Includes examinations of example aircraft systems in operation.

**AVSC 2230**
**AMT Powerplant Phase II C**
**5**
* Prerequisite(s): AVSC 1330, AVSC 1340, Must complete all (b) level AMT apprentice courses with grade of C- or better

For Aviation Maintenance Technician Apprentice Students. Provides students with information and understanding of turbine engines, designs, systems and components. Covers engine installation, accessory devices, lubrication systems, fuel metering, and airworthiness inspections.

**AVSC 2240**
**AMT Powerplant Phase III D**
**5**
* Prerequisite(s): AVSC 2210, AVSC 2230, Must complete all (c) level AMT apprentice courses with grade of C- or better

For Aviation Maintenance Technician Apprentice Students. Provides intermediate level understanding of engine components, accessories, and their operating principles. Prepares students for the FAA AMT Power plant Knowledge Examination.

**AVSC 2250**
**Aviation Business Statistics**
**3**
* Prerequisite(s): MAT 1030 or 1035, MATH 1050 or 1055, or STAT 1040 or 1045

Presents an application of statistics in business and economics within the context of an aviation-related business and operational setting involving the manufacturing, sustainment, safety, marketing, sales, and aftermarket services of aerospace products. Topics include methods of collecting, analyzing, and presenting data, descriptive statistics, populations and samples, measures of central tendency and dispersion, elementary probability, binomial and normal distributions and their interrelationship, frequency distributions, averages, index numbers, probability, sampling, estimation, analysis of variance, time series, regression and correlation, and chi-square.

**AVSC 2300**
**Ground IV - Commercial**
**3**
* Prerequisite(s): AVSC 1250 and Department Approval

Covers privileges, responsibilities and the operational environment of a commercial pilot. Explores application of aeronautical knowledge and skills in simulated commercial operation situations. Develops judgment and decision-making skills. Studies aerodynamics, performance and limitations, weight and balance, aircraft systems, airworthiness, aeromedical factors, night and high altitude operations, weather hazards and reports, airport operations, flight planning, and decision making. Prepares students for the required FAA Commercial Pilot Airplane Knowledge Test.

**AVSC 2310**
**Flight IV - Commercial**
**3**
* Prerequisite(s): AVSC 1250 and Department Approval

Includes maneuvers such as steep power turns, steep spirals, slow flight, lazy eights, pylon eights, and chandelles. Includes commercial cross-country, instrument flying skills, and emergency procedures. Prepares students for the required FAA Commercial Pilot Airplane Practical Test. Graded credit / no-credit. Course fee of $17,890 for flight applies.

**AVSC 235R**
**Unusual Attitude Safety Training**
**1**
* Prerequisite(s): AVSC 1250

Teaches pilots how to assess various flight situations and take the appropriate action to avoid or recover from any in-flight unusual attitude scenario, includes training not covered by commercial flight courses such as situations involving wake turbulence, wind shear, mountain waves and other wind flow patterns, as well as instrument or control system failure and pilot error may produce unusual attitudes beyond those experience in normal flight. Presented in three phases: for the experience level of the 1) Private Pilot Student, 2) Instrument Pilot Student, 3) Commercial Pilot Student and for the Certified Flight Instructor Student.Course enhances overall pilot skill and increases confidence in all flight conditions. May be repeated for a maximum of 2 credits toward graduation.

**AVSC 2400**
**Ground Certified Flight Instructor**
**4**
* Prerequisite(s): Department Approval

Provides the foundational knowledge and teaching skills necessary to become an authorized FAA airplane flight instructor. Teaches certification and training requirements for which the student will have instructional privileges. Develops organization and presentation skills required for instructional activity including the application of human behavior and learning principles during instructional activity. Emphasizes training of aviation students to specific standards of competence regardless of the specific instructional privileges carried by the flight instructor. Focuses on the teaching of critical emphasis areas as identified by the FAA. Prepares students for the required FAA Flight Instructor Airplane Knowledge Test and Fundamentals of Instruction Knowledge Test. May be delivered online.

**AVSC 2410**
**Flight Certified Flight Instructor**
**1**
* Prerequisite(s): Department Approval

Designed for advanced pilots preparing for the Flight Instructor rating. Trains students to discuss and teach while precisely performing maneuvers and maintaining proper operational control. Emphasizes the identification of common student errors and proper correction. Prepares students for the required FAA Flight Instructor Airplane Practical Test. May be delivered online.

**AVSC 2420**
**Ground CFI Instrument**
**1**
* Prerequisite(s): AVSC 2300, AVSC 2310
* Corequisite(s): AVSC 2430

Stresses in-depth study of gyroscopic and pressure instruments, attitude instrument flying techniques, IFR departure, en route, arrival and approach procedures, and the teaching of this to other pilots. Discusses Federal Aviation Regulations that apply to instrument flight instruction, flight logbook endorsements and entries, and other directives and publications that apply to airplane instrument flight. Studies the correct procedures for teaching and the analyzing of student errors while performing the required instrument flight maneuvers. Prepares students for the required FAA Flight Instructor Instrument Airplane Knowledge Test. May be delivered online.

**AVSC 2430**
**Flight CFI Instrument**
**1**
* Prerequisite(s): AVSC 2300, AVSC 2310
* Corequisite(s): AVSC 2420

Designed for instructor pilots seeking the CFI Airplane Instrument rating. Covers all required instrument flying maneuvers from the right seat of the instrument training airplane such as instrument departures, en route navigation, and instrument approach to landings. Prepares students for the required FAA Flight Instructor Instrument Airplane Practical Test. May be delivered online.

**AVSC 2440**
**Ground III - Multi Engine**
**1**
* Prerequisite(s): AVSC 1110 and Department Approval

Designed for pilots preparing for multi-engine airplane operations. Covers the theory of multi-engine airplane flight and the significant aerodynamic differences between single-engine and multi-engine airplane flight. Includes system operation of constant speed propellers, multi-tank and pump fuel systems, dual electrical systems, turbocharger and ice control systems. Discusses multi-engine weight and balance and use of performance charts. Prepares students for the oral exam portion of the FAA Multi-Engine Airplane Practical Test and Airplane Pilot Knowledge Test.

**AVSC 2450**
**Flight III - Multi Engine**
**1**
* Prerequisite(s): AVSC 1110 and Department Approval

Prepares students for flight in complex multi-engine airplanes. Stresses normal and emergency flight procedures and skills demonstrated and practiced for all phases of flight. Includes single-engine operation of a multi-engine airplane in varying flight environments and situations. Discusses complex systems operation as well as instrument flight procedures. Prepares the student for the required FAA Multi-engine Airplane Practical Test. Course fee of $11,209 for flight applies.

**AVSC 2500**
**Ground Multi Engine Instructor**
**1**
* Prerequisite(s): AVSC 2300, AVSC 2310
* Corequisite(s): AVSC 2510

Presents specific teaching techniques and skills necessary to certify as a flight instructor with a multi-engine airplane rating. Includes a review of the multi-engine airplane pilot certification requirements. Stresses the unique instructional and safety responsibilities with students in multi-engine airplanes. Prepares students for the oral exam portion of the FAA Multi-Engine Airplane Instructor Practical Test. May be delivered online.

**AVSC 2510**
**Flight Multi Engine Instructor**
**1**
* Prerequisite(s): AVSC 2300, AVSC 2310
* Corequisite(s): AVSC 2500

Prepares students for various maneuvers and operations necessary to instruct pilots for the FAA Multi-engine Airplane Practical Test. Teaches normal and emergency flight operations and procedures in all the various flight environments and regimes. Teaches the knowledge and skill necessary to operate a multi-engine airplane safely, while instructing multi-engine airplane pilots. Prepares students for the required FAA Multi-engine Airplane Instructor Practical Test. May be delivered online.

**AVSC 2710**
**Aviation Marketing**
**3**
* Prerequisite(s): AVSC 2150

Teaches principles of aviation marketing, market research and promotional concepts. Covers planning and coordination, advertising, and media as well as sales presentations. Explores aviation trade shows trade events, and networking as industry marketing tools. Covers the history of customer service in the aviation industry. Introduces customer service principles applicable to both general and commercial aviation. Analyzes customer rights and carrier responsibilities and explores diffusion of confrontational customers. Analyzes airline and corporate cultures and resulting effects on employees and customers.

**AVSC 2750**
**Unmanned Aircraft Systems**
**3**
* Prerequisite(s): AVSC 2150

Introduces unmanned aircraft systems and applications. Examines the history and development of unmanned aircraft, their systems, technology, training methods, and implementation Examines the current and future roles these aircraft will take in society and the implications surrounding their increased usage. Explores security, privacy and safety as they relate to the utilization of unmanned aircraft systems in military, law enforcement and civilian applications. Examines challenges and opportunities related to civilian utilization. May be delivered online.

**AVSC 276R**
**Current Topics in Aviation**
**1 to 3**

Selected topics in Aviation Science that will vary from semester to semester. May be repeated with different topic areas for a maximum of six credit hours toward graduation.

**AVSC 281R**
**Cooperative Work Experience**
**1 to 8**

Designed for Aviation majors. A current job in an aviation related field required prior to registering for this course. Course content is individualized, with students setting objectives in consultation with their faculty coordinator and their on-the-job supervisor. Credit is determined by the number of hours a student works during the semester. (One credit for each five hours of work per week.) May be repeated for a maximum of 8 credits toward graduation. Graded credit/no credit.

**AVSC 285R**
**Cooperative Correlated Class**
**1**
* Corequisite(s): AVSC 281R

Designed to enable students with career aspirations in aviation related fields to begin career planning. Enhances a student's knowledge, personal development, professional development and professional preparation by integrating academic study with practical experience and resume preparation. May be repeated for a maximum of 2 credits toward graduation.

**AVSC 2860**
**SkillsUSA**
**1**

SkillsUSA includes leadership training, parliamentary procedure, job interview skills, prepared speaking, extemporaneous speaking, and organizational skills. Upon completion, the student should understand the SkillsUSA organization and how it helps to build leadership skills.

**AVSC 3010**
**Flight Environment**
**3**
* Prerequisite(s): AVSC 1240 and University Advanced Standing

Teaches interpretation, selection, and compilation of appropriate weather data. Examines METAR, TAF, PIREPS, AIRMET's, SIGMET's and other sources of applicable weather information. Uses sample reports, data, and charts. Includes class and group discussion, lecture, practical example, and case studies. May be delivered online.

**AVSC 3020**
**Aviation Insurance and Risk Management**
**3**
* Prerequisite(s): AVSC 2130 and University Advanced Standing

Explores the complexity of aviation risk management from flight operations and aircraft maintenance perspectives. Examines industry insurance practices and standards, including the development of risk management procedures to meet both government and insurance requirements. Analyzes basic underwriting procedures and requirements. Presents basic principles of hazardous materials handling in aviation.

**AVSC 3030**
**Air Traffic Control I**
**3**
* Prerequisite(s): AVSC 1100 and University Advanced Standing

Teaches tower, approach, and center techniques and terminology. Covers radar and non-radar control environments and the pilot's responsibility in each. Explains effective use of the Air Traffic Control System.

**AVSC 3040**
**Air Traffic Control II**
**3**
* Prerequisite(s): AVSC 3030 and University Advanced Standing

Covers advanced air traffic management concepts, weather problems, communications procedures, and technical control skills. Provides simulated air traffic control situations and crisis management skills. Discusses terminal en route procedures and Federal Aviation Regulations. May be delivered online.

**AVSC 3060**
**Airline Management**
**3**
* Prerequisite(s): AVSC 2150 and University Advanced Standing

Prepares student for management level duties at air carriers. Examines airline operational considerations, regulation, financing, accounting methods, marketing, customer service, profitability, and labor relations. Discusses how some airlines succeed and others fail.

**AVSC 3070**
**Aviation Cargo Operations**
**3**
* Prerequisite(s): AVSC 2150 and University Advanced Standing

Studies air cargo history and industry development. Teaches air cargo scheduling and supply chain administration. Explores aircraft options and conversions and airport and logistical considerations. Discusses shipping and air cargo regulations including hazard material (hazmat) and security issues. Explores domestic and international air cargo considerations.

**AVSC 3090**
**Airline and Dispatch Operations**
**3**

Prerequisite(s): AVSC 2150, AVSC 2110 and University Advanced Standing Introduces airline and corporate flight department operations and flight dispatch procedures. Teaches effects of weather, air traffic control and maintenance on fleet logistics. Introduces responsibilities of dispatchers, routers, maintenance controllers, and general system operations. Covers pertinent crew and operational federal aviation regulations. Examines tools and practices of airline system control and corporate flight departments. Explores responsibilities and authority of dispatchers and schedulers.

**AVSC 3100**
**Corporate Aviation Management**
**3**
* Prerequisite(s): AVSC 2150 and University Advanced Standing

Introduces basic principles of corporate flight department management. Discusses regulatory requirements in corporate aviation, acquisition procedures, insurance requirements, and pilot certification programs. Explores fractional ownership programs and management.

**AVSC 3110**
**Aviation Security**
**3**
* Prerequisite(s): AVSC 2150, and University Advanced Standing

Presents advanced security issues related to aviation including passenger screening, profiling, hijacking, bomb threats and passenger disruptions. Covers historical incidents and studies a variety of responses to threats from various countries. Discusses the role of the Department of Homeland Security and the Transportation Security Administration. Covers the role of pilots and other flight crew in security, including the Federal Flight Deck Officers Program. Includes a discussion of regulatory issues and laws established since the 9/11 attacks. May be delivered online.

**AVSC 3120**
**Airport Management**
**3**
* Prerequisite(s): AVSC 2150 and University Advanced Standing

Explores airport management at both small and large airports. Emphasizes basic requirements and attributes of successful airport managers. Course includes discussion of local and state airport finance and regulatory issues. Discusses pertinent Federal Aviation Regulations and security issues.

**AVSC 3140**
**Fixed Base Operations Management**
**3**
* Prerequisite(s): AVSC 2150 and University Advanced Standing

Prepares students for employment and management at a fixed base operation and related general aviation management. Covers the organization, profit, maintenance, and safety systems concerning fixed base operators. Presents pertinent Federal Aviation Regulations, facility management, and advertising issues.

**AVSC 3150**
**Principles of Aviation Management**
**3**
* Prerequisite(s): AVSC 2070, AVSC 2150 and University Advanced Standing

Teaches principles of aviation management including the management process, decision-making, and organizational structure. Covers leadership skills including communication, fostering team work, conflict resolution, and human resource management. Analyzes the importance of ethics and social responsibility as well as developing and crafting executive strategies. Studies organizational culture and effective management of innovation and change. May be delivered online.

**AVSC 3200**
**Flight Physiology**
**3**
* Prerequisite(s): AVSC 1240 and University Advanced Standing

For pilots with a career goal in commercial Aviation. Teaches physiological and psychological factors that affect pilot performance. Studies issues such as human error, fatigue, fitness, attitudes, training devices, controls, cabin space, and human payload. Includes lecture, demonstration, experiments, group projects, class discussion, and possible guest lecturers.

**AVSC 3210**
**Aircraft Incident and Emergency Management**
**3**
* Prerequisite(s): AVSC 2130 and University Advanced Standing

Teaches how to develop a pre-accident plan addressing the issues of chain and command responsibility, initial response to safety and security issues, and the coordination of human and material resources for public safety. Emphasizes post crash/aircraft incident preservation of forensic evidence. May be delivered online.

**AVSC 3220**
**Aircraft Accident Investigation**
**3**
* Prerequisite(s): AVSC 2130 and University Advanced Standing

Explores the fundamental requirements of aircraft mishap and accident investigation. Covers the initial gathering and preservation of evidence at the crash site, including photographic and videographic documentation, assessing environmental factors, human factor considerations, aircraft maintenance status, and air traffic control considerations.

**AVSC 3230**
**Accident Witness Interviewing**
**3**
* Prerequisite(s): (AVSC 3210 or AVSC 3220) and University Advanced Standing

Teaches the currently recommended techniques for conducting an accident witness interview and common mistakes. Presents methods of evaluating and analysis of interview information. Case studies and role playing will be used in classroom exercises.

**AVSC 3240**
**Aviation Accident Reporting**
**3**
* Prerequisite(s): (AVSC 3210 or AVSC 3220), (ENGL 1010 or ENGH 1005), and University Advanced Standing

Teaches the student a working knowledge of preparing a complete aircraft mishap/accident report that includes the factual information, analysis, and conclusions, including probable causes, and aviation safety recommendations. Involves turning accident investigation data into an accident report.

**AVSC 3300**
**Jet Transport Systems**
**3**
* Prerequisite(s): AVSC 1240 and University Advanced Standing

Provides training on turbine driven engines, thrust vectoring, pneumatics, electrical, hydraulic, and auxiliary systems. Includes subjects such as pressurization, de-ice and anti-ice, environmental, and warning systems. Utilizes schematic drawings, computer based trainers, and various jet operating manuals. Includes lecture, class discussion, demonstrations, group practice, and possible guest lecturers.

**AVSC 3310**
**Aviation Logistics Management**
**3**
* Prerequisite(s): AVSC 2150, AVSC 3150, and University Advanced Standing

Examines functional areas of supply, maintenance, transportation and services at operational, strategic and tactical levels. Covers facilities, manpower, labor relations, financial and system management, contract administration, analytical techniques and decision making. Uses a variety of case studies and examples of various transportation companies, airlines, and support groups. May be delivered online.

**AVSC 3320**
**Aviation Managerial Accounting**
**3**
* Prerequisite(s): AVSC 2150 and University Advanced Standing

Provides aviation administration students with knowledge of financial, managerial, and basic cost accounting concepts and applications. Introduces basic accounting methods, accounting information systems and the utilization of accounting information in the decision making process. Uses aviation industry case studies and examples. May be delivered online.

**AVSC 3350**
**Aviation Labor and Human Resource**
**3**
* Prerequisite(s): AVSC 2150, AVSC 3150, and University Advanced Standing

Focuses on effective management of human resources in the unique environment of the aviation industry. Teaches planning, recruitment, selection, training, development, labor relations, employee benefits and compensation, employee legal issues, termination and unemployment, and applicable state and federal regulations. May be delivered online.

**AVSC 3400**
**International Flight Operations**
**3**
* Prerequisite(s): AVSC 1240 and University Advanced Standing

Provides an overview of international flight operations including advanced air navigation systems. Explores navigation equipment and aids utilized in international flight operations. Teaches the operation of the "Glass Cockpit" flight data center. Utilizes simulation for operation of a glass cockpit equipped aircraft.

**AVSC 3530**
**Flight Aerodynamics**
**3**
* Prerequisite(s): AVSC 1240 and University Advanced Standing

Teaches the aerodynamics involved in commercial aircraft. Includes aircraft turning and accelerated climb performance, take off velocity, load factors, hypersonic flight, and laminar flow airfoils. Includes demonstration, examples, experiments, and class discussion. May be delivered online.

**AVSC 3600**
**Multi-piloted Operations**
**3**
* Prerequisite(s): AVSC 1100, AVSC 2070 and University Advanced Standing

Explores concepts of Crew Resource Management (CRM), Threat and Error Management (TEM), and Advanced Qualification Program (AQP) concepts. Covers crew coordination, communication, flight discipline, pilot flying and pilot monitoring protocols in multi-piloted environments.

**AVSC 3740**
**Advanced Methods in Aviation Investigation**
**3**
* Prerequisite(s): AVSC 3220 and University Advanced Standing

Teaches current scientific techniques for the analysis of aircraft materials, components, performance and design. Considers aircraft crashworthiness. Discusses the process of establishing facts from analysis and of the findings of an aircraft investigation and probable vs. proximate cause.

**AVSC 4020**
**Applied Aviation Finance**
**3**
* Prerequisite(s): AVSC 3320 and University Advanced Standing

Examines financial management in the aviation corporate and public sectors and the role of financial markets and institutions. Introduces finance terminology and techniques. Discusses time value of money, fundamentals of security valuation, capital asset pricing model and capital budgeting. Introduces weighted average cost of capital and contrasts debt policy and governance in the public and private aviation sectors.

**AVSC 410G**
**Global Ethical and Professional Issues in Aviation**
**3**
* Prerequisite(s): AVSC 2150, PHIL 2050, and University Advanced Standing

Designed for aviation managers and pilots to develop a global perspective and understanding of key intercultural issues facing aviation. Studies the role of multi-culturalism and globalization, especially where these issues impact safety and the business environment. Includes a study of aviation regulation and scenario-based problem solving skills.

**AVSC 4160**
**Aviation Law**
**3**
* Prerequisite(s): AVSC 2150, Senior Standing and University Advanced Standing.

Introduces the student to the United States Constitution plus derivation and application of international, federal, state and local laws as applied to aviation. Covers administrative, civil and criminal law including torts, principles of liability, contracts, sales, commercial transactions, the environment, labor law and Federal Aviation regulations.

**AVSC 4210**
**Flight: Turbine Transition**
**1**
* Prerequisite(s): AVSC 2300, AVSC 2310, and University Advanced Standing

Covers the required training experience in preparation for an FAA airplane type rating practical exam. Includes start up, taxi, take-off, en-route, approach, landing, shutdown, and emergency procedures. Requires individualized instruction in a cockpit procedures trainer, simulator or aircraft. Proof of earned airplane type rating is required.

**AVSC 4300**
**Ground Airline Transport Pilot Aircraft Dispatcher**
**3**
* Prerequisite(s): AVSC 2110 and University Advanced Standing

Discusses aircraft aerodynamics, airspace and airports, air traffic control, aviation weather, and aero-medical factors and applicable NTSB and FAA regulations. Analyzes the aspects of decision making and professionalism in aviation. Prepares students for the required FAA Airline Transport Pilot Airplane 121 (ATP); FAA Airline Transport Pilot Airplane (135); or Aircraft Dispatcher (ADX) Knowledge Tests.

**AVSC 4310**
**Flight Airline Transport Pilot**
**1**
* Prerequisite(s): AVSC 2300, AVSC 2310, and University Advanced Standing

Focuses on the areas necessary to pass an Airline Transport Pilot Airplane Practical Test. Covers pre-flight, takeoff and departure, in flight maneuvers, instrument procedures, approaches and landings, normal and abnormal procedures, emergency procedures and postflight procedures. Prepares students for the required FAA Airline Transport Pilot Airplane Practical Test.

**AVSC 4500**
**Aerospace Aftermarket Support Services**
**3**
* Prerequisite(s): University Advanced Standing

Explores organizational structures, geographical location selection, staffing, service delivery, and infrastructure requirements of an effective aftermarket product support program associated with aerospace vehicles. Explores existing support concepts to enable the student to design and plan an integrated and deployable product support organization. Emphasizes key elements of customer relationship management. Includes studies for both Original Equipment Manufacture (OEM) and third-party service providers.

**AVSC 4550**
**Aerospace Vehicle Certification-Reliability-Maintainability Systems**
**3**
* Prerequisite(s): University Advanced Standing

Explores the standards, regulations, infrastructure, and issues involving the certification, reliability, maintainability, risk management, and safety of aerospace vehicles through their life cycle. Studies the aerospace sectors of civil, defense, unmanned, and space-based systems. Investigates global training and certification standards of maintenance engineers and technicians.

**AVSC 4700**
**Aviation Professional Seminars**
**3**
* Prerequisite(s): Senior Standing and University Advanced Standing
* Corequisite(s): AVSC 4710

Informs aviation students on personal and career development through guest lectures and industry seminars. Discusses career opportunities to develop and promote career success.

**AVSC 4710**
**Aviation Career Preparation**
**1**
* Prerequisite(s): Senior Standing and University Advanced Standing
* Corequisite(s): AVSC 4700

Prepares students for the rigors of an aviation interview by reviewing important areas including Federal Aviation Regulations, aviation specific discipline knowledge and interpersonal skills necessary to successfully obtain a position in the aviation industry. Includes specific resume, background search, and interview preparation procedures.

**AVSC 475R**
**Current Topics in Aviation**
**1 to 3**
* Prerequisite(s): AVSC 1010 and University Advanced Standing

Presents selected topics in Aviation Sciences and will vary each semester. Requires a special project related to the area of study. May be repeated with different topic areas for a maximum of 6 credits toward graduation.

**AVSC 4800**
**Professional Pilot Capstone**
**3**
* Prerequisite(s): AVSC 3300, 3600 and University Advanced Standing

Teaches systems, operations and performance limitations of the CRJ. Emphasizes operating practices, along with systems indoctrination, and procedures training. Includes systems and operations common to most turbine and transport category aircraft. Provides insight into the rigors of studying for ground school systems class. Utilizes lecture, demonstration, and cockpit procedure trainers. Student who complete the course should be prepared to pass the applicable written exam. May be delivered online. Software fee of $100 applies

**AVSC 4805**
**Canadair Regional Jet Orientation**
**1**
* Prerequisite(s) or Corequisite(s): AVSC 4800

Introduces Canadair Regional Jet aircraft (CRJ) procedures through hands on application in the CRJ flight simulation training device. Provides simulated experience as a pilot in normal, abnormal, and emergency operations. Includes scenario based training in the CRJ200 flight management system (FMS) and other essential systems. Emphasizes crew resource management (CRM) skills in transport category aircraft.

**AVSC 481R**
**Cooperative Work Experience**
**1 to 8**
* Corequisite(s): AVSC 485R

For upper division Aviation majors. A current job in an aviation related field required prior to registering for this course. Course content is individualized, with students setting objectives in consultation with their faculty coordinator and their on-the-job supervisor. Credit is determined by the number of hours a student works during the semester. (One credit for each five hours of work per week.) May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**AVSC 485R**
**Cooperative Related Class**
**1**
* Prerequisite(s): Current job in an aviation related field and University Advanced Standing
* Corequisite(s): AVSC 481R

For upper division Aviation Science majors. Designed to enable students with career aspirations in aviation related fields to begin career planning. Enhances a student's knowledge, personal development, professional development and professional preparation by integrating academic study with practical experience and resume preparation. May be repeated for a maximum of 2 credits toward graduation.

**AVSC 4900**
**Strategic Aviation Management Capstone**
**3**
* Prerequisite(s): AVSC 3150, Senior standing, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): AVSC 4020

Provides aviation administration students with the opportunity to practice and apply their cumulative knowledge acquired over the entire course of study. Teaches the components of formulating a strategic plan, implementing and controlling its execution, and evaluating its success. Applies principles of accounting, finance, economics, labor, logistics, operations, research and strategy development through simulation and aviation case studies.

**AVSC 491R**
**Undergraduate Research Project**
**3 to 6**
* Prerequisite(s): AVSC 3200, AVSC 3600, ENGL 2010, Matriculation into Bachelor's Degree, and University Advanced Standing

Combines and integrates concepts, methodologies, and skills developed in previous AVSC course work through the completion of a comprehensive project. Students will develop their own project and portfolio in consultation with a faculty advisor. A list of detailed guidelines for the project is available from the Aviation Science Department. May be repeated three times for a maximum of 6 credits.

**AVSC 4950**
**Aerospace Technology Management Capstone Project**
**3**
* Prerequisite(s): AVSC 4500, AVSC 4550, and University Advanced Standing.

Assesses significant evidence of learning within the discipline studied through a culminating project. Documents evidence of achievement, experience and competencies for current and prospective employers to aid in job placement or promotion.

# Behavioral Science (BESC)

**BESC 1000**
**Behavioral Science Forum**
**2**

For students interested in exploring a Behavioral Science major. Offers an overview of curriculum, major requirements, faculty and their specialties, study and writing helps and guidelines, campus resources and career possibilities. Utilizes lectures, guest speakers, field trips, and application-oriented activities.

**BESC 107G** **SS**
**Multicultural Societies**
**3**

Examines societies and cultures within the kinships, beliefs, values and political backgrounds related to differing ethnic groups. Provides a forum for constructive interaction among people of differing economic, social, racial, ethnic and religious backgrounds.

**BESC 295R**
**Beginning Research Experience**
**1 to 3**
* Prerequisite(s): Instructor approval; BESC department major

Provides a mentored experience to assist on a faculty member's research project. Begin to explore academic literature to investigate topics of interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. Includes literature searches, materials creation, data collection, or other options as approved by the instructor. May be repeated for a maximum of six credits toward graduation. May be graded Credit/No Credit.

**BESC 3020**
**Research Methods for the Behavioral Sciences**
**3**
* Prerequisite(s): PSY 3110 or declared major in Family Science and (admission into BSW program or declared major in Behavioral Science, Family Science, or Psychology) and (ANTH 101G, FAMS 101G, PSY 1010, SOC 1010, or SW 1010) and (ENGL 2010 with a grade of C+ or higher) and University Advanced Standing

Surveys the most common research designs in the social sciences. Includes true experiments, quasi-experiments, correlational designs, survey research, single case, and the philosophy of qualitative methods. Includes the design of a study, original data collection, data analysis, presentation of results. May be delivered hybrid and/or online.

**BESC 3100**
**Career and Graduate School Preparation for Behavioral Science Majors**
**3**
* Prerequisite(s): (ANTH 101G or FAMS 101G or PSY 1010 or SOC 1010 or SW 1010) and (ENGL 2010 with a C+ or higher) and (admission into BSW program or declared major in Behavioral Science, Family Science, or Psychology) and University Advanced Standing

Emphasizes the development of skills necessary to successfully apply for employment and/or graduate school. Includes resume writing, cover letters and basic interview skills, preparation of acceptable application packages, and learning how to network with school and community resources to find employment and/or graduate school opportunities.

**BESC 3420 (Cross-listed with: COMM 3420)**
**Communication and Conflict**
**3**
* Prerequisite(s): (FAMS 3410 or COMM 3410 or COMM 2110 or LEGL 3150) and University Advanced Standing

Studies contemporary theories of conflict and communication. Analyzes the roles of culture, gender, personal, and organizational ethics in conflicts and disputes. Covers the nature of conflict and teaches methods of negotiation, mediation, and conflict resolution with an emphasis on collaborative problem-solving. Canvas Course Mats $66/McGraw applies.

**BESC 3820**
**Women/War/Peacebuilding**
**3**
* Prerequisite(s): (PSY 1010 or SOC 1010 or ANTH 101G) and (ENGL 2010 with a C + grade or higher) and University Advanced Standing

Examines the gendered foundations and dynamics of war (and ethno-political violence) and peace. Explores consequences to women and their roles in militarism and transformational justice and peacebuilding. Emphasizes an analysis of gender within the framework of the behavioral sciences.

**BESC 4030**
**Introduction to Practice Evaluation and Grant Writing**
**3**
* Prerequisite(s): (ENGL 2010 with a C+ grade or higher), PSY 3110, BESC 3020, and University Advanced Standing

Provides practical guidance for conducting an evaluation study from its inception, through the planning stage, to research design, data collection, data analysis and the reporting, dissemination, and application of conclusions.

**BESC 4040**
**Applied Behavioral Science Research**
**3**
* Prerequisite(s): (ENGL 2010 with a C+ grade), PSY 3110, BESC 3020, and University Advanced Standing

Introduces psychological theory, methods, and knowledge to actively analyze and engage problems facing a variety of clients. Discusses a variety of organizations, including businesses, government, religion, social science, health care, criminal justice, and others. Utilizes psychological tools to identify, investigate, and actively seek viable solutions to issues that can be applied by organizations to achieve greater success. Requires students to develop, carry out, and professionally present an original research project. Lab access fee of $13 applies.

**BESC 4050**
**Clinical Research**
**3**
* Prerequisite(s): ENGL 2010 with a C+ grade or higher, PSY 3110, BESC 3020, and University Advanced Standing

Introduces students to the field of clinical research. Integrates traditional psychological research methods and the area of clinical practice. Uses the scientist-practitioner model to demonstrate common research methodologies and examine clinical outcomes. Applies quantitative and qualitative methods in a clinical setting. Focuses on determining the effectiveness of therapeutic process and outcome using research.

**BESC 4510**
**Academic and Career Advising**
**3**
* Prerequisite(s): (ENGL 2010 with a C+ or higher) and University Advanced Standing

Provides students with an understanding of the field of academic/career advising and what it means to be a scholar and practitioner within the field. Engages in scholarly study of academic advising literature, discussion of advising theory and practice, observation of academic advising sessions, and interviews with advisors. Provides knowledge of advising theory and practice, an understanding of student development theory, and an increase in the knowledge and skills needed to advise students effectively.

**BESC 481R**
**Senior Internship**
**1 to 8**
* Prerequisite(s): PSY 3110, BESC 3020, (ENGL 2010 with a C+ grade or higher) and University Advanced Standing
* Corequisite(s): BESC 485R

Allows Behavioral Science students with non-clinical orientation to receive behavioral science credits for interning in a governmental, corporate, or private agency apart from their regular employment. Provides practical and research experience over the course of the 15-week semester. Supervised by agency representative. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**BESC 485R**
**Internship Seminar**
**1**
* Prerequisite(s): (ENGL 2010 with a C+ grade or higher), PSY 3110, BESC 3020, and University Advanced Standing
* Corequisite(s): BESC 481R

Provides integration of classroom learning with learning that takes place in an on-site internship. To be taken concurrently with BESC 481R, Senior Internship. Repeatable for a maximum of 8 credits toward graduation.

**BESC 495R**
**Advanced Research Experience**
**1 to 3**
* Prerequisite(s): (ANTH 101G or FAMS 1010 or PSY 1010 or SOC 1010 or SW 1010) with a C grade or higher; ENGL 2010 with C+ grade or higher; Instructor approval; BESC department major; University Advanced Standing

Provides a mentored experience to significantly assist on a faculty member's research project or carry out an independent research project of the student's design under faculty mentorship. Requires individual initiative and responsibility. Includes limited formal instruction. Includes literature searches, completion of the IRB application process, materials creation, data collection, data analysis, writing a publishable paper, preparing a poster, preparing an oral presentation, or other options as approved by the instructor. May be repeated for a maximum of nine credits toward graduation. May be graded credit/no credit.

# Biology (BIOL)

**BIOL 1010** **BB**
**General Biology**
**3**

Introduces major themes and concepts of biology including cell and molecular biology, genetics, diversity, evolution, and ecology. Provides students with necessary information and skills to critically evaluate what they hear, read, and see in the living world; communicate clearly; and apply methods to interpret data for making informed decisions concerning the role of biology in a world of which they are a part. May be delivered online.

**BIOL 1011** **BB**
**Introduction to Bioinformatics**
**3**

Covers fundamental topics of bioinformatics including bioinformatics databases, sequence and structure alignment, and protein structure prediction. Uses current examples to introduce an overview of methodologies and applications sufficient to introduce students to the field of bioinformatics.

**BIOL 1015**
**General Biology Laboratory**
**1**
* Prerequisite(s) or Corequisite(s): BIOL 1010

Covers introductory topics in general biology. Complements the student's experience in the General Biology 1010 course with emphasis on the application of the scientific method. Includes actual student experiences with living organisms, use of the microscope, and an introduction to techniques used in the study of life. Course lab fee of $13 for supplies applies.

**BIOL 101H** **BB**
**General Biology**
**3**

Introduces major themes and concepts of biology including cell and molecular biology, genetics, diversity, evolution, and ecology. Provides students with necessary information and skills to critically evaluate what they hear, read, and see in the living world; communicate clearly; and apply methods to interpret data for making informed decisions concerning the role of biology in a world of which they are a part. Requires a term paper, project, or presentation.

**BIOL 1070** **BB**
**Heredity**
**3**
* Prerequisite(s): BIOL 1010 is strongly recommended

Introduces genetics for non-majors. Addresses patterns of inheritance from generation to generation (with an emphasis on human heredity), DNA structure and function as well as other aspects of molecular genetics and reproductive technologies.

**BIOL 1200 (Cross-listed with: GEO 1020)** **BB**
**Prehistoric Life**
**3**
* Prerequisite(s): BIOL 1010 or GEO 1010 recommended

Studies prehistoric life. Uses the concepts of biology and physical science. Studies major groups of ancient animals and plants as found in the rock record. Includes aspects and fundamental concepts of biology, ecology, and geology.

**BIOL 1500 (Cross-listed with: ANTH 1020)** **BB**
**Biological Anthropology**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and (ANTH 101G or BIOL 1010)

For students with special interests in Anthropology or the Life Sciences. Studies fossils and living primates, primate biology and behavior. Surveys humanoid fossils. Investigates human evolution and variations of basic biology as it pertains to human development. Stresses the importance of the distribution and diversity of humankind.

**BIOL 1610** **BB**
**College Biology I**
**4**
* Prerequisite(s): ACT (or equivalent) composite score of 21+, or completion of ENGL1010 (or higher) with a minimum grade of C-

Gives a broad exposure to many aspects of the life sciences. Covers topics of biochemistry, energetics, cell structure and function, genetics, and evolution. BIOL 1615 must be taken concurrently by Biology Department majors. BIOL 1615 is not required for pre-allied health majors.

**BIOL 1615**
**College Biology I Laboratory**
**1**
* Corequisite(s): BIOL 1610

Laboratory course to accompany BIOL 1610. Topics covered include scientific method, biomolecules, cell structure and function, cellular reproduction, Mendelian and molecular genetics, DNA technology, and evolution. Course Lab fee of $30 applies.

**BIOL 1620** **BB**
**College Biology II**
**3**
* Prerequisite(s): BIOL 1610 and BIOL 1615 with a C- or higher in each.
* Corequisite(s): BIOL 1625

Provides the second semester material in the two semester introductory course designed for biology majors. Covers origin and early evolution of life, plant structure and function, plant diversity, animal structure and function, animal diversity, and animal behavior.

**BIOL 1625**
**College Biology II Laboratory**
**1**
* Corequisite(s): BIOL 1620

Laboratory course to accompany BIOL 1620. Topics covered include animal biology and diversity and plant biology and diversity. Course Lab fee of $30 for lab, transportation applies.

**BIOL 202R (Cross-listed with: GEO 202R)**
**Science Excursion**
**1**

For students interested in the natural world. Explores a wide variety of topics in science, including geology, botany, astronomy, zoology, ecology, and archeology. Consists of a minimum of a four-day field trip. Participants should gain an increased understanding of several fields of scientific study. May be repeated as many times as desired for interest, however a maximum of 3 credits may count toward graduation.

**BIOL 204R (Cross-listed with: GEO 204R) BB**
**Natural History Excursion**
**3**

For students interested in the natural world. Promotes an in-depth look at a wide variety of topics in science, including geology, botany, astronomy, zoology, ecology, and archeology. Consists of 15 hours of lecture plus an appropriate field trip. Participants should gain an interdisciplinary understanding of science and nature. May be repeated for up to six credits toward graduation.

**BIOL 2070 (Cross-listed with: GEO 2070)**
**Desert Natural History**
**3**

Integrates the teaching of geological and biological systems of the southwestern deserts. Discusses the ecology and geology of unique desert ecosystems; the rocks and strata providing the foundation of the landscape; the evolutionary and geological processes that mold the landscape and the species within it over time; and, the relationships between the physical and biological aspects of the ecosystem, including humans. Provides an intense, hands-on field course where faculty and students participate together in daily activities in a natural setting. Is held for part of the time on the UVU main campus and part of the time at the Capitol Reef Field Station. Requires students to live and learn at the field station for approximately 1/3 of the course.

**BIOL 2500 BB**
**Environmental Biology**
**3**
* Prerequisite(s): BIOL 1010 or BIOL 1610 is recommended

Acquaints students with the principles of environmental systems, including biogeochemical cycles, energy transformations, biotic and abiotic interactions, natural resources and their management. Discusses the interactions of ecological principles and humanity's technology relative to the world today and factors that influence the quality of life.

**BIOL 290R**
**Special Topics In Biology**
**1 to 4**
* Prerequisite(s): BIOL 1010 or higher or Instructor Approval

Explores and examines special topics relating to the field of Biology. Emphasizes areas of rapid growth in Biology or current importance to society. May be repeated for a total of six credits toward graduation.

**BIOL 295R**
**Independent Studies in Life Sciences**
**1 to 4**
* Prerequisite(s): At least 3 credit hours of college level biology, approval of a faculty mentor, and approval of the department chair

Provides individual studies in biology under the direction of a faculty mentor. May include literature reviews, original research, and participation in ongoing departmental projects. Introduces students to the methodology of life science research. Requires written and oral communication of scientific information. May be repeated for up to 4 credits toward graduation.

**BIOL 3070 (Cross-listed with: GEO 3070)**
**Advanced Desert Natural History**
**3**
* Prerequisite(s): University Advanced Standing

Integrates the geological and biological systems of the southwestern deserts. Includes discussion of the ecology and geology of unique desert ecosystems; the rocks and strata providing the foundation of the landscape; the evolutionary and geological processes that mold the landscape and the species within it over time; and, the relationships between the physical and biological aspects of the ecosystem, including humans. Provides an intense, hands-on field course where faculty and students participate together in daily activities and experimental design in a natural setting. Is held part of the time on the UVU main campus and part of the time at the Capitol Reef Field Station. Requires students to live and learn at the field station for approximately 1/3 of the course.

**BIOL 3100**
**Introduction to Data Analysis for Biologists**
**3**
* Prerequisite(s): University Advanced Standing

Introduces computational methods for analyzing and visualizing common biological data types, focusing on developing computational skills and best practices for working with biological data. Provides instruction in command-line computing and appropriate software environments to enable robust and reproducible analyses of varied data sets.

**BIOL 3200**
**Guided Research Experience**
**1 to 3**
* Prerequisite(s): BIOL 1610 or BIOL 1010

Provides an authentic research experience that is structured in a way that the class will move through the stages of research at the same time throughout the semester. Covers selected essential components and skills of conducting research including laboratory techniques, experimental design, hypothesis testing, and communication of findings. Focused for biology majors with little to no research experience.

**BIOL 3300**
**Developmental Biology**
**3**
* Prerequisite(s): BIOL 1610 with a minimum grade of C- and University Advanced Standing

Examines the principles of Developmental Biology with emphasis on the specialization of cells and their organization into body plans. Is recommended for Biology Majors interested in developmental processes. May be delivered online.

**BIOL 3400**
**Cell Biology**
**3**
* Prerequisite(s): BIOL 1610 and CHEM 1220 with a C- or higher in each and University Advanced Standing

For Biology majors or those desiring more knowledge of this subject. Studies the cell as an organism emphasizing molecular basis of cell structure and functions.

**BIOL 3405**
**Cell Biology Laboratory**
**1**
* Prerequisite(s): BIOL 1610 and CHEM 1220 or higher with minimum grade of C- in each and University Advanced Standing
* Corequisite(s): BIOL 3400

Uses laboratory exercises to demonstrate topics covered in BIOL 3400. Includes experimental methods for studying cell processes, enzymes, tissue specific proteins, organelles, and experimental design. Course Lab fee of $100 applies.

**BIOL 3500**
**Genetics**
**3**
* Prerequisite(s): BIOL 1610 with minimum grade of C- and University Advanced Standing

For Biology majors. Studies the genetic basis of life and the mechanisms by which information to make life is stored in the DNA. Presents classical, molecular, and population genetics in the background of current techniques and understanding of genetic processes. Provides an understanding of the basic principles of genetics and preparation for more advanced courses in other aspects of biology. Canvas CourseMat $72/Macmillan applies

**BIOL 3515**
**Advanced Genetics Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): BIOL 3500

Examines advanced aspects of classical and molecular genetic transmission and analysis. Provides hands-on experience with the methods of classical and molecular genetics.

**BIOL 3550**
**Molecular Biology**
**3**
* Prerequisite(s): BIOL 1610, CHEM 1215, and University Advanced Standing

Examines structure, organization, replication, and expression of genomes. Explores the methods used for study of genome structure and function, including nucleotide and protein extractions, separations, and characterizations. Compares sequence data of genomes, transcriptomes, and proteomes. Examines primary literature in the field.

**BIOL 3555**
**Experiments in Molecular Biology**
**1**
* Prerequisite(s) or Corequisite(s): BIOL 3550

Performs experiments in molecular biology including cDNA synthesis, gene cloning, DNA sequencing, polymerase chain reaction (PCR), computer analysis of nucleic acid and protein sequences, protein expression-screening and protein separation and characterization. Course Lab fee of $150 applies.

**BIOL 3600 (Cross-listed with: CHEM 3600)**
**Biological Chemistry**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): CHEM 2320

Introduces principles of the chemical processes that define living organisms. Covers structure and function of proteins, carbohydrates, lipids and nucleic acids. Explores metabolic pathways, biosynthesis, enzymatics, thermodynamics, membrane dynamics and related processes within a living cell. Emphasizes molecular mechanisms of reactions and their outcome.

**BIOL 3605 (Cross-listed with: CHEM 3605)**
**Biological Chemistry Lab**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): BIOL 3600

Introduces laboratory techniques in biochemistry. Studies methods and theory behind purification of proteins and nucleic acids including chromatography and electrophoresis. Uses methods in assessing enzyme activity and kinetics and protein structure analysis. Includes analysis and manipulation of DNA and RNA. Course Lab fee of $145 applies.

**BIOL 3620 (Cross-listed with: CHEM 3620)**
**Biological Chemistry II**
**3**
* Prerequisite(s): (CHEM 3600 or BIOL 3600) and University Advanced Standing

Is a continuation of CHEM 3600. Teaches in-depth the biochemistry of molecular and cell biology processes. Explores the topics of molecular information flow and signaling. Examines current understanding in biochemical methods and ideas beyond those discussed in Biochem I.

**BIOL 369R**
**Introduction to Undergraduate Research**
**1**
* Prerequisite(s): BIOL 1610; (MATH 1050 or STAT 2040 highly recommended) and University Advanced Standing

Introduces fundamentals of research in biology, including how to identify a research problem, form testable hypotheses, select appropriate experimental methods, collect data, determine appropriate sample size, establish appropriate controls, conduct experiments, document experiment details and data, tabulate, analyze and interpret data and how to write a research report. Emphasizes research ethics, institutional research guidelines, personal protection, and proper disposal of hazardous chemicals and biologicals. Introduces research opportunities available within and beyond the university community. May be repeated for a maximum of 2 credits toward graduation.

**BIOL 3700**
**General Ecology**
**3**
* Prerequisite(s): BIOL 1620 with a C- or higher, and University Advanced Standing

Introduces the relationships between organisms and their environment, including processes at the individual, population, community, ecosystem, and biosphere levels. Includes specific topics such as adaptation to abiotic factors in terrestrial and aquatic habitats, global climate patterns and biomes, evolution of life histories, reproductive strategies and social behaviors, population distributions and dynamics, species interactions, community structure and succession, energy flow and nutrient cycles in ecosystems, global biodiversity, and the impact of humans on ecological processes.

**BIOL 3705**
**General Ecology Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): BIOL 3700

Laboratory component to General Ecology in which students may acquire skills in the collection, analysis, and presentation of ecological data. Activities include field sampling of plant and animal populations, laboratory experiments and observations, and computer simulations. Emphasizes techniques in data storage and statistical analysis, graphical representation of data, and scientific writing. Course Lab fee of $18 for lab, transportation applies.

**BIOL 3800**
**Conservation Biology**
**3**
* Prerequisite(s): (BIOL 1010 or BIOL 1620 with a minimum of C-) and University Advanced Standing; BIOL 3700 strongly recommended

Presents scientific principles of conservation biology and associated cultural and ethical issues. Explores the diversity of life on this planet and how that diversity is organized and distributed. Investigates the challenges facing management of our natural resources in order to maintain healthy and productive populations and ecosystems. Course fee of $13 for materials, transportation applies

**BIOL 4000**
**Freshwater Ecology**
**4**
* Prerequisite(s): BIOL 1620 and (BIOL 2500 or BIOL 3700) with a C- or higher in each, and University Advanced Standing

Explores physical, chemical, and biological characteristics of freshwater systems, including lakes, rivers, and streams. Emphasizes freshwater habitats as ecosystems. Studies human impacts on freshwater, with particular reference to Utah and the West. Emphasizes field experience in collecting and measuring the physiochemical characteristics and different groups of organisms found in freshwater habitats. Includes weekly laboratory. Course Lab fee of $17 for lab, transportation applies.

**BIOL 4200 (Cross-listed with: CHEM 4200, GEO 4200, PHYS 4200)**
**Teaching Methods in Science**
**3**
* Prerequisite(s): Acceptance into secondary education program, senior-level standing, instructor approval, and University Advanced Standing

Examines objectives, instructional methods and curriculum for teaching science in the secondary school. Includes developing, adapting, evaluating, and using strategies and materials for teaching biological and physical sciences, appropriate both to the special needs of the learners and the special characteristics of science discipline.

**BIOL 4260**
**Ethical Issues in Biology WE**
**2**
* Prerequisite(s): (BIOL 1610 and BIOL 1620 with a C- or higher in each) and University Advanced Standing

Offers an in-depth analysis of current ethical issues in biology. Requires extensive reading and an analytical term paper. Presents subjects in lecture, and in lab sessions, concentrates on readings and on analyses of issues and their effects on people. Explores and discusses individual participant paradigms.

**BIOL 4300**
**Bioinformatics and Genome Analysis**
**4**
* Prerequisite(s): BIOL 3500 with a minimum grade C- and University Advanced Standing

Studies analysis of genomic sequences, comparison of genomes of different species to gather information about protein function. Includes hands on learning in bioinformatics and genomics. Uses a combination of computer work and discussions that will allow the student to perform basic gene and protein analysis using web tools.

**BIOL 4400**
**Genomics**
**3**
* Prerequisite(s): BIOL 3500 with minimum grade of C- and University Advanced Standing

Introduces genomics as a science and its relationship to bioinformatics. Provides fundamental knowledge and skills to carry out analysis of genes and genomes. Covers computational approaches for interpreting genomic data, including genome sequencing and annotation, gene expression and the transcriptome, functional genomics, metagenomics, and genetic variation and SNPs.

**BIOL 4450 (Cross-listed with: MICR 4450)**
**Immunology**
**3**
* Prerequisite(s): (MICR 2060 or MICR 3450 or ZOOL 2420) and University Advanced Standing
* Corequisite(s): BIOL 4455

Explores the macromolecules, cells and organs involved in innate and adaptive immunity. Examines the development of lymphocyte repertoire, positive and negative selection of lymphocytes and the production of effector lymphocytes. Studies properties of antigens, vaccines, antigen presenting cells and the mechanisms of antigen presentation. Reviews major immunological methods for medical diagnostics and other applications. Examines causes and consequences of autoimmune and lymphoproliferative diseases and immunodeficiencies. Probes how immune response could be manipulated for cancer therapy and transplantation medicine.

**BIOL 4455**
**Immunology Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): BIOL 4450

Addresses federal, local and institutional regulations on using vertebrate animals for biomedical research. Teaches and regularly practices aseptic techniques required in handling biohazardous materials including vertebrate tissues. Studies how to collect tissues and blood from vertebrate animals and process the samples for harvesting various types of cells and macromolecules. Presents common immunological techniques such as western blot analysis and ELISA. Covers how to immunize animals using appropriate adjuvant and harvest plasma from immunized animals to isolate immunoglobulin. Examines tissue typing methodologies including PCR techniques. Course Lab fee of $150 applies.

**BIOL 4500**
**Principles of Evolution WE**
**3**
* Prerequisite(s): BIOL 1620 and BIOL 3500 with a C- or higher in each, senior status, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): BIOL 3700

Focuses on the concepts of evolution as a fundamental principle of biology. Emphasizes the mechanisms and explanations of the tremendous diversity of life. Studies classical, molecular and current explanations of evolution in the background of current techniques and understanding of the genetic processes. Examines the principles of evolution and the various aspects of natural selection and speciation.

**BIOL 4550**
**Molecular Evolution and Bioinformatics WE**
**3**
* Prerequisite(s): BIOL 3500 with minimum grade of C-, and minimum of 6 additional credits upper division biology (BIOL, BOT, MICR, ZOOL, BTEC) courses, and University Advanced Standing

Focuses on the concepts of evolution as a fundamental principle of biology with emphasis on change at the molecular level. Teaches how natural selection shapes the evolution of genes, gene systems, macromolecules, and organisms. Explores the roles of mutation, natural selection, population size and subdivision, and genetic recombination. Introduces different approaches for testing hypotheses about how molecules evolve by using phylogenetic analysis.

**BIOL 4600**
**Bioinformatics Capstone**
**3**
* Prerequisite(s): Senior status in the Bioinformatics program and University Advanced Standing

Applies concepts from the previous Bioinformatics sequence of courses to the real world. Allows students to work with faculty members and industry experts to design and complete a project that incorporates various concepts that have been presented in previous Bioinformatics courses. Requires development and/or application of bioinformatic tools and presentation of results.

**BIOL 481R**
**Biology Internship**
**1 to 5**
* Prerequisite(s): BIOL 1620 with a C- or higher and Instructor Approval

Allows biology majors to earn credit while obtaining practical and research experience as an intern in a government, nonprofit, private agency, or with an approved employer. Must be supervised by agency representative and faculty advisor. Department chairperson approval required and written contracts must be completed and signed. May be repeated with a maximum of 5 credits counting toward graduation. May be graded credit/no credit.

**BIOL 489R**
**Student Research**
**1 to 4**
* Prerequisite(s): BIOL 1620, CHEM 1210, instructor permission, and University Advanced Standing

Provides guided research studies in biology under the direction of a Biology Department faculty mentor. Includes any combination of literature reviews, original research, and/or participation in ongoing departmental projects. Involves students in the methodology of original biology research. Requires preparation and presentation of oral and/or written reports. May culminate in results that will form the basis of the senior thesis in the major, if thesis option is chosen. May be repeated for 9 credits toward graduation.

**BIOL 490R**
**Special Topics in Biology**
**1 to 4**
* Prerequisite(s): BIOL 1620 and University Advanced Standing

Explores and examines special topics relating to the field of biology. Emphasizes areas of rapid growth in biology or current importance to society. May be repeated for a total of 9 credits toward graduation.

**BIOL 492R**
**Professional Development**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): BIOL 4500

Focuses on professional skills required for students to move forward in their chosen career. Emphasizes writing an effective cover letter, resume and personal statement and communicating effectively in an interview setting. Addresses social media branding for professional settings. Requires students to complete the biology major field test and other department assessments.

**BIOL 494R**
**Student Seminar WE**
**2**
* Prerequisite(s): BIOL 1620 with a C- or higher, junior or senior standing, and University Advanced Standing

Requires students to research scientific literature, give oral presentations, write a research paper, and lead discussions on assigned biology topics in specific areas of current research in biology. May be repeated for up to 4 credits toward graduation.

**BIOL 497R**
**Biology Colloquium**
**.5 to 1**
* Prerequisite(s): University Advanced Standing

Requires students to attend lectures presented by department faculty and/or invited speakers. Features lectures that are usually a summary of the speaker's recent research results, presented at a level appropriate for junior and senior biological science majors. May be repeated for a maximum of 2 credits toward graduation.

**BIOL 499R**
**Senior Thesis**
**1 to 2**
* Prerequisite(s): ENGL 2010, junior standing, instructor permission, and University Advanced Standing

Teaches students to write a thesis based on library research or work performed during laboratory/field research under BIOL 489R. Provides experience in critically analyzing published literature and, if laboratory/field research was performed, comparing research results with the scientific literature. Requires a technically accurate report on one's findings. Includes the opportunity to present the research results to students, faculty and the community at a Department of Biology seminar. May be repeated once for a total of 2 credits toward graduation.

**BIOL 5000**
**Regulatory Affairs for Life Sciences**
**4**
* Prerequisite(s): Acceptance into the Certificate of Proficiency in Regulatory Affairs for Life Sciences or Instructor Approval

Introduces regulatory affairs as practiced by medical device and biopharma companies in the US. Focuses on United States Federal Drug Administration and International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use guidances and best practices.

**BIOL 5010**
**Quality Management Systems for the Life Sciences**
**2**
* Prerequisite(s): BIOL 5000

Introduces FDA and International Conference on Harmonisation (ICH) requirements for the QSR (Quality System Regulation). Focuses on ISO 13485 and related guidances. Specifically covers the regulations and standards which are the basis of the regulated life science industry.

**BIOL 5020**
**Design Control and Risk Management for the Life Sciences**
**3**
* Prerequisite(s): BIOL 5000

Introduces design control and risk management requirements for medical device and BioPharma companies.

**BIOL 525R**
**Advanced Topics for Biology Teachers**
**1 to 5**
* Prerequisite(s): Departmental Approval

For licensed teachers or teachers seeking to re-certify their biology endorsement from the Utah State Office of Education. Teaches principles of biology and pedagogy of teaching biology for teachers in public or private schools. Emphasizes correlation with the Utah Core Curriculum, the National Science Education Standards, and the Benchmarks of Project 2061. Topics will vary.

**BIOL 579R**
**Special Topics**
**2**

Focuses on issues that are current and often changing in regulatory affairs, such as international regulations. Engages students in discussion and lectures with industry experts on cutting-edge issues that impact how medical devices and pharmaceuticals are regulated for compliance and safety. May be repeated for a maximum of 8 credits toward graduation. May be delivered online.

**BIOL 580R**
**Capstone Project**
**1**
* Prerequisite(s): BIOL 5020

Applies knowledge learned in the Regulatory Affairs sequence of courses to the real world. Allows students to work with faculty members and industry experts to design and complete a project that incorporates various concepts that have been presented in previous Regulatory Affairs courses. May be repeated for a maximum of 3 credits toward graduation.

**BIOL 581R**
**Biology Internship**
**1 to 5**
* Prerequisite(s): Instructor Approval and Internship Orientation

Allows students to earn credit while obtaining practical and research experience as an intern in a government, nonprofit, private agency, or with an approved employer. Must be supervised by agency representative and faculty advisor. Department chairperson approval required and written contracts must be completed and signed. May be repeated with a maximum of 5 credits counting toward graduation. May be graded credit/no credit.

# Building Inspection Technology (BIT)

**BIT 1010**
**Building Codes**
**3**

Teaches the nonstructural standards of the Uniform Building Code. Includes occupancy classifications, building area, height and location limits, exit requirements, and fire-resistive standards.

**BIT 1020**
**Residential Codes**
**3**

Teaches the nonstructural standards of the International Residential Code. Includes foundations, walls, floors, roofs, finishes, heating, cooling, plumbing and electrical codes as they apply to residential construction.

**BIT 1170**
**Field Lab Building Codes**
**1**

For students, building inspectors, architects, and builders. Provides practical on-the-job experience in inspecting footings, foundation walls, reinforcement steel, the building structure, and interior and exterior coverings.

**BIT 1230**
**Plan Review**
**3**
* Prerequisite(s): BIT 1010 or instructor's approval.

Designed to introduce students to the techniques of nonstructural plans examination through familiarization of the plan and construction documents, specifications, and the application of code requirements.

**BIT 1240**
**Plumbing Codes**
**3**

A comprehensive study of plumbing code requirements relating to the principles of plumbing design, materials, installation standards, water and gas distribution systems, storm and sanitary sewer systems, water heaters, and mobile home connections.

**BIT 1330**
**Mechanical Codes**
**3**

This is a comprehensive course which covers the entire Uniform Mechanical Code. Students will gain a working knowledge of requirements for mechanical systems, including heating, cooling, ducts, ventilation, refrigeration, kitchen hood and ducts, fuel-gas piping, appliance venting, combustion air, and related requirements.

**BIT 1340**
**Electrical Codes**
**3**

Studies the National Electrical Code in its entirety. Covers electrical wiring systems, methods, electrical equipment, special occupancies, special equipment, special conditions, and communication systems.

**BIT 1380**
**Ride Along Lab**
**1**

For students, building inspectors, architects, and builders. Students will accompany a building inspector as he or she conducts on-the-job inspections. There will be a rotation system established to give students experience in a variety of jurisdictions. This class is for fourth-semester students only.

**BIT 281R**
**Cooperative Work Experience**
**1 to 8**
* Corequisite(s): BIT 285R the first time only

For Building Inspection Technology majors. Provides paid, on-the-job work experience in the student's major. Work experience, the correlated class, and enrollment are coordinated by the Cooperative Coordinator. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and oral presentations. Provides experience in writing and completing individualized work objectives that improve present work performance. Up to 16 credits total between BIT 281R and BIT 285R may be taken toward graduation. May be graded credit/no credit.

**BIT 285R**
**Cooperative Correlated Class**
**1**
* Corequisite(s): BIT 281R the first time only

For Building Inspection Technology Majors. Identifies on-the-job problems and provides remediation of those problems through in-class discussion and study. Includes the study of identifying and maximizing service opportunities. Students register for this class with approval of the Cooperative Coordinator. Includes lecture, guest speakers, video tapes, role playing, case analysis, oral presentations, and written assignments. Completers should be better able to perform in their field of work or study. Take up to 16 credits total between BIT 281R and BIT 285R.

# Business/Marketing Education (BMED)

**BMED 4200**
**Methods of Teaching Business/Marketing/Digital Technology**
**3**
* Prerequisite(s): (IM 2600 or IM 3700 or Instructor Approval), EDSC 3000, and University Advanced Standing

Provides foundation knowledge of business education. Includes methods of teaching business, marketing, digital media, emerging technologies, and keyboarding. Includes philosophical foundations of business education, curriculum trends impacting business and technology classrooms, classroom management, curriculum planning, and assessment. Includes curriculum standards, competency-based instruction, career and technical education, and professionalism. Requires field observation. May be delivered hybrid. Lab access fee of $45 applies.

**BMED 4250**
**Methods of Teaching Business and Marketing**
**3**
* Prerequisite(s): EDSC 3000, LEGL 3000, MKTG 220G, ECON 2020, MKTG 3600, or instructor approval, and University Advanced Standing

Provides an opportunity for prospective teachers to become facilitators of learning specifically by planning, developing, delivering, and evaluating basic business and marketing curriculum. Provides the background and foundation of business/marketing teacher education for students seeking a secondary education degree. Includes textbook selection, student organizations, professional associations, and advisory committees. Addresses issues and trends in business and marketing education. Lab access fee of $45 for transportation applies.

**BMED 4300**
**Methods of Teaching Computer Science**
**3**
* Prerequisite(s): (INFO 1120 or CS 1030) and (INFO 1200 or CS 1500) or Instructor Approval; and University Advanced Standing

Methodology course designed for secondary education students and current educators to gain the pedagogical knowledge and learn best practices necessary for teaching secondary computer science (CS) concepts. Combines pedagogical principles with computer science knowledge to create an effective learning environment. Includes reading, discussing, reflection, evaluation, micro-teaching, and field observations. Addresses the standards set by the International Society for Technology in Education (ISTE) for students and for teachers, and utilizes in the design, implementation, and assessment of learning materials. Lab access fee of $45 applies.

# Botany (BOT)

**BOT 1800**
**Introduction to Horticulture**
**3**

Introduces students to the horticulture industry including plant propagation, landscape management, and greenhouse management. Provides students with information to care for house plants and to design and care for home gardens.

**BOT 2050** **BB**
**Field Botany**
**3**
* Prerequisite(s): BIOL 1010 or BOT 2400 recommended

For biology majors and non-majors. Covers the classification, identification, and ecology of woody plants with an emphasis on native trees and shrubs. Includes field trips and laboratory work. Student plant collection required. Course Lab fee of $30 for transportation applies.

**BOT 2100** **BB**
**Flora of Utah**
**3**
* Prerequisite(s): None, BIOL 1010 is recommended

A vascular plant taxonomy course for intended botany and biology majors or anyone interested in learning about plants native to Utah. Covers the principles of plant classification, nomenclature, and identification with an emphasis on Utah flowering plants. Includes field trips and weekly laboratory. Student plant collection required. Course Lab fee of $30 for transportation applies.

**BOT 2400** **BB**
**Plant Kingdom**
**4**
* Prerequisite(s): BIOL 1010 or BIOL 1610 with a minimum grade of C-

Surveys of the Divisions (Phyla) traditionally studied by botanists, emphasizing structure, reproduction, systematics, and evolution. Completers should be familiar with the morphological features of the major prokaryotic, fungal, algal, and plant groups. Includes a weekly laboratory. Course Lab fee of $50 for supplies applies.

**BOT 290R**
**Special Topics In Botany**
**1 to 4**
* Prerequisite(s): BIOL 1010 or higher or Instructor Approval

Explores and examines special topics relating to the field of Botany. Emphasizes areas of rapid growth in Botany or current importance to society. May be repeated for a total of six credits toward graduation.

**BOT 295R**
**Independent Studies in Botany**
**1 to 4**
* Prerequisite(s): At least 3 credit hours of college level biology, approval of a faculty mentor, and approval of the department chair

Provides individual studies in botany under the direction of a faculty mentor. May include literature reviews, original research, and participation in ongoing departmental projects. Introduces students to the methodology of botany research. Requires written and oral communication of scientific information. May be repeated for up to 4 credits toward graduation.

**BOT 3210**
**Controlled Environment Experiments in Horticulture**
**3**
* Prerequisite(s): BIOL 1610, BIOL 1615, MATH 1050, and University Advanced Standing

Introduces students to conducting greenhouse or growth chamber experiments. Discusses basic greenhouse design and components. Requires students to develop, conduct and analyze basic greenhouse research with the help of the instructor.

**BOT 3340**
**Plant Biology**
**4**
* Prerequisite(s): BIOL 1620 and (CHEM 1120 or CHEM 1220 or higher) with a minimum grade of C- in each, and University Advanced Standing

Designed for Biology Education majors and others wishing a one semester upper division combined plant anatomy/ plant physiology course. Covers structure-function interrelationships from the cellular to whole plant level, including aspects of plant anatomy, physiology, reproduction, growth and development with emphasis on the angiosperms (flowering plants). Includes weekly laboratory. Students may not receive credit for both BOT 3340 and BOT 4100 and/or BOT 4600. Course lab fee of $30 for supplies applies.

**BOT 3500**
**Mycology**
**4**
* Prerequisite(s): University Advanced Standing

Provides an introduction to the fungal kingdom, focusing on understanding evolutionary relationships and adaptations, and in gaining an appreciation for the environmental, industrial, and medical functions that fungi play. Actively explores current primary literature and research methods in mycology.

**BOT 3710**
**Plant Propagation**
**3**
* Prerequisite(s): BIOL 1620 and University Advanced Standing. BOT 1800 recommended

Provides students with an understanding of the basic principles of plant propagation. Emphasizes specific techniques for various types of plants in their appropriate environments. Includes propagating from seed, bulbs, layering, vegetative cuttings, grafting and micropropagation. Focuses on the science behind various propagation methods.

**BOT 3800**
**Ethnobotany WE**
**4**
* Prerequisite(s): BIOL 1620 with a C- or higher and University Advanced Standing

Analyzes and evaluates interactions between people and plants. Discusses how plants are used in medicine, industry, food, and culture. Covers basic concepts, including literature and field research techniques, phytochemical analysis, and ethical issues such as bioprospecting and conservation. Includes class discussions, student-led activities, oral presentations, and a final project. Course lab fee of $15 applies.

**BOT 4050**
**Plant Ecology**
**3**
* Prerequisite(s): BIOL 1620 with a C- or higher, and University Advanced Standing
* Corequisite(s): BOT 4055

Studies the interrelationships between plants and their environment, including population, community, and ecosystem processes. Specific topics include adaptation to abiotic factors, plant life history patterns, species interactions such as competition and herbivory; community structure, diversity, and dynamics; biome structure and distribution, and energy flow and nutrient cycles in ecosystems. Presents the impact of humans on plant communities and ecological processes.

**BOT 4055**
**Plant Ecology Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): BOT 4050

Laboratory component of Plant Ecology in which students acquire skills in the collection, analysis, and presentation of ecological data. Includes field sampling of plant populations, laboratory and greenhouse experiments, and scientific writing. Field trips, including one weekend field trip, are required. Course Lab fee of $87 for lab, transportation applies.

**BOT 4100**
**Plant Anatomy**
**4**
* Prerequisite(s): BIOL 1620 and BIOL 1625 with a minimum grade of C- in each, and University Advanced Standing

Covers the structure and development of cells, tissues and tissue systems in stems, roots, leaves, and reproductive structures in vascular plants, with emphasis on the angiosperms. Discusses primary and secondary plant body, including wood anatomy. Includes weekly laboratory. Students cannot receive credit toward graduation for both BOT 3340 and BOT 4100. Course lab fee of $25 for supplies applies.

**BOT 4200**
**Plant Systematics**
**3**
* Prerequisite(s): (BOT 2050 or BOT 2100), (BIOL 1010 or BIOL 1620), and University Advanced Standing

Covers the principles of plant classification and the techniques employed in gathering and analyzing taxonomic data. Focuses on the essentials of phylogenetic analysis in plants and on the evolutionary relationships between the major groups of vascular plants. Includes a weekly laboratory.

**BOT 4300**
**Native Trees and Shrubs of Utah**
**3**
* Prerequisite(s): BOT 2050 or BOT 2100; University Advanced Standing

Explores the diversity of woody plants of Utah, the plant communities they inhabit, and the ecological roles they play. Requires field trips; may include overnight trips as well as scheduled labs. Course Lab fee of $70 for transportation applies.

**BOT 4430**
**Plant Pathology**
**3**
* Prerequisite(s): BIOL 1610 with a minimum grade of C- and University Advanced Standing

Teaches the fundamental concepts of plant pathology. Describes plant disease symptoms and organisms that cause those diseases and methods of control and diagnosis of diseases. Includes required laboratory. Course fee of $20 applies.

**BOT 4500**
**Introduction to Grasses**
**3**
* Prerequisite(s): BOT 2100 or BOT 2050; University Advanced Standing

Discusses grasses and their relatives, grass anatomy, taxonomy, and ecology. Emphasizes identification techniques. Includes heavy lab component and required field trips. Requires student plant collection.

**BOT 4600**
**Plant Physiology WE**
**3**
* Prerequisite(s): BIOL 1620 and CHEM 1220 both with a minimum grade of C-, and University Advanced Standing
* Corequisite(s): BOT 4605

Covers the physiological processes occurring in plants. Includes experimental techniques used in the investigation of processes such as photosynthesis, water and solute transport, tissue culture, growth regulation and responses and plant hormones. Involves problem solving and critical thinking skills.

**BOT 4605**
**Plant Physiology Laboratory**
**1**
* Prerequisite(s): BIOL 1610, BIOL 1615, and University Advanced Standing
* Corequisite(s): BOT 4600

Focuses on laboratory aspects of topics in BOT 4600. Covers experimentational methods for studying plant physiological processes such as respiration, photosynthesis, mineral nutrition, transpiration and tissue-water relations. Course Lab fee of $35 applies.

**BOT 4650**
**Greenhouse Management**
**3**
* Prerequisite(s): CHEM 1220, BIOL 1620, and University Advanced Standing; BOT 1800 recommended

Gives students an in-depth understanding of greenhouse operations, infrastructure and management. Covers greenhouse structures components and controls. Studies plant growth and development within controlled environments. Informs students about plant nutrition, plant substrates, watering, and lighting strategies used in greenhouse management.

**BOT 4700**
**Plant Tissue Culture WE**
**4**
* Prerequisite(s): BIOL 1620 with a minimum grade of C- and University Advanced Standing

Teaches principles of plant micro propagation techniques. Prepares the student to design and carry out their own micro propagation systems for the cultivation of a particular plant species. Course lab fee of $60 applies.

**BOT 4800**
**Plant-Herbivore Interactions**
**3**
* Prerequisite(s): BIOL 1620 with a C- or higher, and University Advanced Standing

Studies the diversity of interactions between plants and herbivores, and how these interactions can affect population, community, and ecosystem-level dynamics. Topics include plant defenses, tritrophic interactions, plant succession, and co-evolution. Implications of plant - herbivore interactions to natural resource management are considered.

**BOT 481R**
**Botany Internship**
**1 to 5**
* Prerequisite(s): BIOL 1620 with a C- or higher, Instructor Approval, and University Advanced Standing

Allows biology majors to earn credit while obtaining practical and research experience as an intern in a government, nonprofit, private agency, or with an approved employer. Must be supervised by agency representative and faculty advisor. Department chairperson approval required and written contracts must be completed and signed. May be repeated for a maximum of 5 credits toward graduation. May be graded credit/no credit.

**BOT 489R**
**Student Research**
**1 to 4**
* Prerequisite(s): BIOL 1620, CHEM 1210, Junior or Senior Standing, Instructor Approval, and University Advanced Standing

Provides guided research studies in botany under the direction of a Biology Department faculty mentor. Includes any combination of literature reviews, original research, and/or participation in ongoing departmental projects. Involves students in the methodology of original botanical research. Requires preparation and presentation of oral and/or written reports. May culminate in results that will form the basis of the senior thesis in the major, if thesis option is chosen. May be repeated for 4 credits toward graduation.

**BOT 490R**
**Special Topics in Botany**
**1 to 4**
* Prerequisite(s): BIOL 1620 with a C- or higher, and University Advanced Standing

Explores and examines special topics relating to botany. May emphasize areas of rapid growth in botanical science or areas not covered in other courses. May be repeated for a total of 8 credits toward graduation.

**BOT 499R**
**Senior Thesis**
**1 to 2**
* Prerequisite(s): ENGL 2010, Junior standing, Instructor Approval, and University Advanced Standing

Is for students who are nearing completion of a baccalaureate degree in Botany with the thesis option. Assists students who are writing a thesis based only on library research, or those who have performed laboratory/field research under BIOL 489R or BOT 489R. Provides experience in critically analyzing published literature and, if laboratory/field research was performed, comparing research results with the scientific literature. Is supervised by an appointed faculty member of the Department of Biology. Requires a technically accurate report on one's findings. Includes the opportunity to present the research results to students, faculty and the community at a Department of Biology seminar. May be repeated once for a total of 2 credits toward graduation.

# Biotechnology (BTEC)

**BTEC 1010** **BB**
**Fundamentals of Biotechnology I Career Survey**
**3**

Explores careers in biotechnology with emphasis on central dogma of biology, DNA techniques, applications in biotech, and bioethics. Examines forensics and human cloning. Includes lab work. Course Lab fee of $26 applies.

**BTEC 2010**
**DNA Manipulation and Analysis**
**3**
* Prerequisite(s): BTEC 1010 with a minimum grade of a C; BIOL 1610 and BIOL 1615, with minimum grade of C- in each

Facilitates the mastery of lab skills relevant to DNA technology including recombinant DNA cloning, DNA gel electrophoresis, polymerase chain reaction and DNA sequencing. Course fee of $86 for lab applies.

**BTEC 2020**
**Protein Purification and Analysis**
**3**
* Prerequisite(s): BTEC 2010 with minimum grade of C

Teaches current techniques with protein production, purification, and analysis. Includes instruction and practice with polyacrylamide gel electrophoresis (PAGE), chromatography, western blot, and FPLC analysis. Course fee of $107 for lab applies.

**BTEC 2030**
**Cell Culture Techniques**
**2**
* Prerequisite(s): BIOL 1615 with a minimum grade of a "C"

Teaches basics of eukaryote cell culture. Includes handling, storage, and maintenance of mammalian stocks. Emphasizes media preparation and sterile techniques. Includes in vitro labeling and transfection. Course fee of $195 for lab applies.

**BTEC 2040**
**Advanced Nucleic Acid Laboratory**
**3**
* Prerequisite(s): BTEC 2010 with minimum grade of C

Teaches advanced nucleic acid modification and analysis methods. Includes site-directed mutagenesis, DNA sequencing, and RNA analysis methods, high-resolution DNA melting for genotyping and real-time PCR to quantitate DNA in samples. Incorporates methods to mutate 2 genes using CRISPR gene editing technology followed by RT-PCR to analyze gene expression (RNA isolation, creating cDNA, followed by real-time PCR).

**BTEC 3300 (Cross-listed with: CHEM 3300)**
**Biomolecular Modeling and Simulations**
**4**
* Prerequisite(s): CHEM 3600 or BIOL 3600, and University Advanced Standing

Introduces students to the field of molecular modeling and simulations and to the wide range of problems that can be tackled using computational methods. Focuses on biomolecular simulations and computer-aided drug discovery. Emphasizes the connection between structure, dynamics, and function. Teaches application of algorithmic thinking to solving complex problems. Develops practical skills needed to perform simulations and analyze the results. Develops understanding of the inherent approximations and limitations of the methods for adequate assessment of modeling results. Covers topics such as molecular visualization and rendering, molecular dynamics simulations, and computer-aided drug discovery through virtual screening and small molecule docking.

**BTEC 481R**
**Biotechnology Internship**
**1 to 10**
* Prerequisite(s): BIOL 1610 with a minimum grade of C-, junior standing in Biotechnology B.S. program, and instructor approval

Allows biotechnology majors to earn credit while obtaining practical and research experience as an intern in a government, nonprofit, private agency, or with an approved employer. Must be supervised by agency representative and faculty advisor. Department chairperson approval required and written contracts must be completed and signed. May be repeated for a maximum of 10 credits. May be graded credit/no credit.

**BTEC 489R**
**Student Research**
**1 to 4**
* Prerequisite(s): BIOL 1610, CHEM 1210, BTEC 2010, Junior or Senior Standing, instructor permission, and University Advanced Standing

Provides guided research studies in biotechnology under the direction of a Biology Department mentor. Includes any combination of literature reviews, original research, and/or participation in ongoing departmental projects. Involves students in the methodology of original biology research. Requires preparation and presentation of oral and/or written reports. May culminate in results that will form the basis of the senior thesis in the major, if thesis option is chosen. May be repeated for 8 credits toward graduation.

**BTEC 490R**
**Special Topics in Biotechnology**
**1 to 4**
* Prerequisite(s): BIOL 1610 with minimum grade of C-, and University Advanced Standing

Explores and examines special topics relating to the field of biotechnology. Emphasizes areas of rapid growth in biotechnology or current importance to society. May be repeated for a maximum of 18 credits toward graduation.

**BTEC 494R**
**Student Seminar WE**
**2**
* Prerequisite(s): BTEC 2010 with minimum grade of C and University Advanced Standing

Requires students to research scientific literature, write a research paper, give oral presentations, and lead discussions on assigned biotechnology topics in specific areas of current research in biotechnology. May be repeated for up to 4 credits toward graduation.

**BTEC 499R**
**Senior Thesis**
**1 to 2**
* Prerequisite(s): ENGL 2010, junior standing, instructor permission, and University Advanced Standing

Is for students who are nearing completion of a baccalaureate degree in Biotechnology with the thesis option. Assists students who are writing a thesis based only on library research, or those who have performed laboratory/field research under BTEC 499R. Provides experience in critically analyzing published literature and, if laboratory/field research was performed, comparing research results with the scientific literature. Is supervised by an appointed faculty member of the Department of Biology. Requires a technically accurate report on one's findings. Includes the opportunity to present the research results to students, faculty and the community at a Department of Biology seminar and/or other appropriate venues (e.g., conferences). May be repeated for a maximum of 2 credits toward graduation.

# Culinary Arts (CA)

**CA 1000**
**Culinary Basics**
**3**

Designed for hospitality management majors and as elective credit for other business majors. Explains the techniques and procedures of quality and quantity food production. Studies the selection and preparation of major food products. Provides an extensive set of basic and complex recipes for practice. Includes lectures, lab, visits of guest chefs, and field trips. Completers should be prepared to enter the working field as a prep cook. Course fee of $150 for materials applies.

**CA 1120**
**Cooking Skills Development**
**5**
* Prerequisite(s): Food Handlers permit or ServSafe Certification. Acceptance into the Culinary Arts Institute.

Covers basic food service skills in a commercial kitchen environment. Stresses the use of standardized recipes and procedures. Introduces basic ingredients, stocks, soups, mother sauces, protein fabrication, cooking methods and breakfast items. Includes daily end product assessment. Emphasizes sanitary food handling practices and professional work habits.Course fee of $750 for materials and equipment applies.

**CA 1140**
**Professional Dining Room Services**
**1**
* Prerequisite(s): Matriculation and Acceptance into the Culinary Arts Institute

Covers the key aspects and responsibilities of table servers in different styles of operations. Covers taking reservations, greeting guests, basic table settings, formal and specialized settings, food and beverage service, selling menu specials, dealing with closing checks, dealing with customer complaints, emergency procedures, and the use of a Point of Sale system.

**CA 1150**
**Nutrition and Food Service**
**3**

Provides an understanding of how and why the relationship between food and health has moved into sharp focus. This course will trace the change in dietary patterns that have been noted by the food service industry. This course has been designed to help meet the need of developing adequate healthful food programs. You will learn about the changes in eating attitudes and be able to define the various responsibilities of the food service industry. You will learn how to identify whether a market exists for a healthful food program and how to plan and manage such a program. The course will also explore nutrients and their food sources; physiological and metabolic aspects of nutrient functions; individual requirements; food choices and selection; prevention and treatment of common nutritional-related disease; along with contemporary and controversial issues.

**CA 1160**
**Culinary Math**
**1**
* Prerequisite(s): Matriculation and Acceptance into the Culinary Arts Institute

Allows culinary professionals to utilize all the tools necessary to manage daily food service operations for maximum efficiency and profitability. Reviews basic math functions then expands into recipe conversion, yields, recipe costing, and menu costing.

**CA 1170**
**Pastry and Baking Skills**
**5**
* Prerequisite(s): Food Handlers permit or ServSafe Certfication. Acceptance into the Culinary Arts Institute.

Covers basic baking and pastry skills in a commercial kitchen environment. Stresses the use of standardized recipes and procedures. Covers baking terms, equipment and ingredients. Includes daily end product critiquing. Covers yeast-leavened breads, quick breads, pies and tarts, custards, creams, cookies, brownies, pâte à choux, and meringues. Introduces nutritional and specialty diet concerns in baking and pastry. Emphasizes sanitary food handling practices and professional work habits.Course fee of $750 for materials and equipment applies.

**CA 1180**
**Professional Kitchen Garde Manger**
**5**
* Prerequisite(s): CA 1120, Food Handlers permit or ServSafe Certification

Covers preparation of cold food items in a commercial kitchen environment. Covers salad greens, tossed, compound and composed salads, sandwiches, dressings & sauces, cold soups, display platters, assorted forcemeats, savory mousse, preservation techniques, cold hors d'oeuvres, cold appetizers, cheese and centerpieces.Course fee of $750 for materials and equipment applies.

**CA 1230**
**Professional Kitchen I Cooking**
**5**
* Prerequisite(s): CA 1120

Covers advanced food service skills in a commercial kitchen environment. Introduces center of plate foods, starches, vegetables, and compound sauces. Advances comprehension of ingredients, stocks, soups, sauces, protein fabrication, cooking methods, flavor and taste development . Includes daily end product assessment. Emphasizes sustainability, sanitary food handling practices and professional work habits.Course fee of $750 for materials and equipment applies.

**CA 1260**
**Culinary Spanish**
**1**
* Prerequisite(s): Matriculation and Acceptance into the Culinary Arts Institute

Designed to assist food service employers, managers, and workers to effectively communicate to an increasingly Spanish-speaking work force. Introduces short phrasing to assist in basic communication.

**CA 1310**
**Purchasing and Storeroom Management**
**3**
* Corequisite(s): CA 1120 and CA 1170

Teaches principles and practices concerning purchasing of foods, supplies, and materials for a modern full-service food service operation. Emphasizes buying, writing specifications, determining needs, and controlling quality.

**CA 1320**
**Culinary Management**
**3**
* Prerequisite(s): Matriculation and Acceptance into the Culinary Arts Institute

Focuses on employee management and supervision concepts used in the food service field. Includes instruction on writing a professional resume.

**CA 1480**
**Sanitation and Table Service**
**3**

Teaches effective food and beverage service management in outlets ranging from cafeterias and coffee shops to room service, banquet areas, and high-check-average dining rooms. Presents basic service principles while emphasizing the special needs of guests. Explains effective sanitation management to achieve high standards that will keep customers coming back. Includes lecture, film, and tapes. Develops an entry-level working knowledge of serving food and beverage.

**CA 1490**
**Food Service Sanitation**
**1**
* Prerequisite(s): Matriculation and Acceptance into the Culinary Arts Institute

Explains effective sanitation measures that will keep customers and employees safe. Using the ServSafe Program from the National Restaurant Association this course meets the state wide requirements for food service employee's sanitation and safety training.

**CA 2120**
**Professional Kitchen II Restaurant**
**5**
* Prerequisite(s): CA 1230

Focuses on practical applications of all Culinary Arts courses by running Restaurant Forte. Enhances knowledge of cooking methods, mise en place, flavor building, soups, salads, entrees and desserts through regional and international cuisines.Course fee of $750 for materials, equipment applies.

**CA 2130**
**Advanced Pastry Baking**
**5**
* Prerequisite(s): CA 1170

Covers advanced baking and pastry skills in a commercial kitchen environment. Covers cakes, icing, decoration of cakes, petit fours, dessert sauces, laminated doughs, and fillings and toppings. Introduces the use and role of value added dessert items, and banquet and catering dessert requirements. Emphasizes sanitary food handling practices and professional work habits.Course fee of $750 for materials and equipment applies.

**CA 2430**
**Menu Facilities Design and Beverage Management**
**3**
* Prerequisite(s): CA 1310

Introduces menu design. Explores the relationship between menus and restaurant design for both production and service areas. Explains fundamental principles and techniques for planning menus for different operation styles. Provides practical experience and approaches in beverage management and service. Emphasizes legal and moral responsibilities of serving alcoholic beverages. Teaches understanding, service, and storage of beverages in full service restaurants.

**CA 2450**
**Menu Design**
**2**
* Prerequisite(s): CA 1310

Introduces menu design. Explores the relationship between menus and restaurant design for both production and service areas. Explains fundamental principles and techniques for planning menus for different operation styles.

**CA 2750**
**Baking**
**3**
* Prerequisite(s): Instructor Approval

Teaches intermediate baking skills. Includes lectures, demonstrations, and daily hands-on activities. Emphasizes quality products, methods/ techniques and formula development.

**CA 2760**
**Pastry**
**5**
* Prerequisite(s): Instructor approval

Combines patisserie skills learned in other culinary arts classes to develop advanced skills in the production of fine baked products. Stresses the use of standardized recipes and procedures. Includes cakes, tortes, pastries, chocolate, and desserts. Provides daily end-product critiquing. Course fee of $250 for materials applies.

**CA 282R**
**Culinary Arts Internship**
**1 to 8**
* Prerequisite(s): Culinary Arts Institute Director Approval

Provides a transition from school to work where learned theory is applied to actual practice through a meaningful on-the-job experience commensurate with classroom instruction. May be repeated for up to eight hours toward graduation in the Culinary Arts degree. May be graded credit/no credit.

**CA 296R**
**Culinary Arts Seminar**
**1 to 3**
* Prerequisite(s): Instructor Approval

Provides short courses, workshops, and special programs in Culinary Arts topics. Repeatable for up to three credits toward graduation.

**CA 298R**
**ACF**
**1**

For Culinary Arts students who are interested in participating with a national professional association (American Culinary Federation). Prepares students to participate in local, state, and national competitions. May require payment of membership dues. A maximum of four credits may be applied toward graduation.

**CA 299R**
**VICA**
**1**

For Culinary Arts students who are interested in participating with a national vocational student organization (Vocational Industrial Clubs of America) that develops social awareness, civic responsibility, vocational and leadership skills through participation in educational, vocational, civic, recreational, and social activities. Prepares students to participate in local, state, and national competitions. May require payment of membership dues. A maximum of four credits may be applied toward graduation.

**CA 481R**
**Cooperative Work Experience**
**2 to 9**
* Prerequisite(s): Approval of School of Business Career and Corporate Manager and University Advanced Standing

For upper division students working towards a Bachelor of Science Degree in Hospitality Management with an emphasis in Food and Beverage. Provides opportunities to apply classroom theory on the job. Students work in a restaurant kitchen while enrolled at the college. Credit is determined by the number of hours a student works during the semester. Completers meet individually set goals. May apply 6 credits toward a Bachelor of Science Degree in Hospitality Management. May be graded credit/no credit.

# Cabinetry and Archit Woodwork (CAW)

**CAW 100R**
**Survey of Working with Wood**
**2**

An introductory course for those interested in working with wood. Students will experience the satisfaction of making a piece of furniture with individualized help from the instructor. Includes "hands on" practice with woodworking equipment and instruction in methods to design, build, and finish a wood project. May be repeated up to four times for credit. Course fee of $15 for materials, equipment applies.

**CAW 1100**
**Artistic Wood Design**
**2**

Explores form, functions, and utility of wood products through students' design and creation of projects in the wood lab. Provides opportunities to design and create a unique piece of woodwork.

**CAW 1130**
**Residential Cabinetry**
**4**

Studies cabinetmaking methods including joinery, construction, gluing, and clamping. Includes building a set of residential cabinets. Introduces hand and portable electric and air tools. Covers tool care and minor repairs. Stresses functions, selection, maintenance, and safety. Course fee of $15 for materials, equipment applies.

**CAW 1140**
**Millworking and Safety Shop I**
**5**

A lab for CAW students. Teaches fundamentals of woodworking machines and standard millwork operations. Studies correct construction techniques. Safety is taught the first 15 hours and stressed throughout the course. Course fee of $25 for materials, equipment applies.

**CAW 114A**
**Millworking and Safety Shop I**
**2.5**

Laboratory for Cabinetry students. Covers half of CAW 1140. Teaches fundamentals of woodworking machines and standard millwork operations. Studies correct construction techniques. Teaches safety the first 15 hours and stressed throughout the course. Course fee of $15 for materials, equipment applies.

**CAW 114B**
**Millworking and Safety Shop I**
**2.5**

Laboratory for Cabinetry students. Covers half of CAW 1140. Teaches fundamentals of woodworking machines and standard millwork operations. Studies correct construction techniques. Teaches safety the first 15 hours and stressed throughout the course. Course fee of $15 for materials, equipment applies.

**CAW 1150**
**Design Drafting and Billing**
**3**

For CAW majors and other interested community members. Teaches detailed drawing concepts, writing bills of materials, and material cost estimates. Uses all elements of good design.

**CAW 1170**
**Finish Technology**
**2**

For CAW majors and other interested community members. Studies types of stains, fillers and finishes, and techniques to properly prepare wood. Teaches hand and spray painting. Includes lab experience. Course fee of $15 for materials applies.

**CAW 1210**
**Cabinetmaking Materials and Hardware**
**1**

Emphasizes characteristics of wood, plastic laminates, plywoods, and particle boards. Discusses proper use and residential hardware. Covers specifications, types, selection, and installation.

**CAW 1240**
**Millworking Shop II**
**5**

A second semester shop course for CAW students and interested community members. Teaches the design and construction of more difficult millworking projects. Studies advanced jointers, finishing techniques, and fastening devices. Stresses safety. Course fee of $25 for materials, equipment applies.

**CAW 124B**
**Millworking Shop II**
**2**

A second semester shop course for CAW students and interested community members. Covers half of CAW 1240. Teaches the design and construction of more difficult Millworking projects. Studies advanced jointers, finishing techniques, and fastening devices. Stresses safety. Course fee of $15 for materials, equipment applies.

**CAW 1250**
**Drafting and Computer Applications for Cabinetmakers**
**4**

Emphasizes design, purpose, function, appearance, materials, and construction for quality cabinetmaking. Covers efficient timesaving methods. Teaches material cost estimating. Teaches basic CNC software. Uses computer software Cabinet Vision& Master CAM. Course fee of $15 for materials, software applies. Lab access fee of $15 for computers applies.

**CAW 140R**
**Millwork Technology**
**4**

Teaches the techniques and skills necessary to construct quality furniture using current technology and processes. Stresses safety, machine and tool usage, joinery, and operations. Each semester the joinery and operations will differ and increase in difficulty depending on the required project. May be repeated for a maximum of 16 credits toward graduation.

**CAW 2250**
**Computer Aided Manufacturing for Woodworking**
**4**

Teaches how to use computer numerical controlled "CNC" machines to aid in the manufacturing of wood products. Includes machine setup, tooling, software usage, and parts production. Uses CAM software.

**CAW 2300**
**Counter Top Technology**
**3**

Explores methods used to produce different types of counter-tops. Studies high pressure laminates, solid wood, solid surface, tile, and stone. Includes field trips to counter-top shops. Course fee of $25 for materials, equipment applies.

**CAW 2310**
**Cabinetry Math**
**2**

Covers math used in cabinetmaking. Includes fractions, decimals, percents, interest, volume, and metrics. Studies special trade formulas. Students receive instruction through structured situations to cope with the special problems required in the woodworking industry.

**CAW 2340**
**Millworking Shop III**
**5**

Custom cabinetmaking shop. Practice in making and setting up custom shaper knives, doing custom flat and curved veneer and lamination work. Includes lathe work on the duplicator attachments. Completers should be able to enter the field as a cabinet and architectural woodwork trainee. Course fee of $25 for materials, equipment applies.

**CAW 234A**
**Millworking Shop III**
**2.5**

Custom cabinetmaking shop. Covers half of CAW 2340. Practice in making and setting up custom flat and curved veneer and lamination work. Includes lathe work on the duplicator attachments. Completers should be able to enter the field as a cabinet and architectural woodwork trainee. Course fee of $15 for materials, equipment applies.

**CAW 234B**
**Millworking Shop III**
**2.5**

Custom cabinetmaking shop. Covers half of CAW 2340. Practice in making and setting up custom shaper knives, doing custom flat and curved veneer and lamination work. Includes lathe work on the duplicator attachments. Completers should be able to enter the field as a cabinet and architectural woodwork trainee. Course fee of $15 for materials, equipment applies.

**CAW 2430**
**Commercial Cabinetry Technology**
**4**

Studies zoning, shop flow, and production set. Includes field trip to commercial cabinet shop. Teaches set up of machines used in the industry. Course fee of $15 for materials, equipment applies.

**CAW 2440**
**Millworking Shop IV**
**5**

A culminating architectural woodworking shop. Students build projects demonstrating advanced skills learned in previous shop courses. Course fee of $25 for materials, equipment applies.

**CAW 244B**
**Millworking Shop IV**
**2**

Culminates previous architectural woodworking courses. Covers half of CAW 2440. Requires advanced skills, learned previously, to complete projects. Course fee of $15 for materials, equipment applies.

**CAW 2450**
**Machine Maintenance and Upkeep**
**2**

Studies the maintenance and upkeep of machines and tools used in the woodworking industry. Focuses on sharpening, routine maintenance, machine set-up, adjustments, and diagnosing problems.

**CAW 281R**
**Cooperative Work Experience**
**1 to 8**
* Corequisite(s): CAW 285R the first time only

For CAW majors. Provides paid, on-the-job work experience in the student's major. Work experience, the related class, and enrollment are coordinated by the Cooperative Coordinator. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and oral presentations. Provides experience in writing and completing individualized work objectives that improve present work performance. May be repeated twice for credit. May be graded credit/no credit.

**CAW 285R**
**Cooperative Correlated Class**
**1**
* Corequisite(s): CAW 281R the first time only

For CAW majors. Identifies on-the-job problems and provides remediation of those problems through in-class discussion and study. Includes the study of identifying and maximizing service opportunities. Students register for this class with approval of the Cooperative Coordinator. Includes lectures, guest speakers, video tapes, role playing, case analysis, oral presentations, and written assignments. Completers should be better able to perform in their field of work or study. May be repeated twice for credit.

**CAW 299R**
**Skills USA**
**1**

Supports and facilitates the goals and objectives of Skills USA pre-professional student organization that develops social awareness, civic, recreational, and social activities. Students may participate in local, state, and national contests. May be repeated for a maximum of 2 credits toward graduation.

# Chemistry (CHEM)

**CHEM 1010** **PP**
**Introduction to Chemistry**
**3**
* Prerequisite(s): MAT 1000 or above with a C- or better, or a placement score equivalent to MATH 1050 or above
* Corequisite(s): CHEM 1015 (optional)

Assumes no previous knowledge of chemistry. Presents the foundations of chemistry to students who need preparation for further study in chemistry as well as to students who only want to take an introductory course. Covers chemical measurements, atomic structure, formulas, chemical reactions and equations, chemical nomenclature, stoichiometry, molecules and chemical bonding, gas laws, liquids, solids, solutions, acids and bases.

**CHEM 1015**
**Introduction to Chemistry Lab**
**1**
* Corequisite(s): CHEM 1010

A lab designed to accompany CHEM 1010. Provides practical experience to support chemistry foundational learning. Emphasizes chemical measurements, atomic structure, formulas, chemical reactions and equations, chemical nomenclature, stoichiometry, molecules and chemical bonding, gas laws, liquids, solids, solutions, acids and bases. Course lab fee of $31 applies.

**CHEM 1110** **PP**
**Elementary Chemistry for the Health Sciences**
**4**
* Prerequisite(s): MAT 1000 or higher with a C- or better, or STAT 1040 with a C- or better, or placement score into MATH 1050 or higher

Introduces the fundamentals of chemistry to students in the health sciences. Covers chemical measurements and calculations, atomic structure, chemical bonding, chemical reactions, states of matter, solutions, chemical equilibrium, acid-base systems, and introduces organic chemistry.

**CHEM 1115**
**Elementary Chemistry Laboratory**
**1**
* Prerequisite(s) or Corequisite(s): CHEM 1010 or CHEM 1110

Introduces inorganic laboratory experiments including density, precipitation, determination of empirical formulas, gas laws and acid-base reactions.Course Lab fee of $27 applies.

**CHEM 1120**
**Elementary Organic Bio-Chemistry**
**4**
* Prerequisite(s): CHEM 1110

Introduces organic and biochemistry for non-chemistry majors entering nursing and other allied health fields such as medical technology, physical therapy, nutrition, and environmental technology. Studies the nomenclature of organic compounds, organic functional groups and their reactivities, stereochemistry, major biomolecules and their metabolism, enzymes, chemical communications, and chemistry of heredity. May also be used to prepare for organic chemistry (CHEM 2310 and 2320).

**CHEM 1125**
**Elementary Organic Bio-Chemistry Laboratory**
**1**
* Prerequisite(s): CHEM 1110 and CHEM 1115
* Corequisite(s): CHEM 1120

An introductory organic bio-chemistry laboratory class for non-chemistry majors who need a laboratory to accompany Elementary Organic Bio-Chemistry (CHEM 1120). Explores identifications and reactions of organic functional groups and conducts experiments with biomolecules. Course Lab fee of $80 applies.

**CHEM 1210** **PP**
**Principles of Chemistry I**
**4**
* Prerequisite(s): MATH 1080, MATH 1050, MATH 1055 or any higher MATH course with a C- or better, or appropriate placement scores for MATH 1060 or higher. Also, it is highly recommended to have prior chemistry experience in high school or in CHEM 1010
* Corequisite(s): CHEM 1215

First semester of a full-year course primarily for students in the physical and biological sciences and engineering. Covers fundamentals of chemistry including atoms, molecules, reactions, stoichiometry, chemical bonding, thermochemistry, and gas laws.

**CHEM 1215**
**Principles of Chemistry I Laboratory**
**1**
* Corequisite(s): CHEM 1210

Primarily for students in the physical and biological sciences and engineering. Introduces laboratory safety and chemical waste disposal practices. Teaches techniques of using standard laboratory equipment. Shows how to record laboratory data and prepare laboratory reports. Experiments follow topics in CHEM 1210. Course Lab fee of $26 applies.

**CHEM 1220** **PP**
**Principles of Chemistry II**
**4**
* Prerequisite(s): CHEM 1210 with a grade of C- or higher
* Corequisite(s): CHEM 1225

Continuation of Chemistry 1210. Primarily for students in the physical and biological sciences and engineering. Covers intermolecular interactions, properties of solutions, kinetics, equilibria, thermodynamics, and electrochemistry.

**CHEM 1225**
**Principles of Chemistry II Laboratory**
**1**
* Prerequisite(s): CHEM 1215 with a C- or better
* Corequisite(s): CHEM 1220

Is designed for the physical and biological sciences and engineering. Teaches intermolecular interactions, properties of solutions, kinetics, equilibria, thermodynamics, and electrochemistry. Follows CHEM 1215 and emphasizes topics from CHEM 1220. Course Lab fee of $42 applies.

**CHEM 1250**
**Chemistry Cornerstone- Research and Careers**
**1**

Explores scientific literature, culture and careers. Teaches college success strategies for STEM fields to support students interested in a STEM major.

**CHEM 1260**
**Chemistry Cornerstone- Ethics**
**1**

Explores scientific ethics. Teaches college success strategies for STEM fields to support students interested in a STEM major.

**CHEM 2310**
**Organic Chemistry I**
**4**
* Prerequisite(s): CHEM 1220 with a grade of C- or higher
* Corequisite(s): CHEM 2315

The first in a series of two organic chemistry classes for students majoring in science and for those interested in careers in medicine, dentistry, veterinary science, and pharmacy, who must complete two semesters of organic chemistry. Teaches bonding and structures of organic molecules. Explores the relationship between structure and reactivity of organic functional groups. Introduces the concepts of nomenclature, stereochemistry, and reaction mechanism.

**CHEM 2315**
**Organic Chemistry I Laboratory**
**1**
* Prerequisite(s): CHEM 1220, CHEM 1225
* Corequisite(s): CHEM 2310

The first of a series of two laboratory courses to accompany CHEM 2310 and 2320. For students majoring in science and those interested in careers in medicine, dentistry, veterinary science, and pharmacy. Introduces safety in organic chemistry lab and chemical waste disposal. Teaches basic separatory, purification, and analytical techniques in organic chemistry such as crystallization, melting points, distillation and chromatography. Introduces organic synthesis using simple organic reactions. Introduces natural product isolation. Course Lab fee of $88 applies.

**CHEM 2320**
**Organic Chemistry II**
**4**
* Prerequisite(s): CHEM 2310 & CHEM 2315 with a C- or higher
* Corequisite(s): CHEM 2325

Introduces spectroscopic techniques used in identification of organic compounds. Teaches carbon-carbon bond formation strategies. Introduces the concept of aromaticity. Teaches free radicals and their effects on environment and life. Surveys biologically important organic molecules such as carbohydrates, proteins, lipids, and nucleic acids.

**CHEM 2325**
**Organic Chemistry II Laboratory**
**1**
* Prerequisite(s): CHEM 2315
* Corequisite(s): CHEM 2320

The second of a series of two laboratory courses to accompany CHEM 2310 and 2320. For students majoring in science and those interested in careers in medicine, dentistry, veterinary science, and pharmacy. Provides hands-on experience in organic synthesis using a series of single and multistep transformations. Teaches identification of products of reactions using spectroscopic techniques. Explores biologically important organic molecules. Course Lab fee of $88 applies.

**CHEM 3000**
**Analytical Chemistry**
**2**
* Prerequisite(s): CHEM 1220, CHEM 1225 and Advanced University Standing
* Corequisite(s): CHEM 3005

For Chemistry majors and others interested in the basic principles of chemical measurement. Studies principles of quantitative analysis, stoichiometry, equilibrium theory, and volumetric analysis. Introduces error analysis and instrumental methods, especially electrochemistry, spectrophotometry, chromatography, and mass spectrometry

**CHEM 3005**
**Analytical Chemistry Laboratory**
**2**
* Prerequisite(s): CHEM 1220, CHEM 1225, and University Advanced Standing
* Corequisite(s): CHEM 3000

For Chemistry majors and others interested in the basic principles of chemical measurement. Laboratory companion to CHEM 3000. Involves conducting experiments in quantitative and qualitative analysis, including volumetric and gravimetric analysis. Also, students will conduct experiments in introductory instrumental methods, including experiments in spectrophotometry, electrochemistry, and chromatography. Course Lab fee of $146 applies.

**CHEM 3020**
**Environmental Chemistry**
**3**
* Prerequisite(s): CHEM 1225 and University Advanced Standing

Studies the chemistry of soil, ground water, hazardous waste, and the atmosphere. Explores current environmental concerns and issues.

**CHEM 3025**
**Environmental Chemistry Laboratory**
**1**
* Prerequisite(s): CHEM 1225 and University Advanced Standing

Laboratory course which supports CHEM 3020, Environmental Chemistry. Introduces laboratory, sampling, and data analyses techniques used in environmental laboratories. Covers air sampling, and soil and water analysis using a variety of instruments and techniques.

**CHEM 3060**
**Physical Chemistry I**
**4**
* Prerequisite(s): CHEM 1250, CHEM 1260, PHYS 2220, and University Advanced Standing
* Corequisite(s): CHEM 3065

Offers an advanced discussion of the laws of thermodynamics and chemical thermodynamics. Applies the laws to chemical reactions and equilibrium. Covers changes of state, including phase diagrams. Discusses real gases and real solutions. Introduces electrochemistry and chemical kinetics.

**CHEM 3065**
**Physical Chemistry I Lab**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): CHEM 3060

Demonstrates physical chemistry experiments exploring principles and concepts introduced in CHEM 3060. Teaches design and execution of physical chemistry experiments and interpretation of the observations, as well as application of physical chemistry to solving physical chemistry problems. Course lab fee of $75 applies.

**CHEM 3070**
**Physical Chemistry II**
**4**
* Prerequisite(s): CHEM 3060, MATH 2210 and University Advanced Standing
* Corequisite(s): CHEM 3075

Provides an advanced discussion of quantum mechanics, including solutions to the Schrodinger wave equation. Connects quantum mechanics with observables, including spectroscopy.

**CHEM 3075**
**Physical Chemistry II Lab**
**1**
* Prerequisite(s): CHEM 3060, CHEM 3065, and University Advanced Standing
* Corequisite(s): CHEM 3070

Demonstrates physical chemistry experiments exploring principles and concepts. Provides opportunity to design and execute physical chemistry experiments and interpretation of the observations. Applies physical chemistry to solving physical chemistry problems.

**CHEM 3080**
**Physical Chemistry III**
**3**
* Prerequisite(s): CHEM 3070 and University Advanced Standing

Teaches the fundamentals of statistical mechanics and chemical kinetics, as well as the fundamentals of the specialized topics of the physical chemistry of chemical symmetry, computational chemistry, NMR spectroscopy, and electrochemistry.

**CHEM 3100**
**Advanced Inorganic Chemistry**
**4**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): CHEM 3000

Reviews major trends across the periodic table. Surveys basic structure, bonding, and oxidation states of the elements. Introduces inorganic stereochemistry including coordination compounds.

**CHEM 3115**
**Advanced Inorganic Chemistry Lab**
**1**
* Prerequisite(s): CHEM 3005 and University Advanced Standing
* Corequisite(s): CHEM 3100

Explores principles and concepts introduced in CHEM 3100. Teaches design and execution of inorganic chemistry experiments and interpretation of the observations. Uses application of inorganic chemistry to solving inorganic chemistry problems. Course Lab fee of $130 applies.

**CHEM 3300 (Cross-listed with: BTEC 3300)**
**Biomolecular Modeling and Simulations**
**4**
* Prerequisite(s): CHEM 3600 or BIOL 3600, and University Advanced Standing

Introduces students to the field of molecular modeling and simulations and to the wide range of problems that can be tackled using computational methods. Focuses on biomolecular simulations and computer-aided drug discovery. Emphasizes the connection between structure, dynamics, and function. Teaches application of algorithmic thinking to solving complex problems. Develops practical skills needed to perform simulations and analyze the results. Develops understanding of the inherent approximations and limitations of the methods for adequate assessment of modeling results. Covers topics such as molecular visualization and rendering, molecular dynamics simulations, and computer-aided drug discovery through virtual screening and small molecule docking.

**CHEM 3600 (Cross-listed with: BIOL 3600)**
**Biological Chemistry**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): CHEM 2320

Introduces principles of the chemical processes that define living organisms. Covers structure and function of proteins, carbohydrates, lipids and nucleic acids. Explores metabolic pathways, biosynthesis, enzymatics, thermodynamics, membrane dynamics and related processes within a living cell. Emphasizes molecular mechanisms of reactions and their outcome.

**CHEM 3605 (Cross-listed with: BIOL 3605)**
**Biological Chemistry Lab**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): BIOL 3600

Introduces laboratory techniques in biochemistry. Studies methods and theory behind purification of proteins and nucleic acids including chromatography and electrophoresis. Uses methods in assessing enzyme activity and kinetics and protein structure analysis. Includes analysis and manipulation of DNA and RNA. Course Lab fee of $145 applies.

**CHEM 3620 (Cross-listed with: BIOL 3620)**
**Biological Chemistry II**
**3**
* Prerequisite(s): (CHEM 3600 or BIOL 3600) and University Advanced Standing

Is a continuation of CHEM 3600. Teaches in-depth the biochemistry of molecular and cell biology processes. Explores the topics of molecular information flow and signaling. Examines current understanding in biochemical methods and ideas beyond those discussed in Biochem I.

**CHEM 3800 (Cross-listed with: ENVT 3800, PHYS 3800)**
**Energy Use on Earth**
**3**
* Prerequisite(s): (PHYS 1010 or PHSC 1000 or CHEM 1010 or GEO 1010 or GEO 2040 or METO 1010) and (MATH 1050 or MATH 1055) and University Advanced Standing

Covers the science of energy production and consumption. Quantitatively analyzes various methods of energy production, distribution, and end use in all sectors of our society, including transportation, residential living, and industry. Examines the impacts of our energy consumption on the environment and prospects for alternative energy sources. Intended for science majors interested in energy use in society or in an energy related career, and for students in other majors who feel that a technical understanding of energy use will help them to understand and mitigate its impact in our society.

**CHEM 4000**
**Instrumental Analysis WE**
**2**
* Prerequisite(s): CHEM 3000, and University Advanced Standing
* Corequisite(s): CHEM 4005

Covers modern instrumental methods and basic principles of instrumentation. Includes spectroscopic and chromatographic analysis.

**CHEM 4005**
**Instrumental Analysis Laboratory**
**2**
* Prerequisite(s): CHEM 3000, CHEM 2325, and University Advanced Standing
* Corequisite(s): CHEM 4000

Experiments in selected areas of instrumental methods of analysis. Covers both quantitative and qualitative methods of analysis. Includes introductory laboratory exercises and laboratories using advanced sample preparation and instrumental analysis techniques. Involves the independent creation and implementation of an advanced laboratory exercise. Course Lab fee of $333 applies.

**CHEM 4030**
**Radiochemistry**
**3**
* Prerequisite(s): CHEM 1220, MATH 1210, and University Advanced Standing

Introduces nuclear and radiochemistry, stressing the fundamentals of nuclear structure, systematics of nuclear decay, the detection and measurement of radiation, radiation protection, and the role of nuclear chemistry in medical, environmental and scientific applications. Discusses nuclear fuel cycles and nuclear waste problems.

**CHEM 4200 (Cross-listed with: BIOL 4200, GEO 4200, PHYS 4200)**
**Teaching Methods in Science**
**3**
* Prerequisite(s): Acceptance into secondary education program, senior-level standing, instructor approval, and University Advanced Standing

Examines objectives, instructional methods and curriculum for teaching science in the secondary school. Includes developing, adapting, evaluating, and using strategies and materials for teaching biological and physical sciences, appropriate both to the special needs of the learners and the special characteristics of science discipline.

**CHEM 4600**
**Structure Determination**
**3**
* Prerequisite(s): CHEM 2320, and University Advanced Standing
* Corequisite(s): CHEM 4605
* Prerequisite(s) or Corequisite(s): CHEM 3060

Explores integrated topics in organic, inorganic, physical, solid-state, and biochemistry using advanced theory. Enables hands-on use and manipulation of state-of-the-art instrumentation. Examines primary chemistry literature, and involves substantial problem solving using spectroscopic and spectrometric data.

**CHEM 4605**
**Structure Determination Laboratory**
**1**
* Prerequisite(s): CHEM 2320 and University Advanced Standing
* Corequisite(s): CHEM 4600

Exposes students to integrated topics in organic, inorganic, physical, solid-state, and biochemistry using advanced theory. Enables hands-on use and manipulation of state-of-the-art instrumentation. Immerses students in the primary chemistry literature, and involves substantial problem solving using spectroscopic and spectrometric data. Taken as a corequiste with CHEM 4600. Course lab fee of $204 applies.

**CHEM 4800**
**Pharmacology**
**3**
* Prerequisite(s): (CHEM 3600 or BIOL 3600) and University Advanced Standing

Explores the science behind pharmacological therapeutics. Examines general considerations such as pharmacokinetics, drug metabolism, and toxicology. Surveys focused topics including drugs and drug targets for a wide variety of diseases.

**CHEM 482R**
**Chemistry Internship**
**1 to 4**
* Prerequisite(s): CHEM 2320, a minimum GPA of 3.0, Departmental approval of the internship proposal, and University Advanced Standing

Provides supervised, practical, and research experience for students preparing for careers in chemistry. May be repeated for a maximum of 6 credit hours as per school standards. May be graded credit/no credit.

**CHEM 489R**
**Undergraduate Research in Chemistry**
**1 to 4**
* Prerequisite(s): Departmental approval and University Advanced Standing

Conducts research on a project determined by the student jointly with a chemistry faculty and approved by the Chemistry Department Chair. Emphasizes experimental technique, data collection and analysis, and preparation of research for presentation to an audience of peers. May be repeated for a maximum of 6 credits toward graduation.

**CHEM 491R**
**Advanced Topics in Inorganic Chemistry**
**3**
* Prerequisite(s): CHEM 1220, instructor's permission, and University Advanced Standing; CHEM 3100 or CHEM 3600 or BIOL 3600 recommended

Examines advanced and current topics of inorganic chemistry including bioinorganic chemistry, symmetry and molecular orbital theory, and the descriptive chemistry of main-group compounds. Varies from semester to semester. Offered on demand. May be repeated for a maximum of 9 credits.

**CHEM 4920**
**Chemistry Capstone- Literature/Seminar**
**1**
* Prerequisite(s): CHEM 2320 with a C- or higher and University Advanced Standing; ENGL 2010 highly recommended

Engages in current chemistry topics. Enables familiarity with chemistry literature resources, teaches chemistry research and design, and facilitates preparation for further education and employment in chemistry-related fields. Focuses on current topics in chemistry and on chemistry literature.

**CHEM 4930**
**Chemistry Capstone- Ethics/Seminar**
**1**
* Prerequisite(s): CHEM 2320 with a C- or higher and University Advanced Standing

Teaches chemistry research and design for further education and employment in chemistry-related fields. Focuses on scientific ethics, current topics in chemistry, chemistry literature and formal report writing based on American Chemical Society guidelines.

**CHEM 495R**
**Advanced Topics in Organic Chemistry**
**3**
* Prerequisite(s): CHEM 2310, CHEM 2320, Instructor approval, and University Advanced Standing

For students majoring in Chemistry. Varies from semester to semester. May be repeated for a maximum of 9 credits. Topics include organic synthesis, reaction mechanisms, and identification of organic compounds.

**CHEM 496R**
**Special Topics in Chemistry**
**1 to 4**
* Prerequisite(s): CHEM 2320, Junior or Senior standing, instructor approval, and University Advanced Standing

Explores special topics in chemistry. Topics vary depending on student demand and current topics of significance in chemistry. May be repeated for a maximum of 8 credits toward graduation.

**CHEM 499R**
**Independent Study and Research**
**1 to 4**
* Prerequisite(s): Instructor approval and University Advanced Standing

Uses independent study on selected topics and conducting experiments in the same topic. Provides guidance by a faculty member. May be taken for a maximum of 4 credits.

**CHEM 525R**
**Advanced Topics for Chemistry Teachers**
**1 to 5**
* Prerequisite(s): Departmental Approval

For licensed teachers or teachers seeking to recertify their chemistry endorsement from the Utah State Office of Education. Teaches principles of chemistry and pedagogy of teaching chemistry for teachers in public or private schools. Emphasizes correlation with the Utah Core Curriculum, the National Science Education Standards, and the Benchmarks of Project 2061. Topics will vary.

# Chinese (CHIN)

**CHIN 1010** **LH**
**Beginning Chinese I**
**4**

Studies Mandarin. Emphasizes oral proficiency in pronunciation and basic conversation as well as traditional grammar concepts. Focuses on receptive language learning, then verbally-expressive language learning. Lab access fee of $10 applies.

**CHIN 1020** **LH**
**Beginning Chinese II**
**4**
* Prerequisite(s): Students need equivalent knowledge of CHIN 1010

Continues the same mode of learning as CHIN 1010 with renewed emphasis on conversational skills. Introduces characters and elementary calligraphy, reading and writing. Lab access fee of $10 applies.

**CHIN 115R**
**Chinese Conversation I**
**1**

Offers novice Chinese speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen listening comprehension for natural conversational flow. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**CHIN 2000**
**Chinese Character Studies**
**2**
* Prerequisite(s): Basic Chinese speaking ability

Prepares students who have oral fluency in Chinese to read and write Chinese characters, including skills in sentence and paragraph writing according to Chinese language norms in order to advance to 3000 level courses.

**CHIN 2010** **LH**
**Intermediate Chinese I**
**4**
* Prerequisite(s): Students need equivalent knowledge of CHIN 1020

Emphasizes increased communicative ability as well as grammatical accuracy; adds more complex, literary grammatical structures; focuses on reading of basic 600 characters and writing of basic 300 characters. Uses diglot weave (mixture of English and Chinese) and character-romanization mix to ease learning of characters. Lab access fee of $10 applies.

**CHIN 202G** **HH**
**Intermediate Chinese II**
**4**
* Prerequisite(s): Students need equivalent knowledge of CHIN 2010

Emphasizes increased communicative ability as well as grammatical accuracy; adds more complex, literary grammatical structures, as well as discussion of contemporary cultural and political themes. Includes reading of basic 1000 characters and writing of basic 450-600 characters. Uses diglot weave (mixture of English and Chinese) and character-romanization mix to ease learning of characters. Lab access fee of $10 applies.

**CHIN 215R**
**Chinese Conversation II**
**1**
* Prerequisite(s): Students should have equivalent knowledge of CHIN 1020

Offers lower division / novice Chinese speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, sharpen listening comprehension, and develop conversational strategies such as circumlocution and managing a conversation with useful expressions for starting a conversation, gaining time to think, helping the other speaker, seeking agreement, etc. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**CHIN 3030**
**Chinese Composition and Conversation**
**3**
* Prerequisite(s): (CHIN 202G or equivalent experience or instructor approval) and University Advanced Standing

Advances mastery of Chinese grammar while emphasizing production skills of speaking and writing. Expands reading and listening skills to a lesser degree. Reviews and extends lexical depth. Allows students without experience living in a Chinese immersion setting to advance in their communication skills to where they may participate more comfortably in future upper division courses with other students who do have immersion experience. Offers a variety of topics presented in a variety of media as content basis for real communicative practice in Chinese. Conducts all course work primarily in Chinese. Chinese character learning prepares students advanced reading in Chinese.

**CHIN 3050**
**Advanced Chinese**
**3**
* Prerequisite(s): It is recommended that students have passed CHIN 202G, have had one year residency in a Chinese-speaking region, or instructor approval.
* Prerequisite(s) or Corequisite(s): CHIN 2000

Designed for non-native Mandarin speakers who, as a result of foreign residency or similar exposure to the language, have attained a good mastery of basic Mandarin Chinese. Sharpens students' speech-making, reading, and writing skills through advanced Chinese readings about culture, civilization and society, with an emphasis on vocabulary, grammar and syntax. Enhances students' cultural knowledge and awareness through a variety of carefully designed practices and activities. Taught predominantly in Chinese.

**CHIN 3116**
**Exploring China-Past/Present and You**
**3**
* Prerequisite(s): High school students have to pass the AP Chinese Language or AP Chinese Literature & Culture test with a 3 or higher

This course is part of the State of Utah Chinese Bridge Program and it will be taught only in high schools and for high school students. Not to be taught on college campus for university students. Explores Chinese history and traditional cultural values, and connects their influences on the modern Chinese-speaking world. Conveys knowledge and language skills to discuss both ancient and modern Chinese culture and society.

**CHIN 3117**
**Chinese Legacies: tradition and modernity**
**3**
* Prerequisite(s): High school students must pass the AP Chinese Language or AP Chinese Literature & Culture test with a grade of "3" or higher

This course is part of the State of Utah Chinese Bridge Program and it will be taught only in high schools and for high school students. Not to be taught on college campus for university students. Explores the legacies of Chinese culture and tradition and its impacts on and relations to the contemporary societal issues. Emphasizes literary analysis and criticism. Develops knowledge of literary history, skills in interpreting literary texts, and deepens understanding of the Chinese language.

**CHIN 3118**
**Chinese Popular Culture**
**3**
* Prerequisite(s): High school students have to pass the AP Chinese Language test with a score of 3 or above.

This course is part of the State of Utah Chinese Bridge Program, and it will be taught only in high schools for high school students. Not to be taught on college campus for university students. Explores the role that current film, media, and entertainment play in the Chinese-speaking world and exposes students to the historical and cultural perspectives presented through these media. This course is instructed in Chinese.

**CHIN 315R**
**Advanced Chinese Conversation**
**1**
* Prerequisite(s): CHIN 202G or one year residency in a Chinese-speaking country, or instructor approval. University Advanced Standing.

Offers speaking opportunities to middle or upper division Chinese learners to enhance their speaking proficiency in high level language by focusing on oral and verbal production. Improves authentic pronunciation, reduces grammatical and structural errors, and aids student progression beyond translation to natural production. May be repeated for a maximum of 3 credits toward graduation.

**CHIN 3200**
**Business Chinese I**
**3**
* Prerequisite(s): CHIN 3050 and University Advanced Standing

Prepares students to take the Business Chinese Test (BCT), a state-level standardized test designed to assess the Chinese proficiency of non-native speakers engaged in business activities. Explores how students can effectively and respectfully pursue business activities with Chinese companies within the framework of Chinese culture, sponsored by Office of Chinese Language Council International. Taught predominantly in Chinese.

**CHIN 351G**
**Chinese Culture and Civilization**
**3**
* Prerequisite(s): (CHIN 3050 or equivalent) and University Advanced Standing

Explores chronologically the evolution and development of Chinese culture and civilization, and a multitude of aspects that construct Chinese national identity and civilization. Examines modern and contemporary issues, cultural, ethnic, historic, social and economic development of China, as well as historical prosperity and decline, and independence from and interdependence with other nations. Conducted entirely in Mandarin Chinese, including presentations and class instructions.

**CHIN 4050**
**Chinese Language and Culture**
**3**
* Prerequisite(s): CHIN 3050, over one year residency in a Mandarin Chinese-speaking country, or instructor approval, and University Advanced Standing

Designed for non-native Mandarin speakers who, as a result of foreign residency or similar exposure to the language, have attained a fairly good mastery of basic Mandarin Chinese. Sharpens students' speech making, reading and writing skills through advanced Chinese readings on culture, civilization and society, with an emphasis on vocabulary, grammar and syntax. Enhances students' cultural knowledge and awareness through a variety of carefully designed practices and activities. Taught predominantly in Chinese.

**CHIN 4100**
**Translation and Interpretation**
**3**
* Prerequisite(s): CHIN 4050 and University Advanced Standing

Introduces translation as a discipline. Discusses basic theory, principles and tools of translation. Employs the tools of translation: dictionaries, glossaries, grammars and computerized resources. Extensive practice of translation and interpretation from English to Chinese and from Chinese to English.

**CHIN 4200**
**Business Chinese II**
**3**
* Prerequisite(s): CHIN 3200 and University Advanced Standing

Builds on the content of CHIN 3200. Teaches students business Chinese with more complicated grammatical and rhetorical structures. Studies business Chinese terms and expressions, subtle business Chinese culture and customs practiced in Chinese business society, and the more advanced Chinese business language and culture in Chinese societal settings. Prepares students to effectively and respectfully pursue business activities with Chinese companies within the framework of Chinese culture through a better understanding of the language, culture and society. Strengthens and prepares students to take the Business Chinese Test (BCT), a state-level standardized test designed to assess the Chinese proficiency of non-native speakers engaged in business activities. Taught predominately in Chinese.

**CHIN 4500**
**Advanced Writing in Chinese**
**3**
* Prerequisite(s): (CHIN 3050 or CHIN 4050) and University Advanced Standing

Designed to improve students' accuracy, clarity and use of appropriate styles, forms and vocabularies when writing in Chinese. Informs students of the significant roles played by styles, content and intentionality of discourse in their writing, and focuses on improving their skills in addressing the requirements of those various roles in different contexts.

**CHIN 490R**
**Special Topics in Chinese Language and Literacy**
**3**
* Prerequisite(s): CHIN 3050, University Advanced Standing

Presents selected topics in Chinese language and literacy (grammar, literacy, and culture). Covers topics such as " Practical Modern Chinese Grammar" or " Modern Chinese Literacy and Sentence Structure". Studies the main points in Modern Chinese language, literacy and their relations to Chinese society, history and culture. Projects and evaluation will vary according to the topic. May be repeated for a maximum of 9 credits toward graduation.

## Chinese Studies (CHST)

**CHST 200G**
**Introduction to Chinese Studies**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Taught in English. Introduces Chinese Language and Culture to interested students and gives them an overview about the minor study program. Includes an introduction into the characteristics of Chinese script by memorizing a few everyday expressions in Chinese. Introduces Chinese history, economy, society, politics, culture and popular culture, and ethics including philosophy, religions, beliefs, film, literature, contemporary discourses.

**CHST 362G**
**Traditional Chinese History**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Introduces the student to the broad outlines of the cultural history of traditional China from some of the earliest historical records (about 1200 BCE) up through the late imperial period (about 1800 CE). Taught in English.

**CHST 363G**
**Modern Chinese History**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Introduces the student to the broad outlines of Chinese Civilization from the last Imperial Dynasty until the present day. Taught in English.

**CHST 373G**
**Classical Chinese Literature**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Studies classical Chinese literature within the historical, cultural, thematic, and aesthetic context. Taught in English.

**CHST 375G**
**Modern Chinese Literature**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Studies modern Chinese literature within the historical, cultural, thematic, and aesthetic context. Taught in English.

**CHST 416G**
**Chinese Culture and Film**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Examines a selection of films from internationally acclaimed Chinese film directors.

**CHST 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Departmental Approval, and University Advanced Standing

For upper-division students working toward a Minor in Chinese Studies or Chinese Commerce. On approval also counts for a Bachelor of Science Degree in Business Management. Provides a transition from school to work where learned theory is applied to actual practice through meaningful on-the-job experience. No more than three credit hours of internship work experience will apply toward graduation in Chinese Studies or in any Business Management Specialization; may be repeated for a maximum of 16 credits. May be graded credit/no credit.

**CHST 490R**
**Special Topics in Chinese Studies or Commerce**
**3**
* Prerequisite(s): University Advanced Standing

Taught in English. Covers topics of social change, history, political science, culture including literature, art, cinema, economy including commerce, and business culture. Offers insights into Chinese life in the past and today. Defines terminology involved, studies evolution and/or specific texts or contexts, and considers theoretical discourse. Provides additional materials in Chinese for students who want more language practice, e.g., in the Chinese Language minor. May be repeated for a maximum of 9 credits toward graduation.

# Cinema Studies (CINE)

**CINE 2150 (Cross-listed with: ENGL 2150) HH**
**Critical Introduction to Cinema Studies**
**3**
* Prerequisite(s): ENGL 2010

Studies film as an aesthetic and cultural medium. Teaches the fundamentals of film, including narrative form, mis en scene, cinematography, editing, sound, and non-narrative forms. Teaches film analysis, including ideological approaches, and considers film as a cultural institution. May be delivered hybrid.

**CINE 217G (Cross-listed with: COMM 217G, ENGL 217G) HH**
**Race Class and Gender in U S Cinema**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Raises cultural awareness through aesthetic, critical, and interdisciplinary examination of the evolution of the representation of race, class, and gender in American cinema. Focuses on both Hollywood and independent minority filmmakers. Some films screened may carry an "R" rating.

**CINE 2311 (Cross-listed with: THEA 2311) FF**
**Film History I**
**3**

Explores the development of the feature film, both in America and abroad from 1895 to 1945. Covers the evolution of motion pictures from conception as an entertainment novelty (c. 1895) to the mass-audience, commercial art form of the 1940's. Examines film as a serious historical study of a form of mass communication, which has had ethical, social, and political consequences on society. Includes lecture, screenings, and demonstrations with critical discussions of assigned readings and films.

**CINE 2312 (Cross-listed with: THEA 2312)**
**Film History II**
**3**

Explores the development of the feature film, both in America and abroad from 1940 to the Present. Emphasizes the continuing evolution of motion pictures from the height of the Studio System 1930s through to its status as one "form" of digital entertainment in 2010. Examines film as a serious historical study of a form of mass communication, which has had ethical, social, and political consequences on society. Includes lecture, screenings, and demonstrations with critical discussions of assigned readings and films. (Note: Some films screened may be considered controversial and carry an "R" rating.)

**CINE 234R (Cross-listed with: THEA 234R)**
**Special Topics in Cinema Studies**
**3**
* Prerequisite(s) or Corequisite(s): THEA1023 or CINE2150

Focuses upon a particular genre, director, or film movement. May be repeated once for a total of 6 credits toward graduation.

**CINE 312R (Cross-listed with: LANG 312R)**
**National Cinema History**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Covers a single national cinema tradition from the early days of film to the present. Explores representative films from a nation's cinematic chronology, considering major themes, movements, controversies, and artists. Considers social and political contexts as related to the national film output. May be repeated for a maximum of 9 credits toward graduation.

**CINE 3150 (Cross-listed with: ENGL 3150)**
**Cinema and Television Theory**
**3**
* Prerequisite(s): (CINE 2150 or ENGL 2150) and University Advanced Standing

Examines major theoretical approaches to the screen arts. Explores how cinema and television reflect and are created by historical and contemporary cultural contexts. Includes the study of various approaches such as fan studies, spectatorship, stars, authorship, genre, long-form narrative and production. Includes lecture, film and media screenings, and critical discussions of assigned readings.

**CINE 416R (Cross-listed with: ENGL 416R, THEA 416R)**
**Special Topics in Film Studies**
**3**
* Prerequisite(s): (ENGL 2150 or CINE 2150 or THEA 1023) and University Advanced Standing

Covers cinema directors, genre, theory, and social change on a rotating basis. Explains course focus, defines terminology involved, then studies evolution and/or specific texts or contexts, and considers theoretical discourse. May be repeated for a maximum of 9 credits toward graduation. Some films screened may carry an "R" rating. Course fee of $40 for support applies.

**CINE 418R**
**Sundance Documentary Film**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 2150 or CINE 2150

Covers history of documentary film, studies current modes and models of documentary film, includes attending Sundance film festival documentaries. May be repeated for a maximum of 6 credits toward graduation. Some films screened may carry an "R" rating, or may not be rated but would carry an "R" rating. Course fee of $50 for support applies.

# Civil Engineering (CIVE)

**CIVE 3010**
**Introduction to Transportation Engineering**
**3**
* Prerequisite(s): EGDT 1040, University Advanced Standing and (Formal Acceptance into the Civil Engineering Program or Departmental Approval)
* Prerequisite(s) or Corequisite(s): ENGR 2450

Covers analysis and design of transportation systems and their components. Introduces technological, economic, and social aspects of transportation. Covers economic considerations, role of public policy, system planning, design, management, traffic flow models, intersection control, network analysis, and environmental impact. Lab access fee of $45 applies.

**CIVE 3130**
**Structural Analysis**
**3**
* Prerequisite(s): ENGR 2140, University Advanced Standing, and (Formal Acceptance into the Civil Engineering Program or Departmental Approval)

Focuses on analysis of determinate and indeterminate structural systems. Covers flexibility and moment distribution methods. Introduces design load distribution and load guidelines. Canvas Course Mats $105/Pearson applies. Lab access fee of $45 applies.

**CIVE 3140**
**Structural Steel Design**
**3**
* Prerequisite(s): CIVE 3130, University Advanced Standing, and (Formal Acceptance into the Civil Engineering Program or Departmental Approval)

Focuses on design of structural steel components of a building. Covers tension members, compression members, beams, and connections using Load and Resistance Factor Design (LRFD). Includes a design component. Lab access fee of $45 applies.

**CIVE 3150**
**Reinforced Concrete Design**
**3**
* Prerequisite(s): CIVE 3130, University Advanced Standing, and (Formal Acceptance into the Civil Engineering Program or Departmental Approval)

Focuses on design of reinforced concrete components of a structure. Covers beams, columns, slabs, and foundations according to the American Concrete Institute (ACI) 318 building code requirements. Includes a design component. Lab access fee of $45 applies.

**CIVE 3210**
**Geotechnical Engineering**
**3**
* Prerequisite(s): ENGR 2140, University Advanced Standing, and (Formal Acceptance into the Civil Engineering Program or Departmental Approval)

Focuses on the study of soil properties, classifications, and behavior. Applies principles of mechanics to soil as an engineering material. Introduces consolidation and compaction theories, effective stresses, shear strength, and earth pressure and slope stability. Includes a design component. Lab access fee of $45 applies.

**CIVE 3320**
**Hydraulics and Hydrology**
**3**
* Prerequisite(s): ME 3310, University Advanced Standing, and (Formal Acceptance into the Civil Engineering Program or Departmental Approval)
* Prerequisite(s) or Corequisite(s): ENGR 2450

Focuses on concepts of hydraulics such as pipe and open channel flows. Covers weather patterns, precipitation measurement, distribution, and runoff. Introduces storm hydrograph and peak flow analysis, flood design, reservoir and channel routing. Includes a design component.Lab access fee of $45 applies.

**CIVE 3335**
**Civil Engineering Experimentation I WE**
**2**
* Prerequisite(s): ME 3310, University Advanced Standing, and (Formal Acceptance into the Civil Engineering Program or Departmental Approval)
* Prerequisite(s) or Corequisite(s): CIVE 3320

Covers temperature, pressure, and flow measurement, along with calibration of thermal/fluid sensors in a lab setting. Focuses on experiments to investigate various phenomena in fluid flow, hydraulics, and hydrology. Investigates the performance of pumps. Includes a writing component. Lab access fee of $45 applies.

**CIVE 3610**
**Environmental Engineering**
**3**
* Prerequisite(s): CHEM 1210, MATH 2250, University Advanced Standing, and (Formal Acceptance into the Civil Engineering Program or Departmental Approval)

Introduces the fundamentals of environmental engineering. Focuses on chemical, biological, and physical principles dealing with water, waste water, and solid waste management. Covers analyses of air, surface, and ground water quality. Includes a design component. Lab access fee of $45 applies.

**CIVE 4010**
**Traffic Engineering**
**3**
* Prerequisite(s): CIVE 3010 and University Advanced Standing

Introduces elements of traffic engineering including: road use, traffic flow theories, traffic control devices, traffic data collection. Covers freeways and rural highways and principles of intersecting signalization, service level and capacity. Includes a design component. Lab access fee of $45 applies.

**CIVE 4020**
**Highway Planning and Design**
**3**
* Prerequisite(s): CIVE 3010 and University Advanced Standing

Covers classification of highways. Focuses on the process involved in design of highways and their elements. Introduces design of highway cross sections, intersections, and interchanges. Covers design of vertical and horizontal alignment and establishment of sight distances. Includes a design component. Lab access fee of $45 applies.

**CIVE 4135**
**Civil Engineering Experimentation II WE**
**2**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGR 2160

Focuses on testing of civil engineering materials such as soil, asphalt, concrete, and metals related to geotechnical, pavement, and structural aspects of civil engineering. This is a laboratory course with a writing component. Course lab fee of $25 applies. Lab access fee of $45 applies.

**CIVE 4210**
**Foundation Design**
**3**
* Prerequisite(s): CIVE 3210 and University Advanced Standing

Covers foundation classifications. Applies fundamentals of soil mechanics to analysis and design of soil structure systems. Covers shallow and deep foundations, piles and caissons, and retaining structures. Includes a design component. Lab access fee of $45 applies.

**CIVE 4310**
**Storm Water Management**
**3**
* Prerequisite(s): ME 3310 and University Advanced Standing

Applies fluid mechanics and hydrology principles to the analysis and design of storm water management facilities. Covers environmental issues related to storm water management. Includes a design component. Lab access fee of $45 applies.

**CIVE 4320**
**Open Channel Flow**
**3**
* Prerequisite(s): CIVE 3320 and University Advanced Standing

Covers analysis of open channel flow systems. Introduces natural and designed channels, steady and unsteady flows, uniform and non-uniform flows and flow transitions. Includes lectures and design projects. Lab access fee of $45 applies.

**CIVE 4510**
**Civil Engineering Seminar**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): CIVE 4810

Introduces various civil engineering careers and related industries. Emphasizes the importance of life-long learning and active participation in professional societies and communities through lectures given by practicing engineers using their own experiences. Introduces various engineering codes of ethics. Intended as a culminating seminar for graduating seniors to prepare for their engineering careers. Lab access fee of $45 applies.

**CIVE 4610**
**Water and Wastewater**
**3**
* Prerequisite(s): CIVE 3320 and University Advanced Standing

Introduces municipal water and wastewater treatment and distribution practices. Applies physical, chemical, and biological principles to design and operation of water and wastewater distribution systems. Lab access fee of $45 applies.

**CIVE 4810**
**Civil Engineering Capstone I**
**3**
* Prerequisite(s): University Advanced Standing, Formal Acceptance into Civil Engineering Program, and Department Approval

Serves as a comprehensive two-semester civil engineering design experience with practical constraints. Focuses on applying civil engineering principles and the design process along with economic analysis and project management methods to a real-world project, and present the findings to other engineers and the public. Capstone I and II must be taken in consecutive semesters. Lab access fee of $45 applies.

**CIVE 481R**
**Internship**
**1 to 3**
* Prerequisite(s): Matriculation to civil engineering program, Instructor Approval, and University Advanced Standing.

Provides opportunities to apply classroom theory while students work as employees in a job that relates to their careers. Students communicate regularly with a coordinator. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May apply for up to 3 credits; may be graded as credit/no credit.

**CIVE 4820**
**Civil Engineering Capstone II**
**3**
* Prerequisite(s): CIVE 4810 and University Advanced Standing

Serves as a second semester of the two-semester design experience from conception to modeling or prototype. Focuses on applying civil engineering principles and the design process along with economic analysis and project management methods to a real-world project, and present the findings to other engineers and the public. Capstone I and II must be taken in consecutive semesters. Lab access fee of $45 applies.

**CIVE 490R**
**Advanced Current Topics in Civil Engineering**
**1 to 3**
* Prerequisite(s): University Advanced Standing and (Formal Acceptance into the Civil Engineering Program or Department Approval)

Provides exposure to emerging topics and technologies of current interest in civil engineering. Varies each semester depending upon the state of technology. May be repeated for a maximum of 6 credits toward graduation without prior written department approval. Lab access fee of $45 applies.

# Criminal Justice (CJ)

**CJ 1010** **SS**
**Introduction to Criminal Justice**
**3**

Presents the processes, institution, and administration of criminal justice in the United States. Examines the crime problem, criminal law, law enforcement, criminal prosecution, criminal defense, bail, the jury system, and sentencing among adult and juvenile offenders. Explores the correctional system; namely, probation, prisons, inmates' rights, and parole.

**CJ 1300**
**Introduction to Corrections Process**
**3**

Introduces the corrections system. Includes origin and evolution, philosophies of corrections, perspectives on sentencing, and alternatives to incarceration. Includes community corrections; probation and parole; offender rights and legal issues; adult, juvenile, and special needs offenders; corrections specialists, staff, and administration as a profession; and special challenges for the future.

**CJ 1330**
**Criminal Law**
**3**
* Prerequisite(s): CJ 1010

Provides an overview of criminal law. Covers history and terminology of the criminal justice system, the elements of specific offenses, and the role of the criminal justice profession in the fact-gathering process.

**CJ 1340**
**Criminal Investigations**
**3**
* Prerequisite(s): CJ 1010; CJ 1390 is also strongly recommended as a pre- or co-requisite for Criminal Justice majors

Introduces the fundamentals of criminal investigations. Examines the techniques commonly utilized by investigative personnel for crimes against property and persons to include case management and documentation, interacting with victims, witnesses and suspects, and crime scene analysis.May be delivered online.

**CJ 1350**
**Introduction to Forensic Science**
**3**

Studies Forensic Science and multiple forensic disciplines as they correlate with criminal investigations. Teaches the identification and importance of multiple types of physical evidence typically found at a crime scene and how that evidence is used to provide a link between the victim, suspect, and crime scene. Explains the proper techniques needed to document a crime scene and physical evidence. Provides the process of taking the evidence from the scene and the scientific analysis of the evidence, which is completed at the crime laboratory.

**CJ 1390**
**Introduction to Policing**
**3**
* Prerequisite(s) or Corequisite(s): CJ 1010

Evaluates police organizations, administration, and duties within federal, state, and local law enforcement agencies. Includes history and philosophy of law enforcement, evaluation of administrative practices, recruitment and hiring of new personnel, patrol and criminal investigative assignments, issues confronting American law enforcement agencies, emerging concepts, professionalism, and community crime prevention.

**CJ 1800**
**POST Module I**
**7**
* Prerequisite(s): Departmental approval required, Passing score on National Peace Officer Selection Test.

Completes all training required by Utah Peace Officer Standards and Training (POST) to become certified as a Special Function Officer. Certification may become active when hired by an agency with Peace Officer authority.

**CJ 1810**
**POST Module II**
**11**
* Prerequisite(s): CJ 1800, Departmental Approval Required

Completes all training required by Utah Peace Officer Standards and Training (POST) to become certified as a Law Enforcement Officer. That certification may become active when hired by an agency with Peace Officer authority.

**CJ 2110**
**Security Management and Loss Prevention**
**3**
* Prerequisite(s): CJ 1010

Examines external and internal security measures, confidential personnel investigations, and interview procedures. Studies principle and major concepts in prevention, protection, loss control, and crime prevention in the commercial sector.

**CJ 2200**
**Writing for Criminal Justice Professionals WE**
**3**
* Prerequisite(s): CJ 1010 and (ENGL 1010 or ENGH 1005)

Teaches written communication across the criminal justice spectrum. Emphasizes basic formats and language used to present accurate, understandable and factual information. Requires written reports, affidavits, warrants, probable cause statements and other legal documents. Applies proper communication principles to legal writing situations. Allows students to author a variety of formal legal documents. Canvas Course Mats of $49/ Pearson applies.

**CJ 2330**
**Juvenile Justice**
**3**
* Prerequisite(s): CJ 1010

Provides an overview of the juvenile justice system from its origin through present-day trends and development. Examines the origin and development of the juvenile court as well as its changing social and political philosophy. Discusses the role and relationship of municipal law enforcement toward the juvenile offender. Examines closed juvenile institutions, juvenile probation, parole, and alternative placement such as group homes.

**CJ 2350**
**Laws of Evidence**
**3**
* Prerequisite(s): CJ 1330

Examines the principles and practices of the laws and rules of evidence pertaining to the use of criminal evidence in the trial process. Studies legal issues including admissibility of evidence, judicial notice, burdens of proof, hearsay, documentary evidence, evidentially privileges and witnesses. Studies the various sources of rules at the Federal and State levels discovering how the American system of case law affects the development of evidence law.

**CJ 281R**
**Internship**
**1 to 8**
* Prerequisite(s): Department Approval

Provides actual, on-the-job work experience on a paid basis in a criminal justice profession or other approved related situation. Emphasizes successful work experience, with emphasis on identifying and solving problems. Completers should be qualified to work at entry-level jobs in the criminal justice profession. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**CJ 290R**
**Law Society**
**1**

Elective Credit for students interested in law or law-related professions. Provides a program of activity relating to current legal issues, encouraging social awareness and developing law and civic consciousness. Students arrange for guest speakers from the legal and criminal justice professions to present information concerning their professions. Teaches leadership skills by serving on committees. Pass/Fail grade issued. Criminal Justice majors and Paralegal majors may repeat this course for a total of three elective credits towards graduation. Each student must participate in the service project and fundraiser for a passing grade.

**CJ 2920**
**Short Course Workshop**
**1 to 3**

The specific title with the credit authorized for the particular offering will appear in the semester schedule and on the student transcript.

**CJ 3020**
**Police Administration**
**3**
* Prerequisite(s): ENGL 2010, CJ 1010 and University Advanced Standing

Discusses the issues facing contemporary law enforcement administrators. Focuses on the complexities associated with law enforcement organization leadership and strategic planning, training, and stress management; evaluation, promotion, and disciple; legal issues and police department liability; budgeting; politics; and media relations.

**CJ 3040**
**Community Policing**
**3**
* Prerequisite(s): ENGL 2010 (recommended), CJ 1010, and University Advanced Standing

Presents the fundamentals of the community-oriented policing philosophy. Includes the comparison of traditional and community policing philosophies; law enforcement and community relationships. Analyzes the importance of political and public support and involvement; attitudinal changes involving the roles of police management, supervisors, and line personnel; creation of partnership with community organizations and police problem-solving methodologies.

**CJ 3060**
**Corrections in the Community**
**3**
* Prerequisite(s): CJ 1300 and University Advanced Standing

Studies the Criminal Justice Community Corrections component. Presents historical origin, development, and current practices in probation, parole, the halfway house, work and educational release, as well as furlough programs. Requires the design of an ideal corrections facility and a pre-sentence investigation report and recommendation.

**CJ 3100**
**Criminal Profiling**
**3**
* Prerequisite(s): CJ 1010 and University Advanced Standing

Introduces process of reviewing and assessing the behavioral facts of a violent criminal act from a law enforcement and/or investigative perspective.

**CJ 3140**
**Corrections Law**
**3**
* Prerequisite(s): CJ 1300 and University Advanced Standing

Teaches the law as it pertains to the corrections field. Examines civil liability and pertinent constitutional amendments as they relate to corrections covering the areas of probation, incarceration, and parole.

**CJ 3270**
**Criminology**
**3**
* Prerequisite(s): CJ 1010 and University Advanced Standing

Introduces the field of criminology, providing an overview of the issues involved in defining, measuring, and explaining crime. Examines the nature, extent, and general characteristics of criminal behavior and the potential causes of criminal offenses and offenders. Reviews early and contemporary theories which attempt to explain criminal behavior from a sociological, psychological, and biological perspective; the effectiveness of theories in explaining crime; theory integration and application of theory to selected issues as they relate to the modern world.

**CJ 3300**
**Victimology**
**3**
* Prerequisite(s): CJ 1010 and University Advanced Standing

Presents historic treatment and emerging roles of the crime victim in the criminal justice process. Investigates problems and dilemmas faced by crime victims and victimization risk factors. Studies systemic and societal creation of victims, relationships between victims and offenders, crime victim compensation, and reparations.

**CJ 3310**
**White Collar Crime**
**3**
* Prerequisite(s): CJ 3270 and University Advanced Standing

Discusses the implications of white-collar crime for criminal justice professionals and researchers. Examines various forms of white-collar crime using case studies and estimates the extent as well as the costs of these crimes. Focuses on victim and offender profiles and legal issues, including questions of corporate liability. Examines theoretical explanations for white-collar crime committed by individual offenders and corporations.

**CJ 3320**
**Crime and Gender**
**3**
* Prerequisite(s): CJ 1010 and University Advanced Standing

Involves an in-depth approach to the study of women in the criminal justice system from both a theoretical and practical perspective. Covers three main areas: 1) women as offenders; 2) women as victims; and 3) women as criminal justice practitioners.

**CJ 3330**
**Financial Crimes Investigations**
**3**
* Prerequisite(s): CJ 1340 or ACC 2010 and University Advanced Standing

Examines the complex world of financial crimes, money laundering, and the national and international standards for financial institutional compliance.

**CJ 3340**
**Terrorism and the Criminal Justice System**
**3**
* Prerequisite(s): University Advanced Standing and CJ 1010 or ACC 2010.

Examines the phenomena of radicalization and terrorism as they relate to the criminal justice system in America. Evaluates the various radical movements that have led to acts of terrorism, including jihadist extremists, animal rights and environmental extremist, as well as the white supremacist and domestic far-right extremist movement in America. Examines the role of law enforcement in counter terrorism efforts in the United States and law enforcement responses to terrorism. Assesses the challenges of prosecuting, sentencing, and incarcerating terrorists, both domestic and international. Evaluates the movement of Countering Violent Extremism as a means to impede the pathway to terrorism.

**CJ 3360**
**Prisons Contemporary Issues and Dilemmas**
**3**
* Prerequisite(s): CJ 1010, ENGL 2010, and University Advanced Standing

Studies the history of the American prison system, targeting current issues and trends. Explores options for resolving current issues and attempts to understand and diagnose future trends and issues.

**CJ 3400**
**Drugs and Crime**
**3**
* Prerequisite(s): CJ 1010, ENGL 2010, and University Advanced Standing

Presents historical, economic, social, and political roles of legal and illegal drugs. Explains the drug contribution to crime and the impact that drugs have on the criminal justice system. Compares drug production and distribution systems. Illustrates efforts to combat the drug epidemic including decriminalization, prevention, and treatment.

**CJ 4060**
**Special Problems in Criminal Justice WE**
**3**
* Prerequisite(s): CJ 1010 and University Advanced Standing

Examines selected current issues and problems in criminal justice. Researches external factors related to the professions of police, courts, and corrections. Demonstrates functions of the criminal justice system through realistic situations and events.

**CJ 4160**
**Constitutional Criminal Rights**
**3**
* Prerequisite(s): CJ 1330, ENGL 2010, and University Advanced Standing

Studies decisions in leading U.S. Supreme Court criminal cases. Presents an overview of criminal procedure relating to constitutional amendment laws with a criminal justice emphasis. Discusses leading cases concerning constitutional rights and responsibilities.

**CJ 4200**
**Ethical Issues in Criminal Justice**
**3**
* Prerequisite(s): CJ 1010 and University Advanced Standing

Presents major ethical problems within the criminal justice system. Studies differences between moral decay and the ideal justice system. Uses an issue-based approach to solve individual, group and departmental ethical dilemmas.

**CJ 4250**
**Criminal Justice Career Strategies**
**2**
* Prerequisite(s): University Advanced Standing

Emphasizes the development of effective techniques for successfully locating, applying for and securing employment as well as advancing in a Criminal Justice related career path. Includes industry and job research, demonstration, role play, and application exercises. Should be taken during second semester junior year. Provides preparation for coop/internship experience.

**CJ 470G**
**Comparative Criminal Justice Systems**
**3**
* Prerequisite(s): CJ 2350 and University Advanced Standing

Examines the influences of the history, religion, ethnicity, traditions on the political and social cultures between and among six model nations of obvious historical interest to the USA. Examines the respective similar influences and distinctions between other countries and compares them with the political practices and legal systems of the USA as viewed from the international and multicultural vantage point.

**CJ 475R**
**Current Topics in Criminal Justice**
**3**
* Prerequisite(s): CJ 1010, University Advanced Standing, and Instructor Approval

Presents selected topics in Criminal Justice, Law Enforcement, and/or National Security and will vary each semester. Requires a special project related to the area of study. May be repeated with different topic areas for a maximum of 9 credits toward graduation.

**CJ 481R**
**Internship**
**1 to 12**
* Prerequisite(s): University Advanced Standing

Provides actual, on-the-job work experience on a paying or non-paying (volunteer) basis in a criminal justice profession or other approved related situation. Emphasizes successful work experience, with emphasis on identifying and solving problems. May be repeated for a maximum of 12 credits toward graduation. May be graded credit/no credit.

**CJ 487R**
**Criminal Justice Field Experience**
**1 to 6**
* Prerequisite(s): Junior or Senior status and University Advanced Standing

Provides students access to law enforcement agencies, prisons, detention centers, courts and institutions dealing with criminals and delinquents. Includes 2-3 weeks of intense classroom instruction, interviews, and lectures by practitioners in the field and several on-site visits of varying duration. Course may be repeated five times for a total of 6 hours of credit.

**CJ 4880**
**Qualitative Research Methods in Criminal Justice**
**3**
* Prerequisite(s): University Advanced Standing

Explores the methods of research used by criminal justice educators and practitioners. Introduces the application of basic research practices to law enforcement and corrections problems. Includes the use of American Psychological Association (APA) style.

**CJ 491R**
**Directed Reading and Special Projects**
**1 to 3**
* Prerequisite(s): Junior or Senior status and University Advanced Standing

Offers independent study as directed in reading, individual projects, etc., at the discretion and approval of the department chair. May be repeated for a maximum of 9 credits.

**CJ 4990**
**Criminal Justice Capstone Seminar**
**3**
* Prerequisite(s): CJ 4880 and University Advanced Standing

Applies qualitative, quantitative, and/or mixed research methods to selected issues and dilemmas in criminal justice. Requires the student to develop and present an undergraduate research project both orally and in writing.

**CJ 6200**
**Advanced Topics in Criminal Justice**
**3**
* Prerequisite(s): Acceptance into Master's of Public Services program.

Evaluates contemporary issues in criminal justice, including current and historical concepts of criminal justice, interrelationships among different components of the system, and the role and function of the justice system in society. Develops philosophies of punishment, contemporary policing issues, courtroom decision making, and modern trends in corrections.

**CJ 6210**
**Information-based Decision Making for Criminal Justice Administrators**
**3**
* Prerequisite(s): Acceptance into Master's of Public Services program.

Describes contemporary criminal justice models and how data and information are critical to their success (Intelligence-led Policing, CompStat, Problem Oriented Policing, Community Policing, etc.). Builds crime analysis, crime maps, hot spots, intelligence models, and other data analysis from an administrative perspective in order to compile the tools, resources, and practices used around the world to assist in data-based decision making.

**CJ 6220**
**Contemporary Issues In Criminal Justice**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Evaluates developments and changes in the practice of criminal justice brought about by current issues such as terrorism, rapid technological change, police misconduct, active shooter response, police, and the media. Formulates effective policies and procedures using strategic planning to manage organizational change with the use of current management strategies and philosophies.

**CJ 6230**
**Criminal Justice Policy**
**3**
* Prerequisite(s): Acceptance into Master's of Public Services program.

Evaluates a conceptual approach to the creation, implementation, and evaluation of criminal justice policies. Constructs a framework for planning and formulating policy context now and in the future. Summarizes court decisions instrumental in criminal justice policies for police, courts, corrections, and juvenile justice.

# Classical Studies (CLST)

**CLST 290R**
**Themes in Classical Civilizations**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Explores topics in Classical thought, literature, art, history and philosophy at an introductory level. Emphasizes understanding literature, history and archeological topics through translated primary and secondary sources. Focuses on the basic interpretive skills necessary to relate historical, cultural, and sociological data to classical societies. May be repeated for 6 credits toward graduation.

**CLST 490R**
**Special Topics in Classical Civilizations**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Analyzes literary, historical, archeological, religious and cultural texts and art work from Classical societies. Emphasizes understanding of the social,cultural and political forces which operate on a culture's writers, artists and major contributors. May be repeated with different topics for 6 credits toward graduation.

# Construction Management (CMGT)

**CMGT 1010**
**Introduction to Construction Management**
**3**

Presents an overview of the practice of construction management including heavy civil, commercial, and residential construction. Examines the 5 M's of Construction Management-Money, Machines, Materials, Manpower and Marketing. Introduces construction documents including 2D and 3D building information models (BIM). Utilizes guest lecturers, and field trips in addition to traditional classroom activities.

**CMGT 1020**
**Construction Materials and Methods I**
**3**
* Prerequisite(s): MAT 0950 or higher or appropriate test scores

Provides a basic knowledge of the materials and methods used in heavy civil, commercial, and residential construction projects. Includes lectures, site visits and laboratory work. Curriculum covers CSI Divisions 01-05. Lab access fee of $45 for computers applies.

**CMGT 1150**
**Construction Safety**
**2**

Introduces OSHA safety practices and its role in the construction industry. Reviews related safety theories, procedures and practices used in the construction industry. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 1190**
**Concrete and Framing Lab**
**3**

Offers applied learning experience in concrete and framing methods on a construction project. Course Lab Supply fee of $10 for materials applies.

**CMGT 1220**
**Finishing Lab**
**3**

Offers lab experience in finishing methods and techniques on a construction project. Course Lab Supply fee of $10 for materials applies.

**CMGT 2010**
**Construction Materials and Methods II**
**3**

* Prerequisite(s): MAT 0950 (or higher)

Provides basic knowledge of the materials and methods used in heavy civil, commercial, and residential construction projects. Includes lectures, site visits and laboratory work. Curriculum covers CSI Divisions 06-39. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 2025**
**Heavy Civil Plans and Specifications**
**3**

* Prerequisite(s): CMGT 1010, CMGT 1020

Designed for students interested in heavy/civil construction and design. Studies plans, standards and specifications for infrastructure construction. Emphasizes roadway systems, highway and bridge construction utilized in the heavy civil construction industry. Utilizes current project plans. May include site visits and guest lecturers as appropriate.

**CMGT 2035**
**Construction Computer Applications**
**3**

* Prerequisite(s) or Corequisite(s): CMGT 1010, and (CMGT 1020 or CMGT 2010), or department approval.

Emphasizes construction industry-specific, project management software use. Covers spreadsheets, scheduling, document manipulation, storage, dissemination and collaboration. Lab access fee of $45 applies.

**CMGT 2060**
**Construction Job Site Management**
**3**

* Prerequisite(s) or Corequisite(s): CMGT 2010 or CMGT 1020

Covers the role and duties of job site managers of heavy civil and commercial construction projects. Includes documentation, time and cost control, jobsite layout and control, labor relations, conflict resolution, OSHA safety practices. Emphasizes the design and implementation of project safety plans. Focuses on project quality, productivity, cost control and safety management. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 2080**
**Principles of Construction Scheduling**
**3**

* Prerequisite(s): CMGT 1010, CMGT 2010, and (CMGT 2035 or IM 2010)

Provides fundamental skills required to plan and schedule civil and commercial construction projects. Familiarizes students with computer scheduling software packages used to monitor and control construction projects. Defines the sequencing, phasing, and critical path management of construction activities. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 281R**
**Internship**
**1 to 6**

* Prerequisite(s): Department approval

Provides on-the-job construction work experience. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and presentations. Provides experience in writing and completing individualized work objectives that improve present work performance. May be repeated for a maximum of 6 credits toward graduation. May be graded Credit/No Credit.

**CMGT 289R**
**Construction Industry Seminar**
**.5**

Provides the opportunity to hear professionals teach about unique aspects of the industry. Must be repeated twice for one credit for graduation, but may be repeated for a maximum of two credits.

**CMGT 299R**
**Skills USA**
**1**

* Prerequisite(s): Requires adviser or department approval.

Supports and facilitates the goals and objectives of Skills USA pre-professional student organization that develops social awareness, civic, recreational, and social activities. Students may participate in local, state, and national contests. May be repeated for a maximum of 2 credits toward graduation.

**CMGT 3010**
**Construction Materials Testing**
**3**

* Prerequisite(s): CMGT 1020 and (MAT 1010 or higher or EGDT 1600) and University Advanced Standing

Investigates the general physical properties of construction materials and their common quality control/assurance tests conducted in the construction industry. Analyzes results of these tests and how they affect construction design. Emphasizes the performance of field and lab testing procedures used in heavy civil construction. Course Lab Supplies fee of $17 for materials applies.

**CMGT 3020**
**Building Envelopes and Mechanical Systems**
**3**

* Prerequisite(s): CMGT 1010, IM 1010 or computer proficiency exam, and University Advanced Standing

Covers mechanical, electrical and plumbing (MEP) principles. Provides problem solving experience in the analysis and design of building envelopes and MEP systems used in construction applications. Software fee of $5 applies. Course fee of $10 for materials, transportation applies. Lab access fee of $45 for computers applies.

**CMGT 3030**
**Principles of Construction Estimating**
**3**

* Prerequisite(s): CMGT 2035, MAT 1010 or higher or EGDT 1600, and University Advanced Standing, or CMGT Instructor/Program approval for non-CMGT majors

Introduces the preparation of detailed cost estimates based on contract models and documents. Includes the use of software for performing reliable quantity take-offs. Covers labor, material, and equipment pricing. Includes lectures and laboratory work. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 3050**
**Construction Equipment/Planning and Logistics**
**3**

* Prerequisite(s): CMGT 2080, CMGT 3030, ACC 3000 (recommended) or (ACC 2010 and ACC 2020), and University Advanced Standing, or CMGT Instructor/Program approval for non-CMGT majors

Introduces productivity, logistics and associated costs of heavy equipment required on a typical construction project. Emphasizes equipment used in heavy civil construction. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 3060**
**Applied Statics and Strength of Materials**
**3**
* Prerequisite(s): (MATH 1060 or EGDT 1610) and University Advanced Standing

Introduces basic principles of statics, coplanar force systems, coplanar-nonconcurrent force systems, stresses and strains, properties of materials, shear and bending diagrams, and beam design. Explores materials used in construction projects.

**CMGT 3080**
**Construction Financial Management**
**3**
* Prerequisite(s): ACC 3000 (Recommended) or (ACC 2010 and ACC 2020), and University Advanced Standing
* Prerequisite(s) or Corequisite(s): CMGT 3030

Builds on basic principles of accounting and finance as utilized in the construction industry. Emphasizes labor burden, financial needs and decision tools, construction accounting systems, cash flow, profit and tax projections on construction projects. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 3090**
**Principles of Hydrology in Construction Management**
**3**
* Prerequisite(s): (MATH 1060 or EGDT 1610) and University Advanced Standing

Prepares students to manage the behavior of water on construction projects. Includes intensity, duration and frequency curves and runoff, erosion control, storm drain systems, dewatering systems, environmental impacts, and stability of soils.

**CMGT 3140**
**Construction Real Estate**
**3**
* Prerequisite(s): CMGT 3030 and Advanced University Standing

Explores the legal implications of ownership of real property as it relates to new construction and existing improvements. Includes the nature of real property, estates in land, transfer , encumbrances, restrictions, and contracts. Discusses ownership, settlement, taxation, finance, valuation and appraisal.

**CMGT 3160**
**Building Information Modeling**
**3**
* Prerequisite(s): EGDT 1020 or CMGT Instructor/Program approval for non-CMGT majors and University Advanced Standing

Introduces 3D architectural models for cost estimating, clash detection, collaboration between multiple disciplines and documenting and quantifying project data. Covers model design theory, parametric modeling methods, generation of residential and commercial construction plans and details sufficient for cost estimating, building components and systems, and manipulation of model information. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 4010**
**Construction Contracts**
**3**
* Prerequisite(s): ENGL 2010, CMGT 1010, Junior Standing, and University Advanced Standing, or CMGT Instructor/Program approval for non-CMGT majors

Utilizes appropriate construction documents such as contracts, waivers, change orders, employee documents and specifications. Addresses the dispute process in the United States and the contractual relationship associated with construction project delivery methods.

**CMGT 4020**
**Construction Project Management**
**3**
* Prerequisite(s): (CMGT 2080 or CMGT Instructor/Program approval for non-CMGT majors) and University Advanced Standing

Introduces best management practices in the construction industry pertaining to resource optimization. Utilizes construction planning and problem solving tools on real world construction issues. Identifies and quantifies waste in the industry and determines appropriate methods to eliminate such. Discusses lean philosophy and its impact on construction projects and the industry. Lab access fee of $45 for computers applies.

**CMGT 405G**
**Global Sustainability and the Built Environment**
**3**
* Prerequisite(s): Minimum junior status or CMGT Instructor/Program approval for non-CMGT majors; University Advanced Standing

Explores sustainability issues from a global perspective. Discusses global sustainability and focuses specifically on the LEED green building rating system. May include guest lectures, site visits, and group assignments. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 4500**
**Senior Capstone**
**3**
* Prerequisite(s): CMGT 3030, Senior Standing, and University Advanced Standing

Designed for senior Construction Management and related majors. Involves execution of a construction project case simulation covering all aspects of construction management for either heavy civil, commercial or residential projects. Engages students with local representatives from the construction industry. Requires a written project report and oral presentations. Software fee of $5 applies. Lab access fee of $45 for computers applies.

**CMGT 459R**
**Current Topics in Construction**
**3**
* Prerequisite(s): Program Advisor Approval and University Advanced Standing

Provides exposure to emerging technologies and topics of current interest in Construction. Varies each semester depending upon the state of technology. May be repeated for a maximum of 6 credits toward graduation.

**CMGT 481R**
**Internship**
**1 to 4**
* Prerequisite(s): Department approval and University Advanced Standing

Provides application of classroom theory while working as an employee in the construction industry. Requires communication of personal goals, tracking performance and work hours with the employer. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May be repeated for a maximum of 4 credits toward graduation. May be graded credit/no credit.

**CMGT 489R**
**Undergraduate Research in Construction**
**1 to 3**
* Prerequisite(s): Department approval and University Advanced Standing

Provides the opportunity to conduct research under the mentorship of a faculty member. Practices the theoretical knowledge gained in prior major courses. Creates a significant intellectual or creative product that is characteristic of the construction discipline and worthy of communication to a broader audience. May be repeated for a maximum of 3 credits toward graduation.

**CMGT 497R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Approval of Construction Technologies Department Chair and University Advanced Standing

Offers independent study as directed in reading or individual projects at the discretion and approval of the department chair. May be repeated for a maximum of 6 credits toward graduation.

# Clin Mental Health Counseling (CMHC)

**CMHC 6000**
**ACA Ethics**
**3**
* Prerequisite(s): Admission to Clinical Mental Health Counseling, M.S program

Explores the roles and functions of a professional counselor and the ethical standards that govern the profession. Provides a foundation for the ethical practice of professional Counseling. Introduces students to the history of the Counseling profession as well as professional roles (practitioner, supervisor, educator, etc.) and professional organizations. Examines and applies the American Counseling Association (ACA) Code of Ethics (and ethical standards of its divisions) to a variety of ethical and legal situations using a variety of ethical decision-making models.

**CMHC 6010**
**Theories of Counseling**
**3**
* Prerequisite(s): Admission to Clinical Mental Health Counseling, M.S program or Master of Education-School Counseling Emphasis program

Introduces basic Counseling and psychotherapeutic theories and associated techniques. Provides a survey of models and theories consistent with current research (evidenced-based) and practice in the Counseling profession. Analyzes approaches including psychoanalytic, individual psychology, person-centered, existential, cognitive-behavioral, Gestalt, family systems, and postmodern theories. Examines the influence of sociocultural and historical factors on the development of Counseling theories.

**CMHC 6020**
**Techniques of Counseling**
**3**
* Prerequisite(s): Admission to Clinical Mental Health Counseling, M.S program or Master of Education-School Counseling Emphasis program

Analyzes the theoretical approaches to Counseling which have been demonstrated to be culturally-relevant and conceptually inclusive of multiple theories and techniques: Advanced Cognitive Behavioral Therapy techniques will be emphasized (other techniques will also be explored). Emphasizes selected readings, academic discussion and clinical application. Requires critical thinking and active participation. Applies theoretical information towards a goal of case conceptualizations as a precursor to effective treatment planning.

**CMHC 6030**
**DSM Diagnostics**
**4**
* Prerequisite(s): Admission to Clinical Mental Health Counseling, M.S program

Provides an overview of the major disorders in the current edition of the DSM. Examines a range of mental disorders from adjustment disorders to serious psychopathologies, and includes an overview of the etiology, developmental course, multiaxial diagnosis, treatment planning, and policy/advocacy issues associated with various disorders to address socially responsible practice. Addresses biological, environmental, cultural, intrapersonal, and interpersonal risk and protective factors, along with the sociocultural and theoretical critiques of limitations of diagnosis and the DSM.

**CMHC 6040**
**Professional Orientation**
**3**
* Prerequisite(s): Admission to Clinical Mental Health Counseling, M.S program

Provides a detailed exploration of the field of mental health counseling. Offers inquiry into the nature of the profession, including the professional organization and why many professionals join them. Describes the usual career trajectories of mental health counselors across various disciplines. Requires student development of a career plan and specialization-appropriate resume. Orients students to the requirements for their internship and practica.

**CMHC 6050**
**Career Counseling**
**3**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020,CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Introduces students to the concepts of career development. Presents the philosophical and historical foundations of career Counseling. Applies career Counseling theory to practice. Includes career Counseling technique, career assessment, career exploration, job market strategies, examination of workplace issues, and lifestyle and wellness concepts.

**CMHC 6060**
**Psychological Assessment**
**3**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020, CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Provides an introductory overview of assessment methods, instrumentation, and basic principles of measurement. Reviews techniques for assessing intellectual ability, aptitude/ achievement, psychopathology, emotion, and personality. Includes clinical assessment, communicating results, multicultural considerations, and ethical/ legal issues. Orients students to common instruments used in educational and clinical settings, common selection procedures, measurement methods, administration, scoring, and interpretation.

**CMHC 6070**
**Group Counseling**
**3**
* Prerequisite(s): CMHC 6010, CMHC 6020, and Admission to Clinical Mental Health Counseling, M.S program or Master of Education-School Counseling Emphasis program

Provides an introduction to many of the important challenges facing group leaders and group members in contemporary society. Discusses ethical guidelines particular to group work. Exposes students to how common Counseling theories can be applied in group settings. Provides an understanding of group developmental stages and processes, and how these dynamics influence group growth and productivity. Emphasizes leader skill development. Includes approximately 20 hours of class time spent in a laboratory experience wherein each student is provided the opportunity to function in a group.

**CMHC 6080**
**Eastern Counseling Approaches**
**3**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020, CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Explores the new trends in the field of counseling around mindfulness and meditation interventions. Discusses the history and background of each approach embedding them in their original frame. Facilitates critique of utilizing techniques divorced from original intent. Practices the intended form of these modes of being. Encourages model and psychotherapeutic interventions expanding the usual analytic frame.

**CMHC 6090**
**Psychopharmacology**
**3**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020, CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Explores the principles of psychopharmacology from a practitioner-oriented frame. Introduces the basic principles and concepts behind the types and purposes of various psychoactive substances. Provides neurochemical and biological models appropriate to non-physicians. Presents the mechanisms of action and the relationships between various drugs in the mental health field.

**CMHC 6100**
**Crisis Management**
**3**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020, CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Provides an overview of the types of crises mental health practitioners may involve themselves with, including natural disasters, terrorism, crime, suicide, and homicide. Discusses the research on responses to these types of traumas and some of the mental health conditions that may arise due to such experiences. Provides models of treatment for acute and chronic crises, including both systemic and organizational interventions as well as individual psychotherapeutic interventions.

**CMHC 6110**
**Research Methods**
**3**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020, CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Provides a conceptual understanding of research design and application. Offers an overview of research principles and methodology including qualitative and quantitative approaches and analysis. Enables students to become better, more critical consumers of research projects, methods, and designs. Prepares students to apply relevant research to their clinical practice.

**CMHC 6120**
**Addiction Counseling**
**3**
* Prerequisite(s): CMHC 6010, CMHC 6020, and Admission to Clinical Mental Health Counseling, M.S program or Master of Education-School Counseling Emphasis program

Introduces relevant theory, research, and practice associated with substance abuse and addictions Counseling. Presents a blend of didactic and practical elements to increase student knowledge of fundamental concepts while providing opportunities to experiment with approaches to working with clients presenting with substance abuse and / or addictions concerns. Explores topics that include pharmacological issues and terminology, models of addiction, theories on etiology, diagnosis and assessment, and evidence-based treatment strategies. Requires students to practice the introductory concepts of Motivational Interviewing in a practicum element that will accompany lectures, group discussion, case studies, and demonstrations over the course of the semester.

**CMHC 6130**
**Multicultural Counseling**
**3**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020, CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Exposes students to various cultures and the methods, values, and beliefs that organize family life and human development. Utilizes the oppression model to examine how the intersections of race, class, culture, gender, ethnicity, and sexuality shape and affect the lives of individuals and families and the therapeutic process itself. Explores intervention practices, social advocacy models, and resistance strategies.

**CMHC 6140**
**Program Evaluation**
**3**
* Prerequisite(s): CMHC 6010, CMHC 6020, and Admission to Clinical Mental Health Counseling, M.S program or Master of Education-School Counseling Emphasis program

Introduces research methods and program evaluation as it pertains to the field of professional Counseling. Explores major research designs including both quantitative and qualitative methods. Discusses research procedures, such data collection, sampling, and data analysis, and issues related to validity, reliability, and limitations of different approaches. Examines the history and development of program evaluation and provides an introduction to needs assessment in regard to program development, data collection methodology, and data analysis. Reviews ethical and culturally relevant strategies for interpreting and reporting the results of research and program evaluation studies.

**CMHC 6150**
**Cognitive Therapies**
**3**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020, CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Explores the principles of cognitive-behavioral theory, conceptualization, and psychotherapy techniques. Provides a framework for assessing and treating child and adult clinical problems from the perspective of cognitive#behavioral treatment approaches that have been empirically supported. Presents several assessment strategies including behavioral observation, self#report, self# monitoring, and structured interviews and rating scales. Stresses the important link between assessment and treatment planning, and evaluating treatment outcome. Explores the advantages and disadvantages of techniques discussed within a developmental framework. Emphasizes the assessment of anxiety, depression, addictive behaviors, social skills, and marital dysfunction.

**CMHC 6160**
**Human Development**
**3**
* Prerequisite(s): (CMHC 6010 and CMHC 6020) and (Admission to Clinical Mental Health Counseling, M.S program or or Master of Education-School Counseling Emphasis program)

Presents an overview of various models and theories in the discussion of the characteristics, developmental needs, and tasks at different stages of a person's life cycle. Discusses the impact of social, cultural, biological, and psychological factors on prenatal life, childhood, adolescence, adulthood, and aging. Explores the psychosocial development, cognitive functioning, life transitions, coping and adaptation, work and retirement, bereavement, and related issues in a person's life cycle in relation to students' work as counselors.

**CMHC 671R**
**Practicum**
**2**
* Prerequisite(s): CMHC 6000, CMHC 6010, CMHC 6020, CMHC 6030, and Admission to Clinical Mental Health Counseling, M.S program

Provides a forum for students to attain supervised clinical experience in which the students develop basic Counseling skills and integrate professional knowledge. Requires students to complete 100 hours of field training in a clinical mental health setting, including attaining 40 direct hours through both individual and group Counseling. Provides students with individual supervision by faculty and group supervision in seminar which is designed to be responsive to students' practicum experiences and concerns for their clients and sites. Evaluates students' ability to apply Counseling theories and techniques assessment and diagnostic information, clients' characteristics in case conceptualization, and treatment planning. Provides peer support and consultation. Must be taken twice to complete requirements. May be repeated for a maximum of 4 credits toward graduation.

**CMHC 689R**
**Internship**
**2**
* Prerequisite(s): CMHC 671R taken until 300 practicum hours completed and Admission to Clinical Mental Health Counseling, M.S program

Provides a forum for students to attain clinical experience in which they develop more advanced counseling skills and integrate course knowledge into their work. Requires that this course is repeated until students complete 800 or more hours in a clinical setting in which they provide 320 hours of direct service. Requires attendance to a one hour per week on-campus group supervision, in addition to the individual and group supervision provided at their internship site. Assists student practice of their clinical skills particularly case conceptualization, treatment planning, and treatment implementation. May be repeated for a maximum of 6 credits toward graduation.

# Constitutional Studies (CNST)

**CNST 2600**
**Comparative Constitutionalism**
**3**
* Prerequisite(s): POLS 1000 or POLS 1100

Compares and contrasts the political, social and economic aspects of the origins, drafting, and development of constitutions across the globe.

**CNST 3870**
**Constitutional History to Plessy 1896**
**3**
* Prerequisite(s): University Advanced Standing

Explores, in a critical and historical framework, US Constitutional history to Plessy (1896). Examines the origins and general principles of Constitutional thought, including the Colonial, Confederate, Early Republic, and Civil War periods of early US history. Examines the various Constitutional issues relating to judicial review, national supremacy, slavery, secession, the Civil War, and laissez-faire governmental policies.

**CNST 3880**
**Constitutional History Since Plessy 1896**
**3**
* Prerequisite(s): University Advanced Standing

Explores, in a critical and historical framework, US Constitutional history since Plessy (1896). Examines the development of the US Constitution from the late nineteenth century to the present day, with special attention being given to the progressive era, the New Deal, liberal constitutionalism, and the US Supreme Court's interpretations of civil rights and civil liberties.

**CNST 4720**
**Foundations of American Constitutionalism**
**3**
* Prerequisite(s): (POLS 1000 or POLS 1100 or instructor approval) and University Advanced Standing

Examines the political and constitutional foundations of the American Constitution, from the English Charter of Liberties in 1100 AD to the United States Bill Rights of 1791. Employs a comparative analysis of early Anglo-American constitutional thought, with special attention being given to the writings of prominent 17th century and 18th century constitutional theorists (e.g., Coke, Bacon, Burke, Penn, Dickinson, Mason, Adams, Madison, Marshall).

**CNST 4730**
**Framing of the US Constitution**
**3**
* Prerequisite(s): CNST 4720 and University Advanced Standing

Examines the political and constitutional arguments of the Framers of the Federal Constitutional Convention. Discusses the strengths and weaknesses of the Constitution and the alternative language and plans presented at the Convention. Examines the ratification of the Constitution, focusing on the Anti-Federalists' critique and the Federalists' defense of that historic document. Employs a critical analysis of the political factors affecting the drafting and ratifying of the Constitution.

**CNST 4790**
**US Constitution**
**3**
* Prerequisite(s): (POLS 1100 or POLS 1000) and University Advanced Standing

Examines the United States Constitution as the political blueprint of American national government. Explores the basic constitutional powers and structures of the federal government and the prominent political and constitutional conflicts among its executive, legislative, and judicial branches. Addresses such key elements of constitutional design as limited and empowered government, enumerated and implied powers, separation of powers, checks and balances, federalism, and the Bill of Rights. Employs a critical analysis of modern constitutional politics.

**CNST 4795**
**Civil Rights and Civil Liberties**
**3**
* Prerequisite(s): CNST 4790 and University Advanced Standing

Examines, with a critical lens, the political and constitutional aspects of the origins, drafting, and development of The Bill of Rights, the Modern Civil Rights Movements, and the Ninth, Tenth, Thirteenth, Fourteenth, Fifteenth, and Nineteenth Amendments to the Constitution.

**CNST 490R**
**Issues and Topics in Constitutional Studies**
**3**
* Prerequisite(s): (POLS 1000 or POLS 1100) and University Advanced Standing

Surveys a specific topic in constitutional studies. Topic varies each semester. With the approval of the department chair or coordinator, students may repeat the course for a maximum of 9 credits toward graduation.

**CNST 491R**
**Independent Study**
**1 to 4**
* Prerequisite(s): (POLS 1000 or POLS 1100), Instructor Approval, and University Advanced Standing

Provides independent study for students unable to secure a desired course subject matter within regular curriculum offerings. Requires student and instructor design and complete readings and other projects at the upper division level, with the approval of the department chair or coordinator. May be repeated for a maximum of 8 credits toward graduation.

# Communication (COMM)

**COMM 1020** **HH**
**Public Speaking**
**2**
* Corequisite(s): COMM 1025

Provides an introduction to basic concepts, theories, principles of oral communication as applied to a variety of speaking situations. Develops competence in oral communication through performance, as applied to critical thinking skills, arrangement of ideas, and use of evidence and reasoning to support claims. Explains how culture influences the perception of effective public speaking. Canvas Course Mats $89/Top Hat applies

**COMM 1025** **HH**
**Public Speaking Lab**
**1**
* Corequisite(s): COMM 1020

Provides students with the opportunity to apply, deliver, and examine course concepts discussed in COMM 1020.

**COMM 1050** **SS**
**Introduction to Communication**
**3**

Surveys the questions, methods, and findings in the discipline of speech communication. Explores communication theory and practice across a variety of contexts and forms, including verbal, non-verbal, interpersonal, group, organization, and mass communication. Canvas Course Mats $55/Sage applies

**COMM 1130**
**Writing for the Mass Media**
**3**

Acquaints students with the fundamentals of mass communication, especially the skills of information-gathering and writing for the mass media. Emphasizes print journalism but also considers broadcasting, legal and ethical issues, and public relations. Emphasizes writing for the media and AP style. Focuses on journalistic writing forms.

**COMM 1500** **HH**
**Introduction to Mass Communication**
**3**

Introduces students to the study of American mass media. Provides a critical overview of the main themes in the study of mass media, including the historical development of the media; the social, political, economic, and organizational contexts, impacts, and significance of the media; the nature of media content; its complex relationships to mass audiences; and the legal/regulatory context in which the media operate.

**COMM 1610**
**Reporting for the Mass Media**
**3**

Provides an opportunity to learn about a career in journalism. Focuses on gathering and organizing information in the field. Includes interviewing, covering a beat, investigative reporting, reviews, and opinions. Simulates a journalist's working experience. Offers experience covering current events in the field. Lab access fee of $20 applies.

**COMM 202R**
**Communication Field Experience**
**1 to 3**
* Prerequisite(s): Instructor Approval

Explores a wide variety of topics in public relations, mass media, journalism, and speech communication. May be repeated for a maximum of 6 credits toward graduation.

**COMM 207G**
**Introduction to Gender and Communication**
**3**

Introduces students to the study of gender differences and similarities in communication. Provides practical understanding and skills useful for more effective communication within and across gender boundaries. Addresses gender and communication issues across multiple cultural contexts, including issues beyond mainstream groups and United States culture.

**COMM 2100**
**The News Editing Process**
**3**

Introduces news judgment, content, and journalistic best practices. Prepares students to properly edit documents for publication through rewriting faulty stories, copy editing, and proof-reading. Includes instruction on how to create appropriate headlines and general page layouts. Lab access fee of $20 applies.

**COMM 2110 (Cross-listed with: MGMT 2110)** **SS**
**Interpersonal Communication**
**3**

Examines the role of communication in interpersonal relationships. Includes the history of interpersonal communication research and theory and applications such as negotiation, conflict management, listening, and assertiveness.

**COMM 2115**
**Introduction to Health Communication**
**3**

Provides an introduction to and a foundation for the important area of health communication. Covers persuasion theories as applied to health communication research. Examines the history of medicine and healthcare. Describes patient to caregiver interaction.

**COMM 2120**
**Small Group Communication and Decision Making**
**3**

Provides an overview of the communication processes involved in small-group interactions. Covers theories of leadership, decision-making, and problem-solving through group activities. Canvas Course Mats $66/McGraw applies.

**COMM 217G (Cross-listed with: CINE 217G, ENGL 217G)** **HH**
**Race Class and Gender in U S Cinema**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Raises cultural awareness through aesthetic, critical, and interdisciplinary examination of the evolution of the representation of race, class, and gender in American cinema. Focuses on both Hollywood and independent minority filmmakers. Some films screened may carry an "R" rating.

**COMM 2250**
**Principles of Advertising**
**3**

Introduces the basics of advertising research, strategy, creative execution, and media strategy. Canvas Course Mats of $78 applies.

**COMM 2270**
**Argumentation**
**3**

Examines the study of argument. Emphasizes reasoning, evidence, analysis, evaluation, audience analysis, and application of argumentative skills.

**COMM 2300**
**Introduction to Public Relations and Strategic Communication**
**3**

Introduces the basics of writing for the media, designing corporate literature, and working with the public and key stakeholders on behalf of a business, organization, and/or individual. Canvas Course Mats $44/Sage applies.

**COMM 2400**
**Organizational Communication**
**3**

Teaches how communication processes affect organizations. Applies theory to organizational analysis. Utilizes dialogue and network analysis to improve organizational values and performance.

**COMM 2510**
**Visual Strategies for Communication Majors**
**3**

Teaches strategies to visually align public relation campaigns with an organization's brand, using contemporary digital software. Provides understanding of visual strategies and effective design practices. Creates a literacy of visual communication tools and strategies for articulating a vision to audiences using well-established web design techniques. Lab access fee of $20 applies.

**COMM 2790**
**Magazine Writing**
**3**

Focuses on non-fiction writing for magazine consumption. Teaches how to research and write long, investigative feature articles. Includes analysis of the early magazine industry, contemporary issues in the magazine industry, and in-depth reporting on special topics, such as science, politics, culture and society, education, environment, and international affairs. Lab access fee of $20 applies.

**COMM 290R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Departmental Approval

For qualified students who wish to undertake a well-defined project or directed study related to an area of special interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. Includes projects such as writing a publishable paper, creating a portfolio of published news articles, producing an annotated bibliography, oral or multimedia presentation, or other options as approved by the instructor. May be repeated for a maximum of 3 credits toward graduation.

**COMM 3020**
**Communication Research Methods WE**
**3**
* Prerequisite(s): University Advanced Standing

Covers basic communication research methods in both quantitative and qualitative research. Focuses on the research process and discusses the methodological tools for understanding and conducting basic communication research. Includes examples based on research and promotes awareness of the importance of quantitative and qualitative research perspectives as well as of data collection and analytical procedures. Canvas Course Mats $66/McGraw applies.

**COMM 3025**
**Introduction to Qualitative Communication Research**
**3**
* Prerequisite(s): University Advanced Standing

Reviews methods of qualitative data collection, including ethnography, interviewing, observation, and textual analysis. Explores a variety of methods of qualitative analysis including rhetorical, interpretive, and critical analyses. Prepares students for careers in the fields of user-experience research, organizational research, communication consulting, and graduate research in the field of communication.

**COMM 3030**
**Media Literacy**
**3**
* Prerequisite(s): University Advanced Standing

Explores the concept of media literacy and how individuals can become more knowledgeable citizens when analyzing and evaluating messages disseminated from a wide variety of media outlets.

**COMM 3040 (Cross-listed with: PHIL 3040)**
**Media Ethics**
**3**
* Prerequisite(s): University Advanced Standing

Covers ethical issues in media communication. Includes discussions of ethnicity, gender, nationalism, and conflict. Analyzes development of moral agency. Examines tensions between individual freedoms and social responsibilities. Addresses ethical questions in the context of current struggles within and over corporate and public media.

**COMM 3050**
**Theories of Communication and Culture WE**
**3**
* Prerequisite(s): University Advanced Standing.

Covers main theoretical approaches to communication and culture. Includes transmission, ritual, symbolic interactionist, structuralist, post-structuralist, postmodern, and critical theories. Canvas Course Mats $66/McGraw applies.

**COMM 3100**
**Propaganda and Persuasion**
**3**
* Prerequisite(s): University Advanced Standing

Considers the problem of manipulative propaganda in the modern American context. Focuses on consumerist and militaristic propaganda. Treats propaganda as a special type of intentionally persuasive communication, designed by power blocs to engineer the consent of large numbers of people, often with hidden, unethical, or nefarious intent. Features a heavy use of cinema.

**COMM 3110 (Cross-listed with: ENGL 3110, THEA 3110)**
**Non Fiction Cinema History**
**3**
* Prerequisite(s): ENGL 2150 and University Advanced Standing

Surveys the history of non-fiction/documentary film from 1896 to the present. Includes study of early pioneers from Flaherty's NANOOK OF THE NORTH to the current trend of reality television and popular documentaries. Some films screened may carry an "R" rating.

**COMM 3115**
**Communicating in Environments**
**3**
* Prerequisite(s): University Advanced Standing

Explores how people use communication to navigate both social and natural environments. Investigates social and small group communication; specifically, how small groups are created, what role(s) they play in life. Considers how our culture communicates about the natural world: how do we define nature, who communicates for nature, and how does nature behave as a stakeholder in environmental conflicts. Occurs at the Capitol Reef Field Station, which allows for an experiential application of the theories of small-group and environmental communication. Focuses on the experience and application of the literature of the discipline to create an integrated-learning opportunity.

**COMM 3120**
**Fundamentals of New and Social Media**
**3**
* Prerequisite(s): University Advanced Standing

Examines contemporary issues related to social media, including the impact of such media on journalism and society, social media effects, and new media campaigns. Investigates the relationship between government policy and social media in relation to issues such as the digital divide, net neutrality, and the use of social media to sustain protests and revolutions. Software fee of $20 applies.

**COMM 3130**
**The Culture of Nature and Technology**
**3**
* Prerequisite(s): University Advanced Standing

Analyzes the cultural construction of nature and technology from historical, interpretive, and critical perspectives. Deconstructs the nature/culture dichotomy. Critiques the neutrality of technology thesis. Explores the political and social implications of representations of, and relations to, nature and technology.

**COMM 3140**
**Social Media Content Creation**
**3**
* Prerequisite(s): University Advanced Standing

Develops multimedia content creation skills for a myriad of social media platforms. Focuses both on the theoretical and practical foundation for persuasive/informative social media campaigns from a public relations, journalism, and communication-studies perspective. Covers multimedia content creation for platforms such as Facebook, Twitter, Instagram, and Pinterest, among others. Software fee of $45 applies.

**COMM 314G (Cross-listed with: ENGL 314G, THEA 314G)**
**Global Cinema History**
**3**
* Prerequisite(s): (ENGL 2150 or THEA 1023) and University Advanced Standing

Studies the evolution of global film styles, movements, stars, and genres with a focus on international cinema chronologies outside the United States. Some films screened may be considered controversial and carry an "R" rating.

**COMM 3160**
**Social Media Analytics**
**3**
* Prerequisite(s): University Advanced Standing

Provides methods in which social media activity data is obtained and subsequently measured. Examines common metrics that are used to evaluate the effectiveness of social media campaigns. Explores how social media, as a medium, can be properly evaluated in terms of valuation and return on investment. Critiques and analyzes current and past social media campaigns in order to better understand how metrics can help to modify social media strategy and tactics. Applies the associated theoretical concepts via hands-on activities using contemporary social media content management tools and analytic software. Software fee of $45 applies.

**COMM 317G**
**Ethnographic Methods for Communication Research**
**3**
* Prerequisite(s): University Advanced Standing

Provides an examination of concepts and methodologies used to conduct ethnographic research. Discusses the critical study of cultural processes; the approaches to ethnographic research; and the relationship among ethnographic evidence (fieldwork), interpretation, and representation.

**COMM 319G**
**Intercultural Communication Encounters**
**3**
* Prerequisite(s): COMM 1050 and University Advanced Standing

Promotes awareness of the role of competent communication in intercultural awareness and sensitivity. Reviews classical and current definitions of culture and describes their general characteristics, with specific focus on the issue of cultural diversity. Describes the components and process of intercultural communication including perception and motivation. Provides an overview of differences and similarities in verbal and nonverbal intercultural communication. Identifies guidelines for achieving intercultural communication competence.

**COMM 3290**
**Photojournalism**
**3**
* Prerequisite(s): University Advanced Standing

Covers the fundamental skills and principles of gathering news with a camera. Demonstrates how students can improve the way they see information for distribution via the mass media. Allows students to articulate how they feel about images and describe why such images work well or poorly for publication. Lab access fee of $20 applies.

**COMM 332G**
**International Business Communication**
**3**
* Prerequisite(s): University Advanced Standing

Reviews various aspects of today's international business environment from a business communication perspective. Overviews critical elements that arise from the various cultural backgrounds which can impact both domestic and international organizations. Focuses on the development and refinement of goals-driven, receiver-centric approach to communication. Considers topics such as managerial communication, negotiations, and cultural change.

**COMM 3410 (Cross-listed with: FAMS 3410)**
**Fundamentals of Mediation and Negotiation**
**3**
* Prerequisite(s): University Advanced Standing

Teaches students to understand and participate knowledgeably on a basic level in the processes of mediation and negotiation. Emphasizes conceptual knowledge of both processes and improves practical skills and effectiveness as a mediator and negotiator. Uses an interactive-workshop format that blends theory with simulated class role-play.

**COMM 3420 (Cross-listed with: BESC 3420)**
**Communication and Conflict**
**3**
* Prerequisite(s): (FAMS 3410 or COMM 3410 or COMM 2110 or LEGL 3150) and University Advanced Standing

Studies contemporary theories of conflict and communication. Analyzes the roles of culture, gender, personal, and organizational ethics in conflicts and disputes. Covers the nature of conflict and teaches methods of negotiation, mediation, and conflict resolution with an emphasis on collaborative problem-solving. Canvas Course Mats $66/McGraw applies.

**COMM 350R**
**Special Topics in Communication**
**3**
* Prerequisite(s): University Advanced Standing

Presents selected topics in communication that will vary from semester to semester. May be repeated with different topics for a total of 9 credits toward graduation.

**COMM 3510**
**Visual Communication Theory**
**3**
* Prerequisite(s): University Advanced Standing

Explores the physio-psychological bases of perception, cognition, semiotics, aesthetics, and history that lead to realization of visual messages within the context of communication. Discusses the ethical dimensions of visual image-making and critiques contemporary visual images across all mass media.

**COMM 3520**
**Public Relations and Strategic Communication Case Studies**
**3**
* Prerequisite(s): COMM 2300 and COMM 3020 and University Advanced Standing

Examines public relations and strategic planning process through the analysis of case studies. Addresses strategic communication planning issues in media relations, crisis communications, ethics, creative planning, research, and evaluation, using real-world situations and clients. Software fee of $45 applies.

**COMM 3530**
**Public Relations and Strategic Communication Writing**
**3**
* Prerequisite(s): University Advanced Standing

Develops skills in persuasive writing for institutional or individual clients. Provides a hands-on experience in applying public relations and strategic communication writing tools for corporate, non-profit, government, and/or integrated communication organizations. Covers writing for the media, designing and writing corporate literature, and working with the public on behalf of a business, organization, and/or individual as it relates to public relations and strategic communication. Lab access fee of $20 applies. Software fee of $45 applies.

**COMM 3540**
**Sports Public Relations**
**3**
* Prerequisite(s): University Advanced Standing

Examines the history of sports communication for public relations. Spotlights sports communication key influencers. Highlights the skills necessary to effectively communicate in a changing sports marketplace. Exposes students to how public relations, social networking, corporate involvement, and mass media continue to shape a dynamic field that remains a top choice for creative communication professionals across the globe. Incorporates students' sports-writing skills as they learn the execution of sports digital media plans, media conferences, and media availability.

**COMM 3560**
**Public Relations Event and Media Coordination**
**3**
* Prerequisite(s): University Advanced Standing.

Examines the process of event coordination as it relates to public relations and media management. Reviews the history of festivals and events. Provides an understanding of the concepts of project coordination, strategic planning, and strategic vision within event coordination. Explores media management within event coordination for events that include award shows, film festivals, government press conferences, sporting events, fundraisers, promotional events, and more. Explores public-relations careers within event coordination and helps students create, develop, manage, execute, and evaluate an event from a public-relations approach. Software fee of $45 applies.

**COMM 3570**
**Crisis Communication**
**3**
* Prerequisite(s): University Advanced Standing

Provides a broad theoretical and practical understanding of crisis communication and risk assessment. Examines recent cases to determine what constitutes a crisis. Examines causes of organizational crises, how to avoid these crises, and what to do when a crisis hits. Evaluates communicative channels and messages, including new media, and develops strategies to prepare and manage a crisis situation.

**COMM 362G**
**International Communication**
**3**
* Prerequisite(s): COMM 3020, COMM 3050, and University Advanced Standing

Introduces theories of international communication. Covers different systems of the press in different countries. Analyzes specific case studies in international media.

**COMM 3660**
**Investigative Reporting**
**3**
* Prerequisite(s): University Advanced Standing

Explores news and information in a democratic framework. Develops interview techniques, public record use, fact-checking, and electronic data access in relation to complex social issues.

**COMM 3680**
**Advertising Media Planning**
**3**
* Prerequisite(s): University Advanced Standing

Teaches the process of media planning. Covers procedures, issues, and methods of evaluation. Takes a problem-solving approach, oriented to targeting particular audiences in appropriate ways.

**COMM 3690**
**Creative Strategy in Communication Campaigns**
**3**
* Prerequisite(s): University Advanced Standing

Prepares students for careers in public relations, journalism, and communication by exploring the role of research, copywriting, design, and media structures in developing persuasive messages. Emphasizes execution of creative strategies that are appealing to the intended audience, consistent with communication objectives, and formatted correctly for the media in which they are implemented.

**COMM 3700**
**Free Expression in a Democratic Society**
**3**
* Prerequisite(s): University Advanced Standing

Examines the role of the free speech and free press clauses of the First Amendment of the U.S. Constitution from legal, ethical, political, and pragmatic perspectives. Covers basic rules governing the media (advertisers, newspapers, public relations specialists, and electronic media) and individuals. Includes analysis of court decisions, executive orders, administrative rules, and legislation intended to limit or regulate speech and examples of people/organizations who have challenged these rules.

**COMM 3780**
**Mormons Media and Culture**
**3**
* Prerequisite(s): University Advanced Standing

Examines the intersection of media, popular culture, and Mormonism. Analyzes the social construction of Mormonism through representations in the media, official and unofficial LDS discourse, folklore, material culture, and history. Discusses cultural theories of race, gender, orientalism, and tribalism.

**COMM 3790**
**Case Studies in Journalism**
**3**
* Prerequisite(s): University Advanced Standing

Examines historically significant examples of the press in action from historical, ethical, and critical perspectives. Lab access fee of $20 applies.

**COMM 401G**
**Communication Education**
**3**
* Prerequisite(s): University Advanced Standing

Discusses the various principles and objectives related to communication education and instructional communication. Offers experience in the role of speech lab mentor.

**COMM 4110**
**Interpersonal Communication Theory and Research**
**3**
* Prerequisite(s): University Advanced Standing

Surveys current interpersonal research. Explores the interrelated nature of theory and research. Provides the foundational knowledge required to critically assess current research in the field. Creates an opportunity to systematically explore a personal area of interest within the area of interpersonal communication.

**COMM 4115**
**Advanced Health Communication**
**3**
* Prerequisite(s): University Advanced Standing

Examines how persuasion, interpersonal, and organizational theories impact patient-provider communication. Examines the role of technology in healthcare contexts. Examines the impact of the mass media in health sense-making and decision-making.

**COMM 4120**
**Group Communication**
**3**
* Prerequisite(s): University Advanced Standing

Extends understanding of group operation and experience through current theory and research studies. Provides experiential activity of working in class groups. Enables students to study groups in their social environments, investigate real-world group policy, and discover the benefits of viewing groups as having stable yet permeable boundaries.

**COMM 4125**
**Quantitative Communication Research Methods**
**3**
* Prerequisite(s): University Advanced Standing

Provides knowledge and skills for conducting quantitative communication research. Focuses on how to examine research and formulate research questions and hypotheses. Explores primary communication research methods and their application. Utilizes descriptive and inferential statistical analyses of data and interpretation of statistical findings.

**COMM 4170**
**Contemporary Issues in Organizational Communication**
**3**
* Prerequisite(s): University Advanced Standing

Provides an introduction, overview, and in-depth look at the role of communication in contemporary organizations. Demonstrates the importance and challenges of communication within organizations. Emphasizes the interdependence of internal and external forms of organizational communication.

**COMM 4180**
**Communication and Social Behavior**
**3**
* Prerequisite(s): University Advanced Standing

Examines the complex relationship between human communication and the social worlds in which we live. Looks at ways behavior in roles, institutions, and culture are socially constructed through language. Examines discourses and their roles in constructing social phenomena, with an emphasis on the relationships between discourse and power.

**COMM 4190**
**Family Communication**
**3**
* Prerequisite(s): University Advanced Standing

Evaluates communication concepts and research specific to the distinct field of inquiry known as Family Communication. Reviews family communication concepts such as privacy, conflict, intimacy, difficult conversations, family storytelling, and family communication patterns. Includes quantitative and qualitative research methods.

**COMM 4200 (Cross-listed with: FAMS 4200)**
**Advanced Mediation and Negotiation**
**3**
* Prerequisite(s): University Advanced Standing

Prepares students to manage the mediation and negotiation process. Provides the knowledge of both processes, and sharpens practical skills and effectiveness as a mediator or negotiator. Uses an interactive-workshop format that blends theory with simulated class role-play. A certification with the Utah State Court Administrator's office may be offered to those who pass the course and complete 10 hours of mediation and negotiation at the conclusion of the semester.

**COMM 4250**
**Communication and Leadership**
**3**
* Prerequisite(s): University Advanced Standing

Encourages students to critically analyze leadership in terms of interpersonal effectiveness and professionalism from both a theoretical and practical perspective. Examines power and influence in leadership-related group and team communication. Advances oral and written communication, interpersonal communication, and emotional intelligence in crisis scenarios.

**COMM 431R**
**Communication Executive Lecture Series**
**1**
* Prerequisite(s): University Advanced Standing

Presents lectures by guest speakers emphasizing current public relations and communication topics concerning the student, community, nation, etc. Exposes students to varying topics and industry experts each semester. May be repeated for a maximum of 2 credits toward graduation.

**COMM 4500**
**Media and Politics**
**3**
* Prerequisite(s): University Advanced Standing

Examines theories and research of media and politics. Analyzes the intersection between traditional and emerging media platforms and current issues in political campaigns, attitudes towards politics, and democratic participation.

**COMM 4630**
**Wolverine Student Public Relations and Strategic Communication Firm**
**3**
* Prerequisite(s): University Advanced Standing

Provides industry experience in a public relations firm setting working in corporate and nonprofit sectors. Applies writing, media relations, event planning, branding, copy editing, content creation, and social media management for real-world organizations consistent with accepted public relations practices. Teaches market and consumer research and provides regular contact with clients. Prepares students to create and implement public relations campaigns, including evaluations for client work. Software fee of $45 applies.

**COMM 479R**
**Journalism Workshop**
**3**
* Prerequisite(s): University Advanced Standing

Provides student newspaper staff experience in writing, editing, and publishing. Allows students to work on the student newspaper and complete specific learning objectives related to print production, such as news and feature writing, columns, and editorials. Focuses on layout, production, photography, advertising, and sales in a real-world newspaper environment. May be repeated for a maximum of 6 credits toward graduation. May be graded credit/no credit. Lab access fee of $20 applies.

**COMM 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Departmental Approval and University Advanced Standing

For upper division students working toward a Bachelor of Arts or a Bachelor of Science degree in Integrated Studies with a Communication emphasis. Provides a transition from school to work where academic concepts are applied to actual practice through on-the-job experience commensurate with upper-division classroom instruction. Requires instructor approval and final report. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**COMM 4830**
**Competitive Case Studies**
**3**
* Prerequisite(s): Instructor Approval and University Advanced Standing

Teaches competitive case studies with a public relations emphasis. Focuses on development, research, execution, and evaluation of strategic communication planning for a client. Prepares students to compete in regional or national competitions. Software fee of $45 applies.

**COMM 4850**
**Public Relations and Strategic Communication Campaigns**
**3**
* Prerequisite(s): COMM 2300, COMM 3520, and University Advanced Standing

Applies PR skills, case studies, and writing analysis to create strategic public relations campaigns for a number of clients. Requires students to generate a portfolio of work for clients. Software fee of $45 applies.

**COMM 4930**
**Communication Capstone**
**3**
* Prerequisite(s): COMM 1050, COMM 319G, and University Advanced Standing

Discusses the integration of various principles and objectives covered across the communication curriculum. Includes major thesis or project designed to reflect students' career goals.

**COMM 497R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Departmental approval and University Advanced Standing

For advanced, qualified students who wish to undertake a well-defined project or directed study related to an area of special interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. Includes projects such as writing a publishable paper, creating a portfolio of published news articles, producing an annotated bibliography, oral or multimedia presentation, or other advanced options as approved by the instructor. May be taken for a maximum of 9 credit hours toward graduation.

# Computing (COMP)

**COMP 1000**
**Computer and Information Literacy**
**3**

Discusses computer and information literacy, focusing on current technology, emerging technology, and social media. Promotes appropriate and ethical use of technology, critical-thinking skills, and problem-solving strategies. Develops skills in word processing, spreadsheet, presentation, and image-editing applications for personal and college success.

**COMP 301R**
**Digital Lecture Series**
**1**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Guest speakers lecture on current topics in computer science, digital media, and information systems/technology. May be repeated for a maximum of 3 credits toward graduation.

# Collision Repair Technology (CRT)

**CRT 100R**
**Paint Your Own Car**
**2**

Designed as a survey class. Discusses and demonstrates safety, sanding, masking, feather edging, priming, and refinishing of student's vehicle. Students will refinish their own projects in this class. Body and fender dents, rust out, etc., should be taken care of before class enrollment. The instructor will inspect and approve each project prior to allowing it in the program. Course is open to any community member who may profit from the instruction. May be repeated as desired for interest. Tool room fee of $19 for equipment applies.

**CRT 1110**
**Surface Preparation**
**2**

Covers environmental and personal safety when handling collision industry chemicals. Discusses metal preparation, surface treatment, painting and surface rust removal, proper sanding of old finishes, and film build tolerances. Teaches application and uses of undercoats, primers, primer surfacers, sealers and primer sealers. Covers block sanding, guide coats, wax and grease removers, and surface pre-cleaning techniques. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 111L**
**Surface Preparation Lab**
**1**
* Corequisite(s): CRT 1110

Provides laboratory experience for surface preparation techniques aligning with lectures from CRT 1110. Topics include finish removal, sanding techniques, undercoating materials. Tool room fee of $19 for equipment applies. Course Lab fee of $40 for materials applies.

**CRT 1120**
**Nonstructural Repair**
**2**

Offers in-depth analysis of minor damage and applied metal working techniques. Studies properties of metal, elasticity, corrosion protection, work hardening, rough out, hammer and dolly techniques, heat shrinking, pick and file and grinding methods. Presents application of corrosion protection materials, body fillers, including metal and fiber reinforced fillers, and their shaping. Emphasizes safety precautions. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 112L**
**Nonstructural Repair Lab**
**1**
* Corequisite(s): CRT 1120

Provides a laboratory experience for nonstructural repair techniques aligning with lectures from CRT 1120. Topics include fillers use, metallurgy, shrinking and stretching. Tool room fee of $19 for equipment applies. Course Lab fee of $22 for materials applies.

**CRT 1130**
**Overall Refinishing and Problem Solving**
**2**

Teaches use and maintenance of shop paint spray equipment. Studies types of undercoatings including sealers, primers, and primer surfacers, their use, limitations, and application. Discusses refinish products, their solid levels, coverage, and recommended refinish systems. Teaches prevention and removal of refinishing processing defects. Covers cutting and buffing. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 113L**
**Overall Refinishing and Problem Solving Lab**
**1**
* Corequisite(s): CRT 1130

Provides a laboratory experience for overall refinishing and problem solving techniques aligning with lectures from CRT 1130. Topics include safety, substrate usage, application techniques, base coats, clear coats, single stage paints, and tri coat processes, application / refinish / material defects, causes and cures. Tool room fee of $19 for equipment applies. Course Lab fee of $74 for materials applies..

**CRT 1140**
**Panel Replacement and Adjustment**
**2**

Studies removal, replacement, and alignment of bolt-on body panels. Presents multiple latch mechanisms and their adjustments. Various trim and body fasteners are discussed. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 114L**
**Panel Replacement and Adjustment Lab**
**1**
* Corequisite(s): CRT 1140

Provides a laboratory experience for panel replacement and adjustment techniques aligning with lectures from CRT 1140. Topics include replacement and alignment of bolt-on body panels, fasteners and trim. Tool room fee of $19 for equipment applies.

**CRT 1210**
**Blending Tinting and Detailing**
**2**

Studies automotive refinish blending techniques. identifies proper procedures for Single stage, Base Coat, and Tri stage blending. Identifies detailing techniques and materials. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 121L**
**Blending Tinting and Detailing Lab**
**1**
* Corequisite(s): CRT 1210

Provides a laboratory experience for blending tinting and detailing techniques. Identifies proper procedures for Single stage, Base coat, and Tri stage blending. Identifies detailing techniques and materials. Tool room fee of $10 for equipment applies. Course Lab fee of $53 for materials applies.

**CRT 1230**
**Welding and Cutting**
**2**

Introduces gas welding and cutting followed by intense study of MIG, TIG, STRSW welding of mild, high strength, ultra high strength steels, and aluminums. Studies the most common joints as they apply to current vehicles construction techniques. Introduces plasma arc cutting techniques. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 123L**
**Welding and Cutting Lab**
**1**
* Corequisite(s): CRT 1230

Provides a laboratory experience for welding and cutting techniques aligning with lectures from CRT 1230. Topics include MIG, TIG , Squeeze Type Resistant Spot Welding (STRSW), welding processes. Tool room fee of $19 for equipment applies. Course Lab fee of $39 for materials applies.

**CRT 2310**
**Collision Damage Reporting**
**2**
* Prerequisite(s): CRT 1120, CRT 1130, CRT 1230, recommended

Teaches estimating procedures. Uses Crash Estimating Guide. Covers labor and material costs, judgment of repairs, estimating, and insurance nomenclature. Includes computer generated damage reporting, page logic, and ethical problem solving. Uses lecture, guest speakers, and practice exercises. Includes demonstrations, and lab. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 231L**
**Collision Damage Reporting Lab**
**1**
* Prerequisite(s): CRT 112L, CRT 113L, CRT 123L, all recommended
* Corequisite(s): CRT 2310

Provides a laboratory experience for collision damage estimating techniques aligning with lectures from CRT 2310. Topics include: damage analysis sequence, repair and replace decisions, using crash estimating guide, procedure page analysis of crash estimating guide, selecting parts and labor amounts in crash estimating guide, and various estimating programs for the computer. Tool room fee of $19 for equipment applies. Course Lab fee of $23 for materials applies.

**CRT 2320**
**Structural Damage Analysis**
**2**
* Prerequisite(s): CRT 1230

Teaches visual inspection, gauging, measuring, laser technology, and procedures needed to correctly evaluate primary and secondary structural damage. Includes lecture, demonstrations, and lab. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 232L**
**Structural Damage Analysis Lab**
**1**
* Prerequisite(s): CRT 123L
* Corequisite(s): CRT 2320

Provides a laboratory experience for analyzing structural damage to conventional and unibody frames. Aligns with lectures from CRT 2320. Topics include: damage identification, body and frame measurement systems, interpret dimension information, set up and properly use a variety of manual, and computerized measuring systems. Tool room fee of $19 for equipment applies. Course Lab fee of $20 for materials applies.

**CRT 2330**
**Structural Repair**
**2**
* Prerequisite(s): CRT 1230

Teaches methods, strategies, and technology needed to align and straighten unibody and conventional frame components made from high strength steel and plastics. Studies alignment of steering and suspension components. Includes lecture, demonstrations, and lab. Software fee of $10 applies. Lab access fee of $10 applies.

**CRT 233L**
**Structural Repair Lab**
**1**
* Prerequisite(s): CRT 123L
* Corequisite(s): CRT 2330

Provides a laboratory experience for aligning and straightening unibody and conventional components made from high strength steel and plastics. Tool room fee of $19 for equipment applies.

**CRT 2340**
**Full and Partial Panel Replacement**
**2**
* Prerequisite(s): CRT 1140, CRT 1230

Teaches removal, alignment, welding, gluing, and corrosion protection technology needed to replace unibody components including rails, pillars, and weld-on panels. Includes lecture, demonstrations, and lab. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 234L**
**Full and Partial Panel Replacement Lab**
**1**
* Prerequisite(s): CRT 114L, CRT 123L
* Corequisite(s): CRT 2340

Provides a laboratory experience for full and partial panel replacement, aligning with lectures from CRT 2340. Topics include: removal, alignment, welding, gluing, and corrosion protection technology needed to replace unibody components: including rails, pillars, and weld-on panels. Tool room fee of $19 for equipment applies. Course Lab fee of $15 for materials applies.

**CRT 2400**
**Plastic Paintless Dent Repair**
**2**
* Prerequisite(s): CRT 1110, CRT 1120

Teaches plastic parts identification, interpretation of ISO codes, plastic welding equipment and techniques, SMC repairs and sectioning. Instructs in paintless dent repair tools, and methods of repair. Uses Advanced Tech I-CAR curriculum. Includes lecture, demonstrations.

**CRT 240L**
**Plastic PaintLess Dent Repair Lab**
**1**
* Prerequisite(s): CRT 111L, CRT 112L
* Corequisite(s): CRT 2400

Provides a laboratory experience for plastic parts identification, interpretation of ISO codes, plastic welding equipment and techniques, SMC repairs and sectioning. Instructs in paintless dent repair tools, and methods of repair. Uses Advanced Tech I-CAR curriculum. Includes hands-on demonstrations. Tool room fee of $19 for equipment applies. Course Lab fee of $35 for materials applies.

**CRT 2420**
**Plastic Repair**
**4**

Teaches various repair methods, tools, and materials used to correctly repair plastic materials and SMC panels in modern vehicles. Includes lecture, demonstrations, and lab. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 2430**
**Mechanical and Electrical Repair**
**4**

Teaches basic mechanical systems theory, removal, and replacement. Studies A/C systems, cooling, braking, emission, restraint, and electrical systems. Includes lecture, demonstrations and lab. Uses ICAR Advanced Technical Curriculum. Successful completers should be prepared for ASE certification. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**CRT 2440**
**Mechanical Advanced Vehicle Systems**
**2**

Teaches basic mechanical systems theory, removal, and replacement. Studies basic four-wheel steering, traction control, G.P.S., electronic stability control, and black box technology information systems, minor diagnosis and troubleshooting. Includes lecture and demonstrations. Uses Advanced Tech I-CAR curriculum.

**CRT 244L**
**Mechanical Advanced Vehicle Systems Lab**
**1**
* Corequisite(s): CRT 2440

Provides a laboratory experience for mechanical systems theory, removal, and replacement. Instructs in basic-four wheel steering, traction control, G.P.S., electronic stability control, and black box technology information systems, minor diagnosis and troubleshooting. Includes demonstrations and hands-on. Uses I-CAR Advanced Technical Curriculum. Tool room fee of $19 for equipment applies.

**CRT 2450**
**Bags Brakes Steering**
**2**

Teaches the operation and repair of active and passive restraint systems. Diagnosis of sensors, modules and related components is also discussed. Discusses drum, disc, and anti-lock brake systems and components. Covers parallelogram, and rack and pinion steering systems, repair, replacement and diagnosis of each system is addressed. Uses Advanced Tech I-CAR curriculum.

**CRT 245L**
**Bags Brakes Steering Lab**
**1**
* Corequisite(s): CRT 2450

Teaches the operation and repair of active and passive restraint systems. Diagnosis of sensors, modules and related components is also discussed. Discusses drum, disc, and anti-lock brake systems and components. Covers parallelogram, and rack and pinion steering systems, repair, replacement and diagnosis of each system is addressed. I-CAR Advanced Tech curriculum is used. Tool room fee of $19 for equipment applies. Course Lab fee of $27 for materials applies.

**CRT 2510**
**Custom Welding**
**2**

For students pursuing a Diploma or an AAS degree in Collision Repair Technology with an emphasis in Custom Street Rod Technology or interested community members with a welding background. Covers TIG welding processes for mild steel, stainless steel, and aluminum. Teaches oxyacetylene welding processes for mild steel, brass, copper, pot metal, and aluminum.

**CRT 251L**
**Custom Welding Lab**
**1**
* Corequisite(s): CRT 2510

Provides a laboratory experience for TIG welding processes for mild steel, stainless steel, and aluminum. Instruction in Oxyacetylene welding processes for mild steel, brass, copper, pot metal, and aluminum. Tool room fee of $19 for equipment applies. Course Lab fee of $69 for materials applies.

**CRT 2520**
**Customizing**
**2**

For students pursuing a Diploma or an AAS degree in Collision Repair Technology with an emphasis in Custom Street Rod Technology or interested community members with a welding background. Covers frenching, shaving, body modifications, convertible conversions, building hood scoops, louvers, flare, and other technical customizing processes.

**CRT 252L**
**Customizing Lab**
**1**
* Corequisite(s): CRT 2520

Provides a laboratory experience for frenching, shaving, body modifications, convertible conversions, building hood scoops, louvers, flare, and other technical customizing processes. Tool room fee of $19 for equipment applies. Course Lab fee of $11 for materials applies.

**CRT 2530**
**Panel Fabrication**
**2**

For students pursuing a Diploma or an AAS degree in Collision Repair Technology with an emphasis in Custom Street Rod Technology or interested community members. Covers basic fabricating tools such as sheet metal brake, slip rolls, band saw, and nibblers. Uses specialty tools such as English wheel, power hammer, kraftformer, plenisher hammer, shrinkers, and stretchers. Teaches panel fabrication and hammer forming.

**CRT 253L**
**Panel Fabrication Lab**
**1**
* Corequisite(s): CRT 2530

Provides a laboratory experience for basic fabricating tools such as sheet metal brake, slip rolls, band saw, and nibblers. Uses specialty tools such as English wheel, power hammer, kraftfomer, plenisher hammer, shrinkers, and stretchers. Teaches panel fabrication and hammer forming. Tool room fee of $19 equipment applies. Course Lab fee of $60 materials applies.

**CRT 2540**
**Structural Body Fabrication**
**2**

For students pursing a diploma or AAS degree in Collision Repair Technology with an emphasis in Custom Street Rod Technology or interested community members. Covers body construction from bumper to bumper and from roof to floor. Enhances knowledge of structural components of a well constructed vehicle.

**CRT 254L**
**Structural Body Fabrication Lab**
**1**
* Corequisite(s): CRT 2540

Provides a laboratory experience for body construction from bumper to bumper and from roof to floor. Enhances knowledge of structural components of a well constructed vehicle.

**CRT 2610**
**Top Chopping Sectioning and Channeling**
**2**
* Prerequisite(s): CRT 2510, CRT 251L

For students pursuing a Diploma or an AAS degree in Collision Repair Technology with an emphasis in Custom Street Rod Technology or interested community members with a basic welding and collision repair background. Covers the history of vintage vehicles, methods of top chopping, sectioning and channeling techniques.

**CRT 261L**
**Top Chopping Sectioning and Channeling Lab**
**1**
* Prerequisite(s): CRT 2510, CRT 251L
* Corequisite(s): CRT 2610

Provides a laboratory experience for methods of top chopping, sectioning and channeling techniques. Tool room fee of $19 for equipment applies. Course Lab fee of $16 for materials applies.

**CRT 2620**
**Frames**
**2**
* Prerequisite(s): CRT 2510, CRT 251L

For students pursuing a Diploma or an AAS degree in Collision Repair Technology with an emphasis in Custom Street Rod Technology or interested community members with a welding background. Identifies the different types of frames and how to modify them. Teaches sub-framing, pro-streeting, narrowing of rear ends, drive shafts, and complete frame change over. Covers exhaust systems and other alterations, front to rear.

**CRT 262L**
**Frames Lab**
**1**
* Prerequisite(s): CRT 2510, CRT 251L
* Corequisite(s): CRT 2620

Provides a laboratory experience for identifying the different types of frames and how to modify them. Teaches sub-framing, pro-streeting, narrowing of rear ends, drive shafts, and complete frame change over. Covers exhaust systems and other alterations, front to rear. Tool room fee of $19 equipment applies.

**CRT 2630**
**Detailing and Custom Painting**
**2**
* Prerequisite(s): CRT 1110, CRT 1120, CRT 1130, CRT 1140, CRT 1210

For students pursuing a Diploma or an AAS degree in Collision Repair Technology or Custom Street Rod Technology or interested community members with a automotive painting background. Teaches custom painting and detailing for show cars. Emphasizes flames, scallops, shredding, checker boarding, air brush techniques, murals, fish scales, three stage paints, pearls, candies, and multi-colored changes.

**CRT 263L**
**Detailing and Custom Painting Lab**
**1**
* Prerequisite(s): CRT 111L, CRT 112L, CRT 113L, CRT 121L
* Corequisite(s): CRT 2630

Provides a laboratory experience for custom painting and detailing for show cars. Emphasizes flames, scallops, shredding, checker boarding, air brush techniques, murals, fish scales, three stage paints, pearls, candies, and multi-colored changes. Tool room fee of $19 for equipment applies. Course Lab fee of $73 for materials applies.

**CRT 2640**
**Panel Fabrication of Aluminum**
**2**
* Prerequisite(s): CRT 1110, CRT 1120, CRT 1130, CRT 1140

For students pursing a diploma or an AAS degree in Collision Repair Technology with an emphasis in Custom Street Rod Technology or interested community members. Covers basic hand tools, such as: hammers, dollys, leather bags, and slappers. Use of specialty equipment, such as: English wheel, Pullmax, nibbler, power hammers, and bead rollers. Teaches making bucks, patterns and forms. Teaches panel fabrication of aluminum.

**CRT 264L**
**Panel Fabrication of Aluminum Lab**
**1**
* Corequisite(s): CRT 2640

Provides laboratory experience for use of: hammers, dollys, leather bags, and slappers. Instructs in the use of specialty equipment, such as: English wheel, Pullmax, nibbler, power hammers, and bead rollers. Teaches making bucks, patterns and forms. Teaches panel fabrication of aluminum. Tool room fee of $19 for equipment applies. Course Lab fee of $60 for materials applies.

**CRT 2650**
**Automotive Interior Design**
**2**
* Prerequisite(s): CRT 1110, CRT 1120, CRT 1130, CRT 1140

Discusses automotive interior designs with emphasis on color coordination, and materials. Identifies a variety of techniques used in alteration, sewing, layout, and attachment processes.

**CRT 265L**
**Automotive Interior Design Lab**
**1**
* Corequisite(s): CRT 2650

Offers a laboratory experience for CRT 2650 lecture. Demonstrates interior design materials, color coordination, and stitching techniques. Teaches fabrication, design attachment, molding, layout and cutting. Tool room fee of $19 for equipment applies. Course Lab fee of $96 for materials applies.

**CRT 281R**
**Cooperative Work Experience**
**1 to 8**
* Corequisite(s): CRT 285R

Designed for Collision Repair Technology Majors. Provides paid, on-the-job work experience in the student's major. Work experience, the correlated class, and enrollment are coordinated by the Cooperative Coordinator. Includes student, employer and coordinator evaluations, on-site work visits. Provides experience in writing and completing individualized work objectives that improve present work performance. May be repeated as desired for interest. May be graded credit/no credit.

**CRT 285R**
**Cooperative Correlated Class**
**1**
* Corequisite(s): CRT 281R

Designed for Collision Repair Technology Majors. Identifies on-the-job problems and provides remediation of those problems through in-class discussion and study. Includes the study of identifying and maximizing service opportunities. Students register for this class with the approval of the Cooperative Coordinator. Includes lecture, guest speakers, video tapes, role playing, case analysis, oral presentations, and written assignments. Completers should be better able to perform in their field of work or study. May be repeated as desired for interest.

**CRT 299R**
**Skills USA**
**1**

Supports and facilitates the goals and objectives of Skills USA, which is a pre-professional student organization that develops social awareness, civic, recreational, and social activities. Prepares students to participate in local, state, and national contests. May be repeated for a maximum of 4 credits towards graduation.

# Computer Science (CS)

**CS 1030**
**Foundations of Computer Science**
**3**

Introduces the basics of computing, including computer hardware, and programming concepts and language. Explores how computers work and how a computer may be programmed. Includes a brief history of computer, programming languages, and computer numbering systems. Presents basic programming constructs; students produce a variety of introductory level programs. Surveys various computing professions. May be delivered hybrid and/or online. Lab access fee of $45 computers applies.

**CS 1400**
**Fundamentals of Programming**
**3**
* Prerequisite(s): MAT 1000 or MAT 1010 with a B or better, or MAT above 1010 or ACT score 23 or higher or ALEKS score 38 or higher. CS 1030 recommended

Introduces techniques and tools to formulate and solve problems where computer algorithms and programs are a core part of an effective, repeatable solution. Demonstrates algorithmic thinking using procedural programs composed of sequences of commands, functions, loops, conditionals, and basic data structures. May be delivered online. Lab access fee of $45 for computers applies.

**CS 1410**
**Object Oriented Programming**
**3**
* Prerequisite(s): CS 1400 and (MATH 1050 or MATH 1055 with a C+ or better, or MATH above 1050)

Teaches proper program structure using the core concepts of object-oriented programming: classes, objects, encapsulation, inheritance and polymorphism. Presents problems of increasing size and complexity requiring OOP techniques, standard libraries and other appropriate language constructs. Presents methods to identify, define and implement solutions to naturally recursive problems. May be delivered online. Lab access fee of $45 for computers applies.

**CS 2250**
**Java Programming**
**3**
* Prerequisite(s): CS 1400

Covers practical Java programming in-depth, including abstract classes and interfaces, proper use of the packages Java.lang, Java.io, and Java.util, GUI design and implementation, and programming. Lab access fee of $45 for computers applies.

**CS 2300**
**Discrete Mathematical Structures I**
**3**
* Prerequisite(s): CS 1410 and (MATH 1050 or higher)

For Computer Science Majors. Covers algebraic structures applied to computer programming. Includes logic, sets, elementary number theory, mathematical induction, recursion, algorithm complexity, combinatorics, and relations. First of a two-semester sequence. Lab access fee of $45 for computers applies.

**CS 2370**
**C Plus Plus Programming WE**
**3**
* Prerequisite(s): CS 1410

Introduces C++ programming for students with prior programming experience. Covers language fundamentals, core standard library components, error handling, value semantics, pointers and memory management, object-oriented programming, and templates. Lab access fee of $45 for computers applies.

**CS 2420**
**Introduction to Algorithms and Data Structures**
**3**
* Prerequisite(s): CS 1410

Uses data abstraction to design and implement modular programs of medium size and complexity. Structures solutions to problems using common data structures and algorithms such as advanced arrays, lists, stacks, records, dynamic data structures, searching and sorting, vectors, trees, linked lists, and graphs. Evaluates alternative solutions to problems. Analyzes algorithmic complexity metrics in Big-O notation. Lab access fee of $45 for computers applies.

**CS 2450**
**Software Engineering**
**3**
* Prerequisite(s): CS 2300, CS 2420

Presents concepts, methodology and best-practices necessary to develop large scale software projects. Includes step-wise software requirements analysis, design, implementation, testing and release. Discusses software generation, reuse, scheduling, verification, and maintenance. Emphasizes current "real world" industry best-practices and tools. Lab access fee of $45 for computers applies.

**CS 2550**
**Web Programming I**
**3**
* Prerequisite(s): CS 1410 or DGM 2760 or INFO 1200

Covers design and development of browser-based programs with an emphasis on single-page applications. Teaches generation and modification of HTML via JavaScript, debugging techniques, communicating with web servers, and use of XML and JSON. Lab access fee of $45 for computers applies.

**CS 2600**
**Computer Networks I**
**3**
* Prerequisite(s): CS 2810 or (INFO 1200 and IT 1600)

A rigorous introduction to computer networking theory and technologies for Computer Science and Information Technology majors. Includes theory of data communications protocols; theory and design of transmission systems; transmission media; and communication software. Emphasizes the lower layers of the Open Systems Interconnection model. Requires lab exercises to be completed outside of lecture. Lab access fee of $45 for computers applies.

**CS 2690**
**Computer Networks II**
**3**
* Prerequisite(s): CS 1410, CS 2300, CS 2600, CS 2370
* Prerequisite(s) or Corequisite(s): MATH 1210

Continues CS 2600 Computer Networks I. Focuses on the upper layers of the OSI and Internet models. Covers Internet (TCP/IP) protocols, routing theory, transport protocols, network application interfaces, presentation formatting, information theory and compression, cryptography, and other emerging technologies as time permits. Requires lab exercises and programming assignments to be completed outside of lecture. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**CS 2810**
**Computer Organization and Architecture**
**3**
* Prerequisite(s): CS 1400

Uses assembly language to introduce basic concepts of computer organization. Includes number systems, CPU organization, instruction sets, programming in assembly, memory organization, debugging, program design, and documentation. Covers interrupts, vector tables, and disk I/O. Lab access fee of $45 for computers applies.

**CS 281R**
**Internship**
**1 to 8**
* Prerequisite(s): Department approval

Provides on-the-job work experience for CNS majors. Utilizes the skills and abilities in the fields of computer science, software engineering, networking, and/or computer engineering. May be repeated for a maximum of three credits toward graduation. May be graded credit/no credit.

**CS 291R**
**Independent Study**
**1 to 6**

This course will allow the student to pursue an independent topic in computer science and study this topic in-depth in a flexible non-classroom environment. A maximum of three hours may be counted towards graduation without prior written CNS Department approval. The topic must be approved by the instructor and the CNS Department Chair. Lab access fee of $45 for computers applies.

**CS 296R**
**CS Seminar**
**1 to 3**

Presents topics of current interest to computer science in a seminar environment. Includes invited lectures by experts in the field, or a review of a particular technology by a faculty member. A maximum of three hours may be counted towards graduation without prior written CS Department approval. Lab access fee of $45 for computers applies.

**CS 305G**
**Global Social and Ethical Issues in Computing**
**3**
* Prerequisite(s): ENGL 2010 and (CS 1030 or CS 1400 or INFO 1120 or DGM 1110) and University Advanced Standing

Examines how computers have affected global society and how they could further affect it in the future. Challenges students to (1) examine several types of ethical reasoning to establish an ethical framework to assist in making normative judgments, (2) examine various ethical issues surrounding computer usage, particularly in differing societal contexts, (3) understand the responsibilities they bear, to know how their actions can affect both society and individual people in their own and other cultural setings, and to appreciate both the good and the harm they can do and (4) consider many of the moral and professional issues that those who work with computers might expect to face. Lab access fee of $45 for computers applies.

**CS 3060**
**Operating Systems Theory**
**3**
* Prerequisite(s): CS 2370, CS 2420, and University Advanced Standing. If a computer science or software engineering major, also CS 2810 and matriculation to computer science or software engineering. If a computer engineering major, also ECE 2700 and ECE 3730

Introduces the Unix operating system. Presents the underlying theory and concepts of an operating system, and covers the following topics in depth: device management, processes, threads, synchronization, scheduling, deadlocks, memory management, virtual memory, and file systems. Provides practical experience in writing programs that use standard Unix system calls to interface directly with the operating system. Lab access fee of $45 for computers applies.

**CS 3100**
**Data Privacy and Security**
**3**
* Prerequisite(s): CS 2420 and University Advanced Standing

Covers the fundamental theory, concepts and practical applications of computer security. Includes networking fundamentals, cryptography, authentication and authorization, access control, malware, physical security, computing systems hardening, threat detection and response, secure code, and secure applications development. Emphasizes developing, deploying, and maintaining a secure computing infrastructure with a hands-on approach.

**CS 3240**
**Discrete Mathematical Structures II**
**3**
* Prerequisite(s): CS 2300, CS 2420, CS 2810, computer engineering major or (matriculation to computer science or software engineering), and University Advanced Standing

Presents concepts from discrete mathematics including formal languages, and automata, including Turing machines, regular expressions, grammars, and computability. Lab access fee of $45 for computers applies.

**CS 3250**
**Java Software Development**
**3**
* Prerequisite(s): CS 2420, matriculation to computer science or software engineering if computer science or software engineering major, and University Advanced Standing

Covers object-oriented, functional programming and event-driven features of the Java Programming Language using common libraries, idioms, and software design patterns and principles. Includes abstract classes, interfaces, inner classes, lambda expressions, collections, streams, modern GUIs, I/O, serialization, socket programming, concurrency and parallel multicore programming. Lab access fee of $45 for computers applies.

**CS 3260**
**CsharpNET Software Development**
**3**
* Prerequisite(s): Matriculation to computer science or software engineering and University Advanced Standing

Introduces the C# programming language and the .NET Framework. Discusses the various datatypes, built-in class in namespaces, and how to develop user defined classes and namespaces. Includes programming assignments for console, GUI, and ASP.NET applications. Lab access fee of $45 for computers applies.

**CS 3270**
**Python Software Development**
**3**
* Prerequisite(s): CS 2420 or INFO 2200, matriculation to computer science or software engineering if computer science or software engineering major, and University Advanced Standing

Covers the features of the Python programming language. Includes scripting, dynamic typing, data types (sequences, sets, mappings, files, etc.), loops, iterators, generators, functions, coroutines, classes and objects, modules, packages and scope, runtime services, data wrangling, concurrent programming, etc. Lab access fee of $45 for computers applies.

**CS 3310**
**Analysis of Algorithms**
**3**
* Prerequisite(s): MATH 1210, matriculation to computer science or software engineering, and University Advanced Standing

Introduces development and mathematical analysis of fundamental computer algorithms. Teaches divide and conquer and greedy algorithms, dynamic programming, backtracking, branch and bound and NP-completeness. Lab access fee of $45 for computers applies.

**CS 3320**
**Numerical Software Development**
**3**
* Prerequisite(s): MATH 1210, matriculation to computer science or software engineering, and University Advanced Standing

Teaches the tools necessary for modern scientific computation. Covers computer representation of floating-point numbers, error analysis and numerical stability, IEEE floating-point standards, testing of numerical algorithms, calculation of elementary functions, roots of equations, solutions of linear systems, numerical integration and differentiation, interpolation and approximation, Monte Carlo methods. Lab access fee of $45 for computers applies.

**CS 3370**
**C Plus Plus Software Development**
**3**
* Prerequisite(s): CS 2370, CS 2810, matriculation to computer science or software engineering, and University Advanced Standing

Teaches C++ programming in a production environment, emphasizing mastery of the standard C++ library. Covers the following topics in-depth: const correctness, operator overloading, exception handling, exception-safe design, programming with assertions, automated unit testing, advanced memory management, generic programming with templates, containers, iterators, algorithms, concurrency, and functional programming. Introduces library development, common idioms, and other advanced topics. Emphasizes accepted software engineering practices. Lab access fee of $45 for computers applies.

**CS 3380**
**JavaScript Software Development**
**3**
* Prerequisite(s): CS 2420, CS 2550, matriculation into the CS program, and University Advanced Standing

Covers modern JavaScript features of functional programming, not JavaScript programming limited to the browser. Topics include rest/spread operators, string interpolation, regular expressions, object property shorthand, computed properties, method properties, destructuring assignments using object and array matching, module export/import, classes & inheritance, promises, iterators, generators, map/set, reflection, localization & formatting. Introduces common idioms and design patterns. Emphasizes accepted software engineering practices. Lab access fee of $45 for computers applies.

**CS 339R**
**Advanced Programming Language Other**
**3**
* Prerequisite(s): Varies depending on language offered; University Advanced Standing

Introduces and explores advanced state-of-the-art programming languages and concepts. Investigates topics using language specific analysis, design, Rapid Application Development (RAD), implementation, and testing. Explores language specific syntax, semantics, libraries, the integrated development environment, and debugging techniques. Demonstrates language concepts by developing and writing programs. A maximum of 3 credits will count towards graduation; however, with prior written CNS Department approval more than 3 credits may be counted towards graduation. May be delivered hybrid. Lab access fee of $45 for computers applies.

**CS 3410**
**Human Factors in Software Development**
**3**
* Prerequisite(s): (CS 3250 or CS 3260 or CS 3370 or INFO 2200) and University Advanced Standing

Studies issues of software analysis, design, and development for and from the perspective of human-computer interaction. Emphasizes design of the human-computer interface, effective presentation of data via graphics, color, text, sound, etc., to the user. Uses development tools for effective graphic presentation, the elements of effective information presentation to users. Lab access fee of $45 for computers applies.

**CS 3450**
**Principles and Patterns of Software Design**
**3**
* Prerequisite(s): (CS 3250 or CS 3260 or CS 3270 or CS 3370) and University Advanced Standing

Gives students familiarity with modern principles and practices of software design. Emphasizes design patterns, including their motivation and the design principles on which they are based. Lab access fee of $45 for computers applies.

**CS 3520**
**Database Theory**
**3**
* Prerequisite(s): Matriculation to computer science or software engineering and University Advanced Standing

Introduces the underlying theories of Relational Database Management Systems (RDBMS) as well as their practical use retrieving data using both embedded SQL and relational algebra. Implements queries that start from simply joining, selecting, and projecting data, then progresses to more complex data retrieval techniques that require the use of set operations, sub-queries, and group by having clauses. Discusses entity-relationship (ER) modeling, creating a RDBMS from an ER model, B+ Trees, ACID transactions, normalization, locking, concurrency issues, and alternatives to an RDBMS. Lab access fee of $45 for computers applies.

**CS 3530**
**Data Management For Data Sciences**
**3**
* Prerequisite(s): CS 3520 and University Advanced Standing

Covers advanced relational databases and issues related to managing non-relational data sets. Has two major components: (1) advances knowledge in relational database and skills in using SQL and database indexing; and (2) introduces NoSQL databases such as a document-oriented database, key-value database, column-oriented database, graph database, and Hadoop system and data warehousing. Justifies the need for NoSQL databases, and shows how they are implemented in database systems. Presents criteria that decision makers should consider when choosing between relational and non-relational databases and techniques for selecting the NoSQL database that best addresses specific use cases.

**CS 3540**
**Game Programming**
**3**
* Prerequisite(s): Matriculation to computer science or software engineering and University Advanced Standing

Teaches techniques for two and three-dimensional graphics programming using DirectX, OpenGL, and/or game engines built on those libraries. Presents concepts of game design that relate to the design and implementation of game software, including procedural generation of assets. Includes application of artificial intelligence concepts to game programming. Introduces the use of network programming techniques for development of multi-player games. May be delivered hybrid. Lab access fee of $45 for computers applies.

**CS 3660**
**Web Programming II**
**3**
* Prerequisite(s): CS 2420, CS 2550, and one of CS 3250 or CS 3260 or CS 3270 or CS 3370, and University Advanced Standing

Builds upon concepts taught in CS 2550 Web Programming I. Teaches how to design, implement, test, and debug medium sized web applications using both client and server side technologies. Includes web security, data markup languages, server side scripting technologies, web application interactions with databases, and web service architectures. Teaches how to develop a full web-site having sophisticated user interactions at a variety of security levels. May be delivered hybrid. Lab access fee of $45 for computers applies.

**CS 3670**
**Network Programming**
**3**
* Prerequisite(s): CS 2690, CS 3250, and University Advanced Standing

Covers concept and practical application of socket communication and network protocols. Presents design and implementation of networked applications. May be delivered online. Lab access fee of $45 for computers applies.

**CS 3680**
**Mobile Device Programming**
**3**
* Prerequisite(s): Matriculation to computer science or software engineering and University Advanced Standing

Teaches software design and programming principles and practices for developing applications for mobile devices. Addresses issues such as application life-cycle, user interfaces on touch-screen devices, options for data storage and communication, power and performance, and using graphics and media. Examines hardware features common in mobile devices such as GPS, accelerometers, and cameras. Lab access fee of $45 for computers applies.

**CS 3720**
**Database Programming**
**3**
* Prerequisite(s): CS 3520 and University Advanced Standing

Develops the mastery of programming interfaces to local, remote, web and cloud databases. Uses console, Microsoft Windows WPF and web user interfaces. Lab access fee of $45 for computers applies.

**CS 3800**
**Data Science Through Statistical Reasoning**
**3**
* Prerequisite(s): ECE 3710, CS 3530, and University Advanced Standing

Develops statistical reasoning and computational skills required to clean transform data, implement solutions to complex problems, explore and visualize data, develop and test hypotheses, use simulation to investigate stochastic processes and model real-world situations of interest. Presents cases that require various statistical methods, data technologies, developing algorithms and using powerful statistical and data science tools in a modern scripting language.

**CS 3810**
**Applied Data Science**
**3**
* Prerequisite(s): CS 3100, CS 3530, and University Advanced Standing

Covers the entire life cycle of a data science project, from problem formulation to data science solutions. Starts with a data driven problem, identifying data sets needed, collecting data, selecting techniques to solve the problem, implementing algorithms and models, assessing performance, and communicating insights and recommendations through written reports and oral presentations. Features several individual projects and a semester long team project.

**CS 3820**
**Visualization Analytics for Data Science**
**3**
* Prerequisite(s): CS 3530 and University Advanced Standing

Introduces visual analytics methods and techniques to support human reasoning and decision-making with data. Presents visualization as the primary tool for recognizing and communicating the significance, meaning and decision-making from massive, dynamic, often conflicting, data. Includes both theoretical foundations and application methods, which presents a comprehensive view of this emerging, multidisciplinary field beyond simply learning to use visualization tools. Includes choosing the right visualization for the questions being asked, the data and the target audience; translating numbers to images; showing data or statistics; showing uncertainty, time trends; presenting results of machine learning techniques; many variables; big data; and maps and networks. Covers pie charts, bar charts, histograms, simple metrics, scatterplots, maps.

**CS 4230**
**Software Testing and Quality Engineering**
**3**
* Prerequisite(s): CS 2450, one of (CS 3250 or CS 3260 or CS 3270 or CS 3370), ECE 3710, and University Advanced Standing

Provides a comprehensive exploration of strategies for testing computer systems. Includes unit testing, system testing, developing software testing organization, and establishing software Total Quality Management (TQM) programs. Students will conduct system tests of software packages. Lab access fee of $45 for computers applies.

**CS 4380**
**Advanced High Performance Computer Architecture**
**3**
* Prerequisite(s): CS 3060, (CS 3370 Recommended), and University Advanced Standing

Presents theory and concepts of high-performance computer architectures. Includes digital logic, buses, registers, ALU's, control units, pipelining, parallelism, DASD's, SASD's, RAID, caching, instruction-sets, memory hierarchy, multiprocessing, interconnection via networks. Lab access fee of $45 for computers applies.

**CS 439R**
**Advanced Current Topics in Computer Science**
**1 to 3**
* Prerequisite(s): Department approval and University Advanced Standing

Provides exposure to emerging technologies and topics of current interest in computer science. Varies each semester depending upon the state of technology. A maximum of 6 hours may be counted toward graduation without CS Department approval. Lab access fee of $45 for computers applies.

**CS 4400**
**Software Engineering II**
**3**
* Prerequisite(s): CS 2450, CS 2600, CS 3520, and (CS 3250 or CS 3260 or CS 3270 or CS 3370), and University Advanced Standing
* Prerequisite(s) or Corequisite(s): CS 3450

Covers principles and practices of early phases of software development life cycle. Studies software requirements elicitation, analysis, and design. Includes in-depth, practical study of at least one major software development approach as applied to a realistic organizational systems problem. Explores requirements definition, analysis including prototyping, functional and nonfunctional requirements specification, legacy systems, and architecture patterns. Lab access fee of $45 for computers applies.

**CS 4440**
**Applied 3D Computer Graphics**
**3**
* Prerequisite(s): CS 2420 with a C or better and (CS 3220 or CS 3250 or CS 3260 or CS 3270 or CS 3370 or CS 339R), and University Advanced Standing

Presents theory and implementation concepts of 2D and 3D computer graphics as used in areas such as computer games, movie special effects, scientific visualization and art. Focuses on the development of applications using an existing cross-platform graphics library rather than on the development of a graphics library. Lab access fee of $45 for computers applies.

**CS 4450**
**Analysis of Programming Languages**
**3**
* Prerequisite(s): CS 3240, (one of CS 3250, CS 3260, CS 3270 or CS 3370) and University Advanced Standing

Offers the mature student an in-depth understanding of the design and implementation of programming languages. Explores criteria for evaluating programming languages as a context for comparing both traditional and current popular languages. Includes the evolution of programming languages, the concept of binding, type checking, static and dynamic scoping, control structures, subprograms and parameter passing methods, and concurrency. Explores the functional programming paradigm in-depth. Includes programming assignments in at least two different programming languages, at least one of which being a functional language such as LISP, Scheme, ML, or Haskell. Lab access fee of $45 for computers applies.

**CS 4470**
**Artificial Intelligence**
**3**
* Prerequisite(s): CS 3240, CS 3310, CS 3320, and (CS 3250 or CS 3260 or CS 3270 or CS 3370), and University Advanced Standing

Presents theory, organization, concepts, and principles of artificial intelligence methodologies including neural networks, expert systems, machine learning algorithms, and genetic algorithms. Lab access fee of $45 for computers applies.

**CS 4480**
**Digital Image Processing and Computer Vision**
**3**
* Prerequisite(s): CS 2300, CS 2420, CS 3320, and University Advanced Standing

Prepares students for creating software solutions in the multimedia market of today and into the future. Covers digital sampling of analog signals, basic image processing in the spatial domain and frequency domain, edge and line detection, photo enhancement, feature extraction, and object recognition. May be delivered online. Lab access fee of $45 for computers applies.

**CS 4490**
**Compiler Construction**
**3**
* Prerequisite(s): CS 4380, CS 4450, and University Advanced Standing

Studies theory, analysis and design of class developed compiler. Requires completion of a program level assessment test. Lab access fee of $45 for computers applies.

**CS 4500**
**Advanced Topics in Database**
**3**
* Prerequisite(s): (CS 3520 or INFO 3410) and University Advanced Standing

Covers transaction processing, concurrency control techniques, database recovery techniques, database security and authorization, database integrity, distributed databases and client-server architectures, load balancing, data warehousing, data mining, database machines, mobile database, multimedia database, GIS, genome data management, data fragmentation, data encryption, locking, and deadlock. Lab access fee of $45 for computers applies.

**CS 4550**
**Software Engineering III**
**3**
* Prerequisite(s): CS 4400, CS 4230, and University Advanced Standing

Senior-level, capstone project experience course. Requires operating as part of a high performance team. Includes completing the design and implementation of a large-scale software development project. Combines major milestone presentations to project clients, completing a portfolio of project-related artifacts, and offer an evaluation of the project and team experience. Requires students to take a program level assessment. Lab access fee of $45 for computers applies.

**CS 4610**
**TCP IP Internet Architecture**
**3**
* Prerequisite(s): CS 2690, matriculation to computer science or software engineering, and University Advanced Standing

Provides theoretical, practical, administrative perspectives of the TCP/IP protocol and its use with the Internet. Includes coverage of IPv4, IPv6, TCP, OSPF and related protocols, IP addressing, subnetting issues, and domain name services are also covered. Lab access fee of $45 for computers applies.

**CS 4620**
**Data Mining**
**3**
* Prerequisite(s): CS 3520 and University Advanced Standing

Introduces the process of knowledge discovery and the basic theory of automatic extracting models from data, validating those models, solving the problems of how to extract (mine) valid, useful, and previously unknown interesting patterns from a source (database or web) which contains an overwhelming amount of information. Explains various models (decision trees, association rules, linear model, clustering, bayesian network, neural network) and how to apply them in practice. Algorithms applied include searching for patterns in the data, using machine learning, and applying artificial intelligence techniques. Teaches how to implement several relevant algorithms and use existing tools to mine real-world, business driven databases. Lab access fee of $45 for computers applies.

**CS 4660**
**NoSQL Database Development**
**3**
* Prerequisite(s): Matriculation into the Computer Science or Software Engineering program, CS 3520, and University Advanced Standing

Introduces theory, concepts, architecture, and use of non-traditional database management systems. Discusses the appropriate use of each in its own niche. Lab access fee of $45 for computers applies.

**CS 4670**
**Undergraduate Research Project for Networking Specialization**
**3**
* Prerequisite(s): CS 3660, CS 4610, and University Advanced Standing

Creates a system suitable for presentation and defense including project proposal, management plan, system design documentation, relevant testing and benchmarks, and final written and oral reports. Includes system design, systems integration and systems management. Encourages open source and community service projects. Requires completion of a program level assessment test. Lab access fee of $45 for computers applies.

**CS 4690**
**Distributed Internet Application Development**
**3**
* Prerequisite(s): CS 3660 and (CS 3250 or CS 3260 or CS 3270 or CS 3370), and University Advanced Standing

Provides experience building significant software solutions that span large heterogeneous networks. Includes heterogeneous operating systems, data stores (SQL and NoSQL), service architectures, remote objects, remote services, and data exchange. Lab access fee of $45 for computers applies.

**CS 4700**
**Machine Learning I**
**3**
* Prerequisite(s): CS 3270, CS 3320, and University Advanced Standing

Explores the philosophy, utility, mathematics and algorithms of machine learning in order to understand the basic concepts and issues at the heart of machine learning. Covers the implementation and use of machine learning algorithms to solve real-world problems or to pursue a graduate program. Includes feature selection and extraction, decision trees, neural networks, nearest-neighbors, support vector machines, naive Bayes classifier, clustering, ensembles, reinforcement learning and deep learning.

**CS 4710**
**Machine Learning II**
**3**
* Prerequisite(s): CS 4700 and University Advanced Standing

Applies Deep Learning models to problems in a variety of application domains that use massive data sets, such as recommender systems, novel text, image and music generation, sentiment analysis. Implements working models using algorithms such as recurrent neural nets, convolutional neural nets, deep belief nets, and deep reinforcement learning. Uses modern toolkits such as Tensorflow.

**CS 4770**
**Software Development for Robotics**
**3**
* Prerequisite(s): CS 3370 and University Advanced Standing; CS 4470 recommended

Teaches students through hands on development the intricacies of programming robots such as autonomous vehicles and/or industrial manufacturing robots. Includes behavior based programming, intelligent agents, low level device drivers, sensor calibration and processing, real time programming requirements, motion planning and navigation, and machine learning. Lab access fee of $45 for computers applies.

**CS 479R**
**Advanced Current Topics in Computer Science**
**1 to 3**
* Prerequisite(s): Department Approval and University Advanced Standing

Provides exposure to emerging technologies and topics of current interest in computer science. Varies each semester depending upon the state of technology. May be repeated for a maximum of 6 credit hours toward graduation without prior written CS Department approval. Lab access fee of $45 for computers applies.

**CS 4800**
**Data Science Capstone**
**3**
* Prerequisite(s): CS 3530 and University Advanced Standing

Solves a real-world data science problem or dilemma for an industry partner. Provides an opportunity to work in teams on a project from an industrial firm. Includes realistic industry evaluations such as teamwork, communication, individual initiative, and final product.

**CS 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Matriculation to computer science or software engineering, Instructor Approval, and University Advanced Standing

Provides opportunity to use work experience to add to educational background and academic experience. A maximum of 3 credit hours may be counted towards graduation without prior written CNS Department approval. May be graded credit/no credit.

**CS 4880**
**Cloud Computing**
**3**
* Prerequisite(s): Matriculation into the Computer Science or Software Engineering program, CS 4690, and University Advanced Standing

Develops mastery of programming to cloud databases. Emphasizes real-world scenarios involving architecture, build, development, testing, and deployment on commercially available cloud databases. Covers concurrent programming, distributed programming, microservices, migration, and hybrid clouds. Lab access fee of $45 for computers applies.

**CS 489R**
**Undergraduate Research Project**
**2 to 6**
* Prerequisite(s): Department approval and University Advanced Standing

Combines and integrates concepts, methodologies, and skills developed in previous Computer Science course work. Studies the specification, analysis, design, implementation, and completion of a complex and comprehensive project. Requires a project/portfolio using project management techniques. A maximum of 3 hours may be counted towards graduation without prior written Computer Science Department approval. Lab access fee of $45 for computers applies.

**CS 4900**
**Full Stack Web Senior Capstone**
**3**
* Prerequisite(s): CS 3410, CS 4660, (CS 3250 or CS 3260), and University Advanced Standing

Brings all pieces of full stack web development into a complete capstone project. Covers design, development and deployment of all parts of a web application. Lab access fee of $45 for computers applies.

**CS 491R**
**Independent Study**
**1 to 6**
* Prerequisite(s): Prior written Department Chair approval and University Advanced Standing

Offers independent study as directed by a faculty advisor in reading, individual projects, etc. Varies each semester depending upon the state of technology. A maximum of 3 credit hours may be counted towards graduation without prior written Department approval. Lab access fee of $45 for computers applies.

**CS 496R**
**Senior Seminar**
**1 to 3**
* Prerequisite(s): University Advanced Standing

Presents current state-of-the-art and/or best-practices topics in a seminar format. A maximum of 3 credits will count towards graduation. Lab access fee of $45 for computers applies.

**CS 6100**
**Database Management System Construction**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program

Explores issues associated with implementing a DBMS. Provides experience designing and implementing a relational DBMS with features such as projection, select and join, indexing, B+ trees, and parsing. Examines database performance and implements query optimization.

**CS 6150**
**Advanced Algorithms**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program

Explores applications and tradeoffs of state of the art algorithms in parallel/concurrent programming, data search, graphics, graph theory, data structures, mathematical programming, machine reasoning, machine learning, network flow, and other domains. Applies both theory and practice to various projects with a focus on concurrent/parallel programming.

**CS 6300**
**Software Engineering Leadership**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program

Prepares students to be software project leaders. Evaluates modern software processes and project management. Identifies important roles in software projects and their contribution to project success. Explores interaction of business needs and project development.

**CS 6400**
**Modern Databases**
**3**
* Prerequisite(s): CS 6470

Evaluates recent trends in database technology, including the history of NoSQL, NoSQL aggregate data, distribution models, and NoSQL consistency. Teaches data analysis and machine learning by exploring concepts associated with processing massive data sets such as parallel data analysis through mapReduce and other algorithms. Explores technologies associated with modern databases management systems, such as in-memory databases, cloud database management systems.

**CS 6470**
**Machine Learning**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program

Explores the theory and algorithms, concepts and issues of machine learning. Topics include feature selection, neural networks, decision trees, K-nearest neighbor, clustering, reinforcement learning, genetic algorithms, deep learning and data mining. Implements machine learning approaches in real-world applications.

**CS 6480**
**Advanced Machine Learning**
**3**
* Prerequisite(s): CS 6470

Presents advanced models, algorithms, approaches and applications in neural networks and machine learning. Broadens and deepens the horizons of study of the philosophy and utility of machine learning models beyond what is covered in Machine Learning. Includes advanced gradient descent models, bayesian methods, boltzmann machines, recurrent neural nets, hidden markov models, randomized optimization, hopfield nets, computer vision, modern toolkits, learning from gigantic data.

**CS 6500**
**Software Architecture**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program

Evaluates software architecture and the high level design of large scale software systems. Explores common architectural styles and patterns. Teaches techniques of documenting and assessing software architectures. Teaches characteristics of software architecture evolution. Evaluates several large-scale software architectures.

**CS 6510**
**Design and Simulation of Operating Systems**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program

Analyzes current topics in operating systems design and simulation. Covers modern computer architecture; several types of memory management; current scheduling algorithms for multiple processes; disk management; virtual memory and interprocess communication.

**CS 6600**
**Graduate Project I**
**3**
* Prerequisite(s): CS 6300, CS 6510, CS 6400

Teaches the design and development of a walking skeleton with students participating in all aspects of software development, including: requirements elicitation, architecture, design, implementation, testing, and deployment. First semester of a two-semester capstone course.

**CS 6610**
**Graduate Project II**
**3**
* Prerequisite(s): CS 6600

Guides through completion and delivery of the large-scale system started in CS 6600. Delivers appropriate system documentation. Teaches the writing and execution of system tests that ensure a high quality system. Must be taken immediately after CS 6600.

**CS 6620**
**Advanced Data Mining and Visualization**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program; and (CS 3520 or the Departmental Approval)

Explores advanced concepts of data mining and knowledge discovery including sequence mining, audio video mining, and text mining. Analyzes, designs, develops, and evaluates data mining techniques and tools, including data preprocessing, data characterization and comparison, decision trees, association rule mining in large databases, classification and prediction. Uses clustering and cluster analysis and statistical modeling, advanced methods and applications, extracting meaningful patterns from massive datasets using methods such as neural networks and machine learning algorithms.

**CS 6700**
**Advanced Mathematics for Computer Science**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program

Solves computer science problems using advanced mathematical models. Applies calculus functions of multiple variables, linear equations, matrix algebra, determinants, Gaussian elimination, eigenvalues, linear programming, and finite-state Markov chains.

**CS 6730**
**Advanced Embedded Systems Engineering**
**3**
* Prerequisite(s): CS 6510

Provides a hands-on design experience of software design at the system layer where hardware meets software. Explores embedded computing platforms, interacting with the external world, real-time operation, constraints and optimization, and other techniques which are important for building embedded systems that work in the real world. Applies design/implementation/debugging of embedded functionality through a series of projects and homework exercises.

**CS 6800**
**Computer Graphics and Mixed Realities**
**3**
* Prerequisite(s): Acceptance into the Master of Computer Science program

Introduces computer graphics beyond 2D and 3D graphics into mixed reality, where virtual objects interact with the real world. Explores topics such as 2D/3D graphics, augmented reality, virtual reality, immersive visualization, the use of graphics/physics engines, and 3D printing.

# Dance (DANC)

**DANC 1010** **FF**
**Dance as an Art Form**
**3**

Explores multi-cultural dance and movement expression. Studies the different ways in which world cultures are expressed through dance and movement. Overviews dance history and traces the evolution of dance as an art form. Examines the art and craft of dance making, dance as an expression of culture and community. Explores dance as artistic expression in 20th Century America. Course lab fee of $30 for World Dance applies.

**DANC 1100**
**Beginning Ballet**
**1**

For all students without previous ballet experience. Emphasizes ballet discipline, develops posture, alignment, and muscular control to improve health and appearance of physical body.

**DANC 1200**
**Beginning Modern/Contemporary Dance**
**1**

Gives students experience in modern/contemporary dance technique, emphasizing locomotor skills and movement expression. Introduces elements of dance, time, space, and energy.

**DANC 127R**
**Ballet Technique I**
**3**

For intermediate level ballet students. Requires ability to handle the varying technical difficulties of classical ballet. Includes theories from Soviet, French, Italian, American, English, and Danish schools. Provides hands-on experience in barre and center floor work to increase strength, flexibility. Emphasizes body alignment and correct placement. Prepares students for a more intensive study in ballet. May be repeated for a total of 18 credits. Course Lab fee of $216 for support applies.

**DANC 1330**
**Studio Workshop Creative Process in Dance**
**1**

A multi-disciplinary approach to the creative process in dance. Overviews the creative process and explores the development of individual artistry and personal voice in dance. Examines how the creative process in other disciplines informs creative work in dance. Includes participation and lecture.

**DANC 141R**
**Intermediate Modern/Contemporary Dance**
**2**

Increases physical skills in dance technique and performance technique. Introduces principles and concepts that govern human movement. Emphasizes development of strength, flexibility, coordination, core support, and movement expressiveness. Includes aspects of composition, improvisation, and performance as they relate to technique. Develops foundational skills in modern dance technique. Prepares students for more intensive study. Does not fulfill a dance major requirement. May be repeated for a total of 6 credits toward graduation.

**DANC 143R**
**Modern/Contemporary Dance Technique and Theory I/Semester I**
**3**
* Prerequisite(s): Audition

Introduces Dance majors to modern/contemporary dance technique. Focuses on development of solid foundational skills in modern dance technique and theory that prepare the student for an intensive major program. Emphasizes the development of strength, flexibility, core support, coordination, kinesthetic awareness and memory, and movement expressiveness. Includes experience in improvisation and composition as a means of understanding and applying technical skills in performance settings. May be repeated for a total of six credits toward graduation. Course Lab fee of $216 for support applies.

**DANC 144R**
**Modern/Contemporary Dance Technique and Theory I/Semester II**
**3**
* Prerequisite(s): DANC 143R

Focuses on development of solid foundational skills in modern dance/contemporary dance technique and theory that prepare the student for an intensive major program. Emphasizes the development of strength, flexibility, core support, coordination, kinesthetic awareness and memory, and movement expressiveness. Includes experience in improvisation and composition as a means of understanding and applying technical skills in performance settings. May be repeated for a total of six credits toward graduation. Course Lab fee of $216 for support applies.

**DANC 1500**
**Beginning Jazz Dance**
**1**

Gives students experience in jazz dance including rhythms, style, and jazz techniques. Includes basic jazz terminology.

**DANC 1510**
**Intermediate Jazz Dance**
**1**
* Prerequisite(s): Instructor Approval

For students who have fundamental dance skills and basic jazz techniques. Teaches intermediate jazz technique, style and rhythm. Increases coordination, stamina, strength and flexibility through appropriate principles of jazz training.

**DANC 1520**
**Folk Dance I**
**1**

Presents music, dance steps, and styles of folk dances from different countries. Teaches basic dance formations, positions, and terminology.

**DANC 1530**
**Folk Dance II**
**1**
* Prerequisite(s): DANC 1520

Acquaints students with intermediate level folk dances from around the world, including steps, styling, music and costumes. Discusses cultural characteristics that are expressed through folk dance.

**DANC 1540**
**Clogging I**
**1**

Teaches basic steps, styling and history of clogging. Includes dances and freestyle clogging choreography.

**DANC 1550**
**Clogging II**
**1**
* Prerequisite(s): DANC 1540 or equivalent experience

Teaches buck-style clogging and steps of complex rhythm and structure. Includes upper body movement patterns and emphasizes total body coordination. Examines contemporary and historical trends in clogging.

**DANC 1560**
**African Dance I**
**1**

Explores traditional movements and rhythms from Central and West Africa and is accompanied by live drumming. Focuses on the development of solid foundational skills in African dance technique. Emphasizes the cultural significance of various dances and rhythms as well as the influences of the African aesthetic in contemporary dance and culture. Includes participation, video, and guest instructors from Africa. Course fee of $40 for support applies.

**DANC 1580**
**Tap Dance I**
**1**

Introduces basic steps and rhythms of tap dance. Reviews the history of this American theatrical dance form.

**DANC 1590**
**Hip Hop Dance I**
**1**

Explores a variety of Hip-hop styles and moves to the latest music. Introduces students to fundamental dance techniques. Discusses Hip-hop as a cultural movement.

**DANC 1600**
**Hip Hop II**
**1**
* Prerequisite(s): Previous Hip-Hop dance experience and Instructor Approval

For all students interested in developing intermediate/advanced skills in Hip-Hop. Explores Hip-Hop through different styles, across the floor combinations, break dancing, and in-class performances. Broadens the students' understanding of this fun, loose, upbeat, and energetic style of dance and culture.

**DANC 1610**
**Dance Conditioning**
**1**

For dance students enrolled in modern dance, ballet, jazz, or ballroom dance classes and for students interested in dance-specific conditioning. A beginning course in dance conditioning. Covers theory and practice. Emphasizes body balancing in strength, flexibility and endurance training supported by knowledge of basic principles of anatomy and biomechanics. Includes stress management, nutrition, body image, somatotypes, and body connectivity work.

**DANC 1620**
**Polynesian Dance I**
**1**

Explores basic forms of authentic Polynesian dance with a focus on the dances of Tonga, New Zealand, Tahita and Hawaii. Teaches the origins of the Polynesian people, their "tapu" systems, culture, religions, musical instruments and legends through movement classes, research, discussion and video. Develops understanding of Polynesian dance and the sacredness of this beautiful art form.

**DANC 1700**
**American Social Dance I**
**1**

For students with no prior American Social Dance experience. Teaches beginning (Bronze) level patterns of American Social Dance including Foxtrot, Triple Swing, Waltz, and Cha Cha. Emphasizes, on a beginning level, correct rhythm, poise, footwork and foot positions, dance position, and etiquette. Successful completers will have a good general knowledge of Bronze level curriculum. Course fee of $10 for practical experience applies.

**DANC 1710**
**International Ballroom Dance I**
**1**

Teaches beginning (Bronze) level patterns of International Ballroom Dance including Waltz, Quickstep, and Tango. Introduces correct rhythm, poise, footwork, foot positions, dance position, posture, and leading and following. Provides general knowledge of Bronze level curriculum. Course fee of $10 for practical experience applies.

**DANC 1720**
**Latin Ballroom Dance I**
**1**

Teaches beginning (Bronze) level patterns of International Style Latin Rumba, Samba, and Cha Cha. Introduces correct rhythm, poise, footwork, and foot positions. Provides general knowledge of Bronze level curriculum. Course fee of $10 for practical experience applies.

**DANC 1780**
**Country Western Dance I**
**1**

Teaches Western Swing, Line Dances, Texas Two-Step, Cotton Eyed Joe, Schottische, and Heel Toe polka. Stresses rhythm, dance with a partner, and developing a country western dance style. Uses lecture, demonstration, and active class participation.

**DANC 1790**
**Country Western Dance II**
**1**
* Prerequisite(s): DANC 1780

Teaches Pony Swing, East Coast Swing, Waltz, Two-Step, and Line Dances. Stresses rhythm, dance with a partner, and developing a country western dance style. Uses lecture, demonstration, and active class participation.

**DANC 2100** **FF**
**Teaching Dance for Children**
**3**

Introduces fundamentals of teaching dance to children in the community, school and home. Includes philosophy, educational benefits, lesson integration, and teaching methods. Emphasizes content creation based on state and national standards. Assists students to become independent, creative, and productive learners as they acquire the knowledge, skills, and experience to teach children ages 5–12.

**DANC 2110** **FF**
**Orientation to Dance**
**3**

For students interested in pursuing a career in dance. Introduces students to the discipline of dance as an academic as well as artistic field of study. Examines various dimensions of the discipline such as performance, teaching, choreography, dance science/medicine, movement analysis and fundamentals, dance criticism, interdisciplinary collaboration, and current issues. Includes lecture, readings, discussion, writing and participation. Prepares the student entering the Dance emphasis. Course lab fee of $32 applies.

**DANC 221R**
**Pointe II**
**1**
* Prerequisite(s): By audition only.

For dance majors and other students with an interest in the professional dance world. Emphasizes women's pointe work. Builds strength and control necessary for further advanced study. Explores various music components necessary for development of virtuosity en pointe. Completers will have skills necessary to progress to advanced pointe class. Includes guest choreographers and teachers. May be repeated for a total of six credits toward graduation. Course Lab fee of $120 for support applies.

**DANC 222R**
**Ballet Technique and Theory II for Men**
**1**
* Corequisite(s): DANC 227R or DANC 327R

Focuses on men's ballet technique at a beginning level and prepares men dance majors for the professional world. Emphasizes jumps and technical abilities specifically for men. Builds strength and control necessary for further intermediate study. Explores the development of musicality and epaulement as it relates to artistic interpretations. Prepares students to perform simple men's variations from the classical repertoire. May be repeated for a total of four credit hours.

**DANC 2250**
**Character Dance I**
**1**
* Prerequisite(s): Intermediate equivalent skill level to be determined by audition

First of a two-semester sequence. Must be taken in sequence. For ballet students at an intermediate or higher skill level. Studies theatre dance based on ethnic styles within ballet performance context.

**DANC 2260**
**Character Dance II**
**1**
* Prerequisite(s): DANC 2250

Second of a two-semester sequence course. Must be taken in sequence. For ballet students at an intermediate or higher skill level. Studies theatre dance based on ethnic styles within ballet performance context.

**DANC 227R**
**Ballet Technique II**
**3**
* Prerequisite(s): Instructor Approval

For intermediate level ballet students. Requires ability to handle the varying technical difficulties of classical ballet. Includes theories from Soviet, French, Italian, American, English, and Danish schools. Provides hands-on experience in barre and center floor work to increase strength, flexibility, and artistic interpretation. Emphasizes body alignment and correct placement. Successful completers should be fully prepared to participate in an upper division classical ballet course. May be repeated for a total of 18 credits. Course Lab fee of $216 for support applies.

**DANC 2330**
**Improvisation**
**1**

For students interested in experiencing and developing skills in physical inventiveness and performance intuition and immediacy. Provides guided exploration in the elements of dance for the creative development of personal movement vocabulary, spontaneous group interaction, and the ability to recall and give form to movement generated improvisationally. Course lab fee of $64 for Dance Accompanist applies.

**DANC 2340**
**Composition**
**2**
* Prerequisite(s): DANC 2330
* Prerequisite(s) or Corequisite(s): DANC 143R, or DANC 144R, or Instructor Approval

For students interested in experiencing and developing skills in dance composition. Includes conceptual and practical exploration of the basic elements of dance in both solo and group forms. Investigates the relationship between choreographic intention, movement invention, content, and form/structure. Introduces choreographic devices and forms and encourages experimentation in the choreographic process. Emphasizes the process of creating and giving form to a personal movement vocabulary. Course lab fee of $85 for Dance Accompanist applies.

**DANC 2350**
**Dance and Technology**
**2**

Explores fundamental approach to Dance for Camera in its various forms. Includes documentary-style videos as well as the creation of dances made specifically for the screen. Explores three-dimensional movement through the two-dimensional medium of the camera. Examines how editing choices creates dance composition in video form. Discusses aesthetic and historical representations of the body through media. Covers choreography for the camera, video camera basics, elements of a video shoot, and video-editing while preparing the student for further integration of dance and technology, such as the use of video projection during live dance performance. Provides the necessary skills to professionally produce video resumes. Lab access fee of $10 for computers applies.

**DANC 243R**
**Modern/Contemporary Dance Technique and Theory Level II /Semester I**
**3**
* Prerequisite(s): by audition

Teaches fundamental body and performance technique. Emphasizes locomotor skills and movement progressions as well as elements of body, effort, shape, space, and time. May be repeated for 9 credits toward graduation. Course Lab fee of $216 for support applies.

**DANC 244R**
**Modern/Contemporary Dance Technique and Theory Level II/Semester II**
**3**
* Prerequisite(s): DANC 243R

Focuses on development of technical and performance skills in modern/contemporary dance. Includes concepts of applied anatomy and kinesiology as well as Bartenieff Fundamentals. Emphasizes clarity of movement intent and interpretation in movement progressions. May be repeated for a maximum of 9 credits towards graduation. Course Lab fee of $216 for support applies.

**DANC 247R**
**Repertory**
**1**
* Prerequisite(s): By Audition
* Corequisite(s): DANC 143R, DANC 144R, DANC 243R, or DANC 244R

For students with advanced technical, performance, and artistic skills in Modern/ Contemporary Dance interested in performing amateur and professional choreographic works. Emphasizes study and performance of student, guest, and faculty choreography. Introduces students to choreographic approaches of historical and current works. Includes performance in formal and informal concerts. Repeatable for a maximum of three credit hours.

**DANC 248R**
**Special Topics In Dance**
**2**

Provides students an in-depth exploration of specialized dance forms outside of traditional course offerings, with an emphasis on World Dance forms such as Polynesian, Classical Indian, Argentine Tango, Capoeira, Balinese and Tibetan Folk Dance. Focuses on learning specific dance forms through active participation. Includes integration of theoretical, historical and social concepts which deepen the student's understanding of the context in which the dance form was practiced historically and is practiced today. May be repeated for a total of 6 credits towards graduation.

**DANC 250R**
**Advanced Jazz Dance**
**2**
* Prerequisite(s): Instructor Approval

Explores advanced level jazz technique, performance and composition skills. Includes preparation for the professional audition through movement experiences, lecture with group discussions, video, guest teacher(s), and group projects. May be repeated for a total of six credit hours.

**DANC 2560**
**African Dance II**
**1**
* Prerequisite(s): DANC 1560 or previous African Dance experience

Explores dance traditions of West and Central Africa, as well as other countries in the African Diaspora, including Brazil, Cuba, and Haiti. Focuses on strong foundational skills in various African dance styles and emphasizes the cultural and historical significance of the various dances and rhythms. Explores more complex movement and rhythmic structures than African I and challenges the students' physical stamina. Accompanied by live drumming. Course fee of $50 for support applies.

**DANC 265R**
**Fundamentals of Movement**
**2**
* Prerequisite(s): DANC 1200 recommended

For students and community members who want to move with greater ease, efficiency, and sense of connection in the body. Emphasizes body awareness and developmental human movement patterning. Makes application to the areas of dance, sport, theater, somatics, performance, and psychology. Includes Bartenieff Fundamentals and basic principles of Laban Movement Analysis. Develops integrated and harmonious movement patterns in the body. May be repeated for four credits total toward graduation.

**DANC 2670**
**Introduction to Laban Studies**
**2**
* Prerequisite(s): DANC 265R

For all dance students and others interested in understanding how the components of movement combine to create functional and expressive movement statements. Introduces the basic principles of Laban Movement Analysis (LMA). Presents a comprehensive system for analyzing the complexity of human movement based on the theories of Rudolph Laban and Irmgard Bartenieff. Utilizes physical performance and observation methods. Emphasizes the process of perceiving and making meaning of human movement from a variety of contexts.

**DANC 270R**
**American Social Dance II**
**1**
* Prerequisite(s): Instructor Approvall

For students with Bronze level American Social Dance experience or equivalent. Teaches intermediate (Silver) level patterns of American Social Dance including Foxtrot, Waltz, Triple Swing, Viennese Waltz, West Coast Swing, and Cha Cha. Emphasizes, on an intermediate level, correct rhythm, poise, footwork, and foot positions, dance position, and etiquette. Successful completers will have a good general knowledge of Silver level curriculum. May be repeated for a maximum of 2 credits toward graduation. Course fee of $15 for practical experience applies.

**DANC 271R**
**International Ballroom Dance II**
**1**
* Prerequisite(s): Instructor Approval

For students with Bronze level International Ballroom Dance experience. Teaches the intermediate (Silver) level patterns of International Style Waltz, Quickstep, Tango, Foxtrot, and Viennese Waltz. Emphasizes, on an intermediate level, rhythm, poise, footwork, foot positions, dance position, alignment, rise and fall, body flight and correct leading and following. Successful completers will have a good general knowledge of Silver level curriculum. May be repeated for a total of two credits toward graduation. Course fee of $15 for practical experience applies.

**DANC 272R**
**Latin Ballroom Dance II**
**1**
* Prerequisite(s): Instructor Approval

For students with Bronze level Latin Ballroom Dance experience or equivalent skill level. Teaches the intermediate (Silver) level patterns of International Style Rumba, Samba, Cha Cha, and Paso Doble. Emphasizes, on an intermediate level, rhythm, poise, footwork, foot positions, dance position, alignment, and correct leading and following. Successful completers will develop a good general knowledge of Silver level curriculum. May be repeated for a total of two credits toward graduation. Course fee of $15 for practical experience applies.

**DANC 276R**
**Ballroom Dance Company Back Up Team**
**1**
* Prerequisite(s): By audition only.

For students with or without prior ballroom dance team experience. Teaches American and International techniques as a performance discipline. Includes choreography, rehearsals, performances, demonstrations, competition. Also teaches fundamentals of formation team dancing, stage performance and team competition. Requires individual practice. Prepares dancers for audition to touring team. May be repeated for up to four credits toward graduation. Course fee of $45 for specialized clothing applies.

**DANC 281R**
**Internship in Dance I**
**1 to 3**
* Prerequisite(s):Departmental Approval

Provides an opportunity for students to receive college credit and explore career options in dance by working in dance-related fields. Applies academic concepts to actual work experiences. Requires approval of faculty sponsor and completion and acceptance of application. Requires completion of an orientation, completion of Master Agreement between UVU and employer, completion of goals and tasks as required by academic department, and completion of final evaluation. May be repeated for a total of 6 credits towards graduation. May be graded credit/no credit.

**DANC 3140**
**Dance Production and Lighting**
**2**
* Prerequisite(s): University Advanced Standing

Introduces essential aspects of dance production. Focuses on theory and practice of lighting for dance. Includes consideration of costuming, set design, sound design, backstage organization, make-up for dance, promotion, and programming. Includes lecture and lab experience.

**DANC 3160**
**Dance Accompaniment**
**2**
* Prerequisite(s): University Advanced Standing

Designed for students interested in musical accompaniment for dance. Explores rhythmic structures and its components in music and dance, composing a percussion score for dance, and building percussion instruments. Emphasizes practical skills in performing simple and complex rhythmic patterns on drum. Includes participation, writing, lecture, and discussion.

**DANC 321R**
**Pointe III**
**1**
* Prerequisite(s): Advanced equivalent skill level to be determined by audition.
* Corequisite(s): DANC 327R

For women dance majors and others with an interest in the professional dance world. Emphasizes pointe. Builds strength and control. Explores various styles from classical and contemporary repertoire. Women develop successful virtuosity en pointe. Completers will have skills necessary to perform at an advanced technical skill level and have skills necessary to perform variations from classical repertoire. Includes guest teachers. May be repeated for a total of six credits toward graduation. Course Lab fee of $120 for support applies.

**DANC 322R**
**Ballet Technique and Theory III for Men**
**1**
* Corequisite(s): DANC 327R or DANC 427R

Focuses on men's ballet technique at an intermediate and prepares men dance majors for the professional world. Emphasizes jumps and technical abilities specifically for men. Builds strength and control necessary for further study. Explores the development of musicality and epaulement as it relates to artistic interpretations. Prepares students to perform men's variations from the classical repertoire. May be repeated for a total of four credit hours.

**DANC 327R**
**Ballet Technique III**
**3**
* Prerequisite(s): DANC 227R or Advanced equivalent skill level to be determined by audition

For ballet students at an advanced skill level who are able to handle the varying technical difficulties of classical ballet. Provides hands-on experience in barre and center floor work to increase strength and flexibility. Emphasizes the development of musicality as it relates to artistic interpretations. Successful completers will be prepared to participate on a corp de ballet professional performance level. May be repeated for a total of 18 credits toward graduation. Course Lab fee of $216 for support applies.

**DANC 3330**
**Modern Dance Workshop**
**2**
* Prerequisite(s): DANC 2340 and University Advanced Standing

A continuation of DANC 2330 and DANC 2340. Emphasizes the relationship between improvisation and composition in the choreographic process. Focuses on developing fluency in creating and developing content and creating appropriate form for that content. Explores established choreographic forms in both solo and small group settings. Requires some choreographic work outside of class.

**DANC 3340**
**Ballet Choreography**
**2**
* Prerequisite(s): DANC 2230, DANC 2340, and University Advanced Standing
* Corequisite(s): (DANC 327R, DANC 427R, or DANC 428R) and (DANC 321R or DANC 421R)

For dance majors desiring ballet emphasis. Investigates and explores the choreographic process with relationship to narration as well as all choreographic concepts. Includes the creation of student works that give shape and form to ideas based on a specific theme or statements. Examines plot, character, and theme as part of the creative process.

**DANC 3350**
**Choreography**
**2**
* Prerequisite(s): DANC 3330 and University Advanced Standing

Provides in-depth experience in the choreographic process. Focuses on development of personal voice in choreography and the ability to generate choreographic form intrinsic to thematic content. Explores the use of choreographic forms and devices as means of developing thematic content. Requires intensive exploration of the creative process through imaginative thinking, creating, and crafting in movement.

**DANC 3400** **XF**
**Dance in the Elementary School**
**2**
* Prerequisite(s): University Advanced Standing

Introduces the philosophy, educational benefits, and teaching methods of dance for children. Teaches movement as an effective and motivational medium for building self awareness, expression, and discipline. Develops skills in the psychomotor, affective, and cognitive domains. Places emphasis on learning through problem-solving and on integrative learning. Addresses the Utah State Core Curriculum in Dance for the elementary school. Completion of a second course is required to satisfy the fine arts requirements (see Graduation section of catalog).

**DANC 341R**
**Modern/Contemporary Dance Technique and Theory Level III/ Semester I**
**3**
* Prerequisite(s): By audition

Builds technical, performance, and theoretical understanding and skills in modern/ contemporary dance. Emphasizes body and performance techniques; axial and locomotor skills; total body connectivity movement progressions; increased spacial, rhythmical, and qualitative acuity; risk-taking; and movement commitment. Includes aspects of composition, improvisation, and performance as they relate to technique. May be repeated for up to 9 credits total toward graduation. Course Lab fee of $216 for support applies.

**DANC 3420**
**Dance in the Elementary Schools Practicum**
**3**
* Prerequisite(s): DANC 3400 and University Advanced Standing

Builds on the methods, strategies, and dance pedagogy studied in the DANC 3400 Dance in the Elementary Schools course. Focuses on the practicum experience in the elementary schools using the Utah Secondary Dance Core Curriculum.

**DANC 342R**
**Modern/Contemporary Dance Technique and Theory Level III/ Semester II**
**3**
* Prerequisite(s): DANC 341R or by audition

Builds technical, performance and theoretical understanding and skills in modern/ contemporary dance. Expands on the skills and concepts introduced in DANC 341R. Emphasizes body and performance techniques, axial and locomotor skills, total body connectivity movement progressions; increased spacial, rhythmical, and qualitative acuity; risk-taking; and movement commitment. Includes aspects of composition, improvisation, and performance as they relate to technique. May be repeated for up to 9 credits total toward graduation. Course Lab fee of $216 for support applies.

**DANC 3450**
**Modern/Contemporary Dance Teaching Methods**
**3**
* Prerequisite(s): DANC 3400 and University Advanced Standing

Introduces methodologies, strategies, ideologies, and philosophies of dance pedagogy based on current research and practices. Emphasizes lesson plan writing using the Utah State Secondary Dance Core Curriculum and the National Dance Standards. Integrates theory and practice through lecture, discussion, writing, and classroom teaching experiences in the college and public school settings.

**DANC 346R**
**Synergy Dance Company**
**3**
* Prerequisite(s): Audition required
* Corequisite(s): DANC 143R or DANC 144R or DANC 243R or DANC 244R or DANC 341R or DANC 342R or DANC 441R or DANC 442R

Designed for students to gain more advanced understanding of artistry through the process and performance of student, faculty, and guest choreography in a formal and informal performance settings. Combines participation in technique, performance, composition, and improvisation. Also includes lectures and demonstrations for local schools and other interested groups. May be repeated for a maximum of 9 credits toward graduation. Course Lab fee of $74 for practical experience applies.

**DANC 348R**
**Special Topics in Dance**
**1 to 3**
* Prerequisite(s): University Advanced Standing and Department Approval

Addresses emerging topics, issues, and developments related to dance. Includes lectures, demonstrations, and studio time for application and evaluation. May be repeated for a maximum of 9 credits toward graduation.

**DANC 356G**
**Dance and Culture**
**3**
* Prerequisite(s): Matriculation in any BFA or BS Dance major and University Advanced Standing

Explores the richness and beauty of various cultures from around the world through the medium of dance. Teaches students a deeper knowledge and appreciation of various world dance, or multi-cultural dance forms, through participation in movement classes, informal performances, and dance-related cultural events in class, on campus, and in the community. Serves to deepen the student's understanding of the profound relationship between dance and culture, and dance and human existence throughout time through readings, group discussions, interactive assignments, cultural research projects, concert attendance, writing, dancing, singing and playing music. Explores the evolution and dissemination of the various cultural dance forms studied in class. Course Lab fee of $40 applies.

**DANC 3610**
**Intermediate Dance Conditioning and Injury Prevention**
**2**
* Prerequisite(s): DANC 1610 and University Advanced Standing

An intermediate course for dance majors that covers the theory and practice of core conditioning principles with specific application to dance. Regularly scheduled conditioning work outs with accompanying lectures, where recognition and appropriate responses to common dance injuries will be discussed.

**DANC 3630**
**Dance History WE**
**3**
* Prerequisite(s): ENGL 2010, DANC 2110, DANC 356G, and University Advanced Standing

Introduces the art of dance in the Western tradition. Emphasizes the relationship of dance to lineage-based, ancient, medieval, Renaissance, Baroque, Classical, Romantic, and Modern cultures. Explores keystone Western dance history concepts and the work of various recognized dance scholars. Introduces students to a wide range of publications in the field. Includes lecture and movement experiences. Emphasizes skills of critical analysis, synthesis, and interpretation in writing about dance.

**DANC 365R**
**Advanced Fundamentals of Movement**
**2**
* Prerequisite(s): DANC 265R, DANC 2670, and University Advanced Standing

Continues and deepens the content of DANC 265R. Emphasizes application of principles of Bartenieff Fundamentals to varied movement contexts. Explores the connections between Laban Movement Analysis (LMA) elements of Body, Effort, Shape, and Space and applies the connections to developing increased ease in movement function and liveliness of expression in many movement forms. Develops increased skill and awareness in movement sensation, perception, practice, observation, analysis, prescription, and interpretation. Utilizes LMA symbology. Involves lecture, participation, observation, and written and verbal analysis. May be repeated for 4 credits toward graduation.

**DANC 3670**
**Movement Analysis**
**3**
* Prerequisite(s): DANC 265R or equivalent, DANC 2670 or equivalent, and University Advanced Standing

An advanced survey course in movement analysis. Focuses on application of the concepts and theories of Laban Movement Analysis in the context of observing, recording, analyzing, and making meaning from human body movement. Includes in-depth study of motif score writing and applying Body, Effort, Shape and Space Harmony paradigms. Utilizes physical performance and written and verbal observation methods. Examines application to disciplines that concern themselves with human movement behavior such as behavioral sciences, theater, communications, human performance, human development, business, and education.

**DANC 3680**
**Dance Kinesiology**
**4**
* Prerequisite(s): (ZOOL 1090 or ZOOL 2320) and University Advanced Standing

Studies the neuromusculoskeletal system in practical application to dance. Analyzes demands placed on the dancer's body and identifies how to maximize efficiency and reduce injuries while maintaining requisite aesthetic elements. Includes lecture and lab experiences.

**DANC 3690**
**Motif and Labanotation I**
**2**
* Prerequisite(s): DANC 265R, DANC 2670, and University Advanced Standing

Teaches Motif Writing and beginning Labanotation. Expands students' understanding of the written symbol system of Laban Movement Analysis and deepens observation and analysis skills critical for understanding dance and varied manifestations of human movement expression. Relates Motif Writing and Labanotation to dance history and current dance choreography and performance. Includes application of Motif Writing to teaching dance technique, composition, and improvisation. Emphasizes the theory of human movement description and analysis formulated by Rudolph Laban and requires students to both write and read beginning to intermediate level notated scores. Includes lecture, discussion, observation, and participation including reading from score, written and embodied symbology assignments, teaching assignments, and completion of several creative projects.

**DANC 370R**
**American Social Dance III**
**1**
* Prerequisite(s): Instructor Approval

For students who have successfully completed Bronze and Silver American Social Dance courses and for members of the Ballroom Tour Team. Teaches the advanced (Gold) level patterns of American Style Foxtrot, Cha Cha, Waltz, Triple Swing, Viennese Waltz, and West Coast Swing. Emphasizes, on an advanced level, correct poise, style, rhythm. Also teaches correct footwork, foot position, alignments, rise and fall, partnering, correct leading and following, and etiquette. First semester successful completers will have a general knowledge of Gold level curriculum. Second semester successful completers will have an in-depth knowledge of Gold level curriculum. May be repeated for two credits toward graduation. Course fee of $20 for practical experience applies.

**DANC 371R**
**International Ballroom Dance III**
**1**
* Prerequisite(s): Instructor Approval

For students who have successfully completed Bronze and Silver International Ballroom Dance courses, and for members of the Ballroom Tour Team. Teaches the advanced (Gold) level patterns of International Style Waltz, Quickstep, Tango, Foxtrot, and Viennese Waltz. Emphasizes, on an advanced level, correct poise, style, rhythm. Also teaches correct footwork, foot positions, alignments, rise and fall, partnering, floor craft, and correct leading and following. First semester focuses on developing a general knowledge of Gold level curriculum. Second semester focuses on developing an in-depth knowledge of Gold level curriculum. May be repeated for a maximum of 4 credits toward graduation.Course fee of $20 for practical experience applies.

**DANC 372R**
**Latin Ballroom Dance III**
**1**
* Prerequisite(s): Instructor Approval

For students who have successfully completed Bronze and Silver Latin Ballroom Dance courses and for members of the Ballroom Tour Team. Teaches the advanced (Gold) level patterns of Latin Style Rumba, Samba, Cha Cha, Paso Doble, and Jive. Emphasizes, on an advanced level, correct poise, style, and rhythm. Also teaches correct footwork, foot position, alignments, rise and fall, partnering, correct leading and following, amounts of turn, Cuban action, and movement principles. First semester focuses on developing a general knowledge of Gold level curriculum. Second semester focuses on developing an in-depth knowledge of Gold level curriculum. May be repeated for a maximum of 4 credits toward graduation. Course fee of $20 for practical experience applies.

**DANC 3730**
**American Social Dance Teaching Methods**
**2**
* Prerequisite(s): DANC 1700 or equivalent skill level, DANC 270R or equivalent skill level, and University Advanced Standing

For dance majors and other students with an interest in teaching social dance. Focuses primarily on teaching techniques using Bronze level patterns. Emphasizes calling steps. Explores proper music selection and tempo. Includes actual teaching time of peers and a beginning class. Completers should be able to adequately teach social dance in either a formal or informal setting.

**DANC 3740**
**Ballroom Dance Choreography**
**2**
* Prerequisite(s): (DANC 270R, DANC 271R, DANC 272R, or Instructor Approval) and University Advanced Standing

Investigates and explores the choreographic process with reference to choreographic concepts. Involves the creation of dance skills that give shape and form to ideas based on a specific theme, style, or statement. Includes Latin, International Ballroom, American Rhythm and Smooth, and Cabaret styles. Explores formation team competition, solo couple competition, formation team stage performance, and solo couple stage performance as part of the creative process.

**DANC 3750**
**Studies in Ballroom Dance Styles**
**2**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Investigates and explores historical ballroom dance styles. Emphasizes the social and cultural context in which ballroom dance is created and performed. Includes career, life style, education, gender, moral and ethical concerns related to ballroom dance issues. Also covers ballroom dance history, evolution, and current trends. Identifies similarities and differences between ballroom dance and other dance forms. Involves discussion, lecture, research, student presentations and participation.

**DANC 376R**
**Ballroom Dance Company Back-up Tour Team**
**2**
* Prerequisite(s): Audition

For students with advanced ballroom dance experience. Teaches American, International Ballroom, and Latin techniques using intermediate and advanced choreography in performance and competitive discipline. Includes choreography, stage performances, competitions, and demonstrations with increased emphasis on dance technique and proper execution of formations. Requires individual practice. Prepares dancers for audition to touring team. May be repeated for eight credits toward graduation. Course fee of $45 for specialized clothing and materials applies.

**DANC 421R**
**Pointe IV**
**1**
* Prerequisite(s): Advanced equivalent skill level to be determined by audition
* Corequisite(s): DANC 427R

For women dance majors and other students with an interest in the professional dance world. Emphasizes pointe. Continues to build strength and control through increased complex combinations. Explores advanced levels of styles from classical and contemporary repertoire. Develops virtuosity en pointe. Prepares students to perform at a professional technical skill level. Includes guest teachers. May be repeated for a total of six credits toward graduation. Course Lab fee of $120 for support applies.

**DANC 422R**
**Ballet Technique and Theory IV for Men**
**1**
* Prerequisite(s): Intermediate/Advanced equivalent skill level to be determined by audition.
* Corequisite(s): DANC 227R or DANC 327R or DANC 427R

Emphasizes jumps, turns and other technical abilities specifically for men at an advanced level. Builds strength and control necessary for performing male variation, particularly from the classical ballet repertoire. Explores the development of musicality as it relates to artistic interpretations. May be repeated for a total of eight credit hours.

**DANC 423R**
**Pointe V**
**1**
* Prerequisite(s): DANC 321R or to be determined by audition
* Corequisite(s): DANC 427R or DANC 428R

For women dance majors and other students with an interest in the professional dance world. Emphasizes pointe. In-depth study of styles from classical and contemporary repertoire. Women develop successful virtuosity en pointe. Completers will have skills necessary to perform at an professional technical and artistic skill level and have the advanced experience necessary to pursue a professional career in Dance. Includes guest teachers. May be repeated for a total of six credits toward graduation. Course Lab fee of $120 for support applies.

**DANC 424R**
**Pas de deux**
**1**
* Prerequisite(s): (DANC 321R or DANC 327R) and (DANC 421R or DANC 427R or DANC 428R); advanced equivalent skill level to be determined by audition.
* Corequisite(s): (DANC 427R or DANC 428R) and (DANC 421R or DANC 423R)

For dance majors and other students with an interest in developing their advanced level technique. Emphasizes work as pairs through tradition styling and classical technique. Explores various pas de deuxs from classical through contemporary repertory. Includes master guest teachers and study of traditional classical pas de deux choreography. Teaches skills necessary to perform pas de deux from classical repertoire. May be repeated for a total of four credits toward graduation. Course Lab fee of $126 applies.

**DANC 425R**
**Repertory Ballet Ensemble**
**3**
* Prerequisite(s): Audition required
* Corequisite(s): DANC 327R or DANC 427R

For serious ballet students showing a high level of talent and technical achievement. Explores the development of artistic interpretation as students learn styles of various repertoire works. Prepares students to perform as a competent corps de ballet member. May be repeated for a maximum of 9 credits toward graduation. Course fee of $75 for specialized clothing applies.

**DANC 4260**
**Ballet Pedagogy**
**3**
* Prerequisite(s): University Advanced Standing

Emphasizes appropriate teaching methodologies for all levels of ballet technique, pointe and men's class. Develops interpersonal skills as they relate to classroom management. Explores the styles and teaching methodologies of all ballet schoolings/styles to help students develop and construct effective lesson plans and curriculum. Course lab fee of $61 applies

**DANC 427R**
**Ballet Technique IV**
**3**
* Prerequisite(s): DANC 327R or advanced equivalent skill level to be determined by audition
* Corequisite(s): DANC 421R

For ballet students at an advanced skill level who are able to handle the varying technical difficulties of classical ballet. Provides experience in barre and center floor work to increase strength and flexibility. Emphasizes the development of musicality as it relates to artistic interpretations. Successful completers will be prepared to participate on a corp de ballet professional performance level. May be repeated for a total of 18 credits toward graduation. Course Lab fee of $216 for support applies.

**DANC 428R**
**Ballet Technique V**
**3**
* Prerequisite(s): DANC 427R or advanced equivalent skill level to be determined by audition
* Corequisite(s): DANC 421R or DANC 423R

For ballet students who successfully audition for Utah Regional Ballet Company at an advanced skill level and artistic skill level who are prepared for the technical difficulties required at a professional level. Provides hands-on experience in barre and center floor work to fully develop the professional artist. Successful completers will be prepared to participate on a professional performance level. May be repeated for a total of 24 credits toward graduation. Course Lab fee of $216 for support applies.

**DANC 429R**
**Utah Metropolitan Ballet Repertory**
**3**
* Prerequisite(s): Advanced/Professional Skill level; determined by audition
* Corequisite(s): (DANC 421R, DANC 423R) or DANC 427R, DANC 428R

For serious ballet students showing a high level of talent and technical achievement. Explores the development of artistic interpretation as students learn styles of various repertoire works. Successful completers should be qualified to perform as a competent corps de ballet member. May be repeated for a maximum of 9 credits toward graduation. Course fee of $50 for specialized clothing applies.

**DANC 4350**
**Senior Capstone I**
**2**
* Prerequisite(s): DANC 3140, DANC 3630, DANC 3680, and (DANC 3340, or DANC 3350, or DANC 3740), and University Advanced Standing

Prepares senior dance majors with the skills, resources, and portfolio/marketing materials needed to apply for graduate work or professional opportunities in dance. Emphasizes digital portfolio development and biographical writing, personal web page creation, audition and interview strategies, and dance resources. Includes writing, performance, research, video editing and multimedia work. Course fee of $16 applies.

**DANC 4360**
**Senior Capstone II**
**2**
* Prerequisite(s): DANC 3680 and DANC 4350 and DANC 4880 and (DANC 3340 or DANC 3350 or DANC 3740 with a B- or higher) and University Advanced Standing

Designed for senior dance students as the second course in a capstone sequence. Emphasizes through choreography, performance, and production a synthesis of the knowledge and skills developed in the B.S. and B.F.A. degrees in Dance. Includes writing, collaborative work, discussion, lecture, and intensive studio preparation of choreography. Course fee of $66 applies.

**DANC 441R**
**Modern/Contemporary Dance Technique and Theory Level IV/Semester I**
**3**
* Prerequisite(s): By audition

Builds technical, performance, and theoretical understanding and skills in modern dance/ contemporary dance. Emphasizes body and performance techniques, axial and locomotor skills, total body connectivity, movement progressions, increased spacial, rhythmical and qualitative acuity, risk-taking, and movement commitment. Includes aspects of composition, improvisation, and performance as they relate to technique. May be repeated for up to 9 credits total towards graduation. Course Lab fee of $216 for support applies.

**DANC 442R**
**Modern/Contemporary Dance Technique and Theory Level IV/ Semester II**
**3**
* Prerequisite(s): DANC 441R or by audition

Builds rigorous technical, performance, and theoretical training. Emphasizes advanced performance sequences and progressions that utilize technical, kinesthetic, and expressive skills. Includes challenging spacial, rhythmical, and qualitative performance skills, risk-taking, and movement commitment. Includes aspects of composition, improvisation, and performance as they relate to technique. May be repeated for up to 9 credits total toward graduation. Course Lab fee of $216 for support applies.

**DANC 4430**
**Dance Teaching Practicum**
**3**
* Prerequisite(s): DANC 3450 and University Advanced Standing

For secondary dance licensure majors or dance majors interested in dance pedagogy. Builds on the methodologies, strategies, ideologies and philosophies of dance pedagogy studied in DNCE 3430. Emphasizes lesson plan and unit development, instruction, and assessment based on the National and Utah State Dance Standards. Focuses on the integration of theory and practice during a practicum experience in the secondary public schools setting. Includes writing, reading, discussion, and participation.

**DANC 446R**
**Contemporary Dance Ensemble**
**3**
* Prerequisite(s): By audition
* Corequisite(s): DANC 341R or DANC 342R or DANC 441R or DANC 442R

Designed for students with advanced technical, performance, and artistic skills. Provides students interested in further developing their artistry with opportunities to perform the works of professional choreographers in formal and informal settings. Explores a variety of contemporary and historical choreographic approaches. Prepares students for work in a professional modern dance company. May be repeated for a maximum of 9 credits toward graduation. Course Lab fee of $75 for practical experience applies.

**DANC 471R**
**International Ballroom Dance IV**
**2**
* Prerequisite(s): Instructor Approval

For students who have successfully completed Bronze, Silver and Gold International Ballroom Dance classes and for members of the Ballroom Tour Team. Prepares students to dance, choreograph and compete on a championship amateur level. Teaches the Advanced (Gold-Bar) level patterns of International style Waltz, Quickstep, Tango, Foxtrot, and Viennese Waltz. Emphasizes, on a pre-professional level, correct poise, style, and rhythm. Also teaches and enhances correct footwork, foot positions, alignments, rise and fall, partnering, floor craft, body flight, precedes and follows, and correct leading and following. First semester focuses on developing a general knowledge of Gold-Bar level curriculum. Second semester focuses on developing an in-depth knowledge of Gold-Bar level curriculum. May be repeated for a maximum of 8 credits toward graduation. Course fee of $20 for practical experience applies.

**DANC 472R**
**Latin Ballroom Dance IV**
**2**
* Prerequisite(s): Instructor Approval

For students who have successfully completed Bronze, Silver and Gold International Ballroom Dance classes and for members of the Ballroom Tour Team. Includes preparation to dance, choreograph and compete on a championship amateur level. Teaches the advanced (Gold-Bar) level patterns of Latin style Rumba, Samba, Cha Cha, Paso Doble, and Jive. Emphasizes, on a pre-professional level, correct poise, style, and rhythm. Also teaches and enhances correct footwork, foot positions, Cuban action, alignments, rise and fall, partnering, floor craft, precedes and follows, and correct leading and following. First semester focuses on developing a general knowledge of Gold-Bar level curriculum. Second semester focuses on developing an in-depth knowledge of Gold-Bar level curriculum. May be repeated for a maximum of 8 credits toward graduation. Course fee of $20 for practical experience applies.

**DANC 4740**
**International Ballroom and Latin Theory**
**3**
* Prerequisite(s): DANC 271R, DANC 272R, and University Advanced Standing

Covers technical and theoretical aspects of basic figures in Waltz, Tango, Foxtrot, Quickstep, Cha Cha, Samba, Rumba, Paso Doble, and Jive, such as footwork, amounts of turn and rhythm. Emphasizes correct teaching methods associated with each dance. Prepares students to obtain membership in the Imperial Society of Teachers of Ballroom Dance and to teach professionally.

**DANC 476R**
**Ballroom Dance Company Tour Team**
**3**
* Prerequisite(s): Audition

For students with advanced Ballroom Dance Team experience. Teaches advanced technique in performance and competitive discipline. Includes choreography, performances, demonstrations, and tours, in formation team dancing, stage performance, team competition, team match, and individual competitive events. Requires individual practice. May be repeated for 12 credits toward graduation. Course fee of $100 for specialized clothing and materials applies.

**DANC 481R**
**Internship in Dance II**
**1 to 3**
* Prerequisite(s): Matriculation in BFA or BS in Dance and Departmental Approval, and University Advanced Standing

Provides an opportunity for upper-division students to receive college credit and work in a dance-related field. Offers students the opportunity to focus on a specific career path and prepare themselves to enter the profession. Applies academic concepts to actual work experiences. Requires approval of faculty sponsor and completion and acceptance of application. Also requires completion of an orientation, completion of Master Agreement between UVU and employer, completion of goals and tasks as required by academic department, and completion of final evaluation. May be repeated for a total of 6 credits towards graduation. May be graded credit/no credit.

**DANC 4880**
**Current Issues in Dance**
**3**
* Prerequisite(s): DANC 3630, and University Advanced Standing

Introduces students to the issues and philosophical views that have influenced dance and other art forms. Examines current trends and issues in dance. Includes lecture, discussion, readings, video, guest artists, and collaborative projects.

**DANC 4920**
**Dance as Cultural Practice**
**3**
* Prerequisite(s): DANC 2110 and (DANC 365R or DANC 3670) and University Advanced Standing

Designed for students with an interest in dance and cultural representation. Takes a critical cultural approach to the study of dance as a means of encoding cultural values. Analyzes issues of gender, identity, religion, power, art, semiotics, and media/technology in relation to dance. Explores the effect of dance as cultural representation on society. Emphasizes critical theories of dance, representation, identity, feminism, and post-modernism. Requires student presentation of research project.

# Dental Hygiene (DENT)

**DENT 1000**
**Introduction to Dental Professions**
**1**

Explores the main aspects of the dental profession. Introduces head and neck anatomy, tooth morphology, periodontology, and dental instrumentation skills. Explains the various dental specialty programs. Studies broad topics in dental professions.

**DENT 1010**
**Dental Hygiene I**
**3**
* Prerequisite(s): Acceptance into Dental Hygiene program
* Corequisite(s): DENT 1015

For students accepted into the Dental Hygiene Program. Introduces basic principles and skills used in the practice of dental hygiene, including infection control, patient assessment and treatment. Requires practicing on dental mannequins and student patients. Teaches all skills to clinical comptence. Builds on basic and dental sciences and is foundational for the ensuing Dental Hygiene II, IIi, and IV courses. Course fee of $3175 for practical experience applies.

**DENT 1015**
**Dental Hygiene I Preclinical lab**
**2**
* Prerequisite(s): Acceptance into Dental Hygiene program
* Corequisite(s): DENT 1010

For students accepted into the Dental Hygiene Program. Introduces basic principles and skills used in the clinical practice of dental hygiene, including infection control, patient assessment and treatment. Skills are practiced in a preclinical setting on dental mannequins and student patients; all skills are taught to clinical competence. Builds on basic and dental sciences and prepares for clinical dental hygiene practice on community patients. Course Lab fee of $73 applies.

**DENT 1020**
**Oral Anatomy and Physiology**
**4**
* Prerequisite(s): Acceptance into Dental Hygiene program

For students in the Dental Hygiene Program. Focuses on study of the normal development, structure, and function of the orofacial region. Provides microscopic and macroscopic study of oral structures in a laboratory setting. Builds on basic sciences and prepares for the study of the dental sciences and clinical dental hygiene.

**DENT 1030**
**Dental Materials**
**2**
* Prerequisite(s): Accepted into Dental Hygiene program

Presents the history, composition, chemical, and physical properties and use of materials commonly utilized in the dental laboratory and dental operatory. Builds on dental sciences. Provides laboratory experience in performing common dental laboratory procedures and prepares for the clinical practice of expanded functions. Course Lab fee of $75 applies.

**DENT 1040**
**Dental Hygiene II**
**3**
* Prerequisite(s): Acceptance into Dental Hygiene program
* Corequisite(s): DENT 1015

Provides advanced dental hygiene modalities, including oral health education, practice management, patient assessment and treatment. Emphasizes treatment planning and emergency preparedness. Builds on basic and dental sciences and prepares for clinical dental hygiene practice. Course fee of $3175 for practical experience applies.

**DENT 1045**
**Dental Hygiene II Clinical**
**3**
* Prerequisite(s): Acceptance into Dental Hygiene program
* Corequisite(s): DENT 1040

Provides for developing clinical dental hygiene skills, practiced on patients in a clinical setting, including oral health education, practice management, patient assessment and treatment. Emphasizes treatment planning and emergency preparedness. All skills are taught to clinical competence. Builds on basic and dental sciences and prepares for clinical dental hygiene practice. Course Lab fee of $85 applies.

**DENT 1050**
**Clinical Dental Radiography**
**1**
* Prerequisite(s): Acceptance in Dental Hygiene program
* Corequisite(s): DENT 1055

Focuses on radiation physics, biology, protection and quality dental techniques. Prepares competency in film processing, mounting, interpretation of errors, recognition of anatomical landmarks, and evidence of pathologies. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

**DENT 1055**
**Clinical Dental Radiography Lab**
**1**
* Prerequisite(s): Acceptance into Dental Hygiene program
* Corequisite(s): DENT 1050

Focuses on clinical application of radiation physics, biology, protection and quality dental techniques. Prepares students for competency of film processing and mounting, interpretation of errors, recognition of anatomical landmarks, and evidence of pathologies. Practices skills on radiographic mannequins in a laboratory setting. Builds on basic and dental sciences and prepares for clinical dental hygiene practice. Course Lab fee of $74 applies.

**DENT 1060**
**General and Oral Pathology**
**2**
* Prerequisite(s): Acceptance into Dental Hygiene program

Focuses on the study of commonly encountered systemic and oral diseases; etiology, presentation, treatment and effect on dental treatment, including associated emergency procedures. Emphasizes the principles of inflammation, immunology, healing, and repair. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

**DENT 1070**
**Medical Emergencies in the Dental Office**
**2**
* Prerequisite(s): Acceptance into Dental Hygiene program

Introduces the basic principles and management of medical emergencies that could occur in a dental office, including the care and clinical management of medically compromised patients.

**DENT 2020**
**Dental Pharmacology**
**3**
* Prerequisite(s): Accepted into Dental Hygiene program

Focuses on pharmacology as it affects the clinical practice of dentistry. Emphasizes drugs commonly used in dentistry, for treatment of common systemic and oral diseases, and for emergency treatment: effects, administration, and toxicology. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

**DENT 206G**
**Oral Public Health**
**3**
* Prerequisite(s): Acceptance into the Dental Hygiene Program

Examines the principles of community health, including assessment, planning, implementation, and evaluation of health care, with an emphasis on oral health. Builds on knowledge of ethics, basic and dental sciences, and clinical dental hygiene practice. Provides the knowledge and skills necessary to function in a community health setting and includes learning experiences in community health agencies. Analyzes and evaluates global or intercultural issues. Evaluates cultural rules and biases. Explores stereotypical cultural conceptions.

**DENT 3010**
**Dental Anesthesiology**
**3**
* Prerequisite(s): Acceptance into the Dental Hygiene Program and University Advanced Standing
* Corequisite(s): DENT 3015

Focuses on pain control to include local and topical oral anesthesia, nitrous oxide conscious sedation and other means of pain control that will be taught to the accepted standard of care. Requires application of knowledge gained from this course to direct clinical application on their patients in the clinical setting. Builds on basic and dental sciences and prepares the student for clinical dental hygiene practice and will also prepare the student for their local anesthesia boards exams. Course fee of $3175 for practical experience applies.

**DENT 3015**
**Dental Hygiene III Clinical**
**4**
* Prerequisite(s): Acceptance into Dental Hygiene program and University Advanced Standing
* Corequisite(s): DENT 3010

Introduces skills involving oral anesthesia (pain control) and supportive periodontal treatment. Utilizes advanced skills of dental hygiene practice, including assessment and treatment on patients of all ages in a clinical setting, with emphasis on planning and comprehensive treatment. Requires demonstration of clinical competence unless otherwise noted in the course outline. Includes more rigorous skill and patient difficulty levels than the first year clinical experiences. Builds on basic and dental sciences and foundational skills to include DENT3010, and prepares the student for clinical dental hygiene practice. Course Lab fee of $63 applies.

**DENT 3030**
**Periodontology**
**3**
* Prerequisite(s): Acceptance into the Dental Hygiene Program and University Advanced Standing

Focuses on the study of the healthy periodontal tissues, and the factors, recognition, and classes of periodontal disease. Provides background knowledge of nonsurgical and surgical treatment of periodontal disease. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

**DENT 3040**
**Dental Hygiene IV**
**2**
* Prerequisite(s): Acceptance into Dental Hygiene program and University Advanced Standing
* Corequisite(s): DENT 3045

Provides comprehensive didactic experience in all phases of dental hygiene practice for patients, regardless of special needs. Introduces nutritional and tobacco cessation counseling. Builds on basic and dental sciences and prepares for various practice settings in clinical dental hygiene. Course fee of $3175 for practical experience applies.

**DENT 3045**
**Dental Hygiene IV Clinical**
**4**
* Prerequisite(s): Acceptance into the Dental Hygiene Program and University Advanced Standing
* Corequisite(s): DENT 3040

Provides comprehensive clinical experience in all phases of dental hygiene practice for patients, to include special needs. Teaches to clinical competence. Introduces nutritional and tobacco cessation counseling. Builds on basic and dental sciences and prepares for various practice settings in clinical dental hygiene. Course Lab fee of $63 applies.

**DENT 3050**
**Dental Hygiene Seminar**
**1**
* Prerequisite(s): Acceptance into the Dental Hygiene Program

Explores topics relevant to contemporary practice of dental hygiene, including their professional roles, career and stress management, ethical and legal aspects, and the role of the dental hygienist in the dental specialty practices. Builds on clinical practice and prepares for entry into the many aspects of the profession of dental hygiene. Includes observation of various dental specialty practices.

**DENT 3060**
**Advanced Dental Hygiene Public Health**
**3**
* Prerequisite(s): DENT 206G and University Advanced Standing

Examines current and future issues in oral public health. Investigates barriers and solutions to health concerns. Analyzes and evaluates community needs and oral health issues. Incorporates elements of public health into practice of dental hygiene. Prepares students to design a business/practice model for public health dental hygienists. Builds on community health theories and models learned in the associate-level community dental health course.

**DENT 307G**
**Domestic Multicultural Experience**
**2**
* Prerequisite(s): Accepted into Dental Hygiene program and University Advanced Standing

Examines the principles of community health, socioeconomic status and personal bias. Builds on knowledge of ethics, basic and dental sciences, and clinical dental hygiene practice. Provides the knowledge and skills necessary to function in a community health setting and includes learning experiences in community health agencies.

**DENT 3100**
**Office and Private Practice for the Dental Hygienist**
**3**
* Prerequisite(s): 2 year hygiene degree, departmental approval, and University Advanced Standing

Expands beyond the dental hygiene basics taught in hygiene school. Addresses topics in dental hygiene practice that will help the clinical dental hygienist become more proficient in their field and a leader in dental hygiene. Studies practice management issues, productivity, salary enhancement, cutting edge technology, dental insurance, salaries and benefits, team work, patients and money considerations, and other challenges faced in the dental hygiene profession.

**DENT 3200**
**Teaching the Dental Hygiene Patient WE**
**3**
* Prerequisite(s): Admission to the BS Dental Hygiene and University Advanced Standing

Addresses areas such as learning theories, teaching strategies, societal-cultural considerations, and evaluation and applies them specifically to the needs of the dental hygienist when teaching his/her patients and the community at large.

**DENT 406G**
**Global Community Health Project**
**3**
* Prerequisite(s): Admissions to the Dental Hygiene Program or upon approval by program director, and University Advanced Standing

Addresses the complexities inherent in global and/or intercultural oral health and the community health theories and strategies used to address these concerns. Includes the planning and execution of a 10 day oral health education or service project in either another culture or another country (e.g., Native American reservation in Utah or Guatemala). Students from all disciplines may participate.

**DENT 4200**
**Teaching the Dental Hygiene Student**
**3**
* Prerequisite(s): DENT 3200, DENT 3060, and University Advanced Standing

Prepares the dental hygienist to become a successful educator in a dental hygiene program by addressing areas such as: learning theories, teaching strategies, learning objectives, lesson plans, syllabi, curriculum design evaluation tools, and roles of an educator. May be delivered online.

**DENT 4300**
**Dental Hygiene Capstone**
**1**
* Prerequisite(s): Admission to the BS Dental Hygiene and University Advanced Standing

Requires the student to integrate several main areas of study in the BS program and create a paper or project that reflects comprehensive knowledge and ability to reflect, connect and then produce a work based on their learning experiences throughout the BS program.

**DENT 481R**
**Internship in Dental Hygiene**
**1 to 4**
* Prerequisite(s): University Advanced Standing and Dental Hygiene Department approval

Utilizes the student's current practice as a dental hygienist to further apply and develop their skills and knowledge. May be repeated for up to 8 credits toward the BS Dental Hygiene.

**DENT 489R**
**Undergraduate Research in Dental Hygiene WE**
**3**
* Prerequisite(s): Acceptance into Dental Hygiene program and University Advanced Standing

Explores research proposal process and design. Provides opportunity to develop basic research skills in searching and critically appraising evidence-based literature. Engages in evidence-based decision making, developing clinical questions and translating research into practice. Creates a significant intellectual and creative research proposal in the dental discipline. May be repeated for a maximum of 6 credits toward graduation.

**DENT 490R**
**Special Topics in Dental Hygiene**
**3**
* Prerequisite(s): Accepted into Dental Hygiene program and University Advanced Standing

Explores special topics in Dental Hygiene. Focuses on current and future themes relevant to the profession of dental hygiene including societal, economic, and cultural impact. Topics are subject to change from year to year. May be repeated for a maximum of 6 credits toward graduation.

# Digital Media (DGM)

**DGM 1061**
**Digital Cinema Editing I**
**3**

Introduces the interface, tools, techniques, and operations of a variety of Non-Linear Editing (NLE) software programs. Introduces standard editing concepts and practices necessary for the creation and completion of Digital Cinema projects made for various distribution channels. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 1062**
**Animation for the Internet**
**2**

Introduces the interface, tool set, tweening techniques, and operations of an animation software package for online use. Requires creation of an interactive project with sound, video, and motion. Introduces basic scripting. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 1063**
**Image Editing**
**2**

Introduces students to the interface, fundamental set of tools, techniques and operations of Photoshop. Requires creation and modification of digital images. Software fee of $15 applies. Lab access fee of $45 applies.

**DGM 1110**
**Digital Media Essentials I**
**4**

Beginning course designed to give students an in-depth introduction and well-grounded understanding of the digital media way of thinking, opportunities in the field, various tools, and introduction to development techniques. Topics include: audience assessment, digital imaging, compression algorithms, ethical dilemmas, message design through text, audio, images, animation, and digital video. May be delivered online. Software fee of $15 applies. Lab access fee of $45 applies.

**DGM 1220**
**Digital Design Essentials**
**3**

Teaches fundamentals of digital layout for web development and how to properly create engaging interfaces for digital media. Addresses technical challenges for digital mediums to deliver effective digital experiences. Introduces basic content creation and sprint thinking independent of software platforms. Lab access fee of $45 applies.

**DGM 1230**
**Interaction Design Essentials**
**3**
* Prerequisite(s): DGM 1220

Implements creative development layouts into interactive designs. Focuses on integration with industry development tools. Introduces basic overview of product development, pattern libraries, layout and development standards using interaction and industry practices for digital experiences. Lab access fee of $45 applies.

**DGM 1240**
**Communicating Digital Design WE**
**3**
* Prerequisite(s): DGM 1230

Focuses on the development of highly creative and visual design documentation; how to communicate both written and visual information in meaningful ways in a highly technical field. Covers why communicating a particular design challenge is just as important as the design itself, and why writing, layout, and visual clarity is critical to mastering UX and Digital Product Design. Sets the foundation for all documentation assignments in the Web Design and Development degree.Lab access fee of $45 applies.

**DGM 1500**
**Intro to Digital Cinema**
**1**

Offers an overview of the Digital Cinema major and industry. Teaches students the expectations and timetables required of them as they progress through the major. Develops a broad understanding of the various aspects of the filmmaking process and how training for these various aspects is conducted at UVU. Emphasizes industry standards of safety and professionalism. Should be taken in the first semester of classes in the program. Lab access fee of $45 applies.

**DGM 1510**
**Film Production Analysis**
**3**

Film Production Analysis is a foundation class for those interested in the digital media and motion picture business. Analyzes the various technologies and production techniques that make up motion picture communication. Involves viewing a motion picture each week of class and analyzing how the producer and director incorporated production and structural techniques to produce a compelling story. Covers the eight sequence structural elements of motion picture storytelling, how each crew member of the production team contributes to the overall impact, how scripting is used to direct the team to create a strong cinematic effect, and how the three act eight sequence structure guides the entire team through the pre-production, production and post-production process. Software fee of $15 applies. Course fee of $18 for software and plug-ins applies. Lab access fee of $45 applies.

**DGM 1520**
**Digital Cinema Production I**
**3**

Introduces professional video production techniques used for non-narrative digital cinema projects. Covers production processes such as working with clients, storytelling, camera techniques, basic lighting techniques, production management and basic non-linear editing techniques. Requires participation in a high-quality semester project that will take a non-narrative project through the entire pre-production, production and post-production process. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 1600**
**Scripting for Internet Technologies**
**3**

Introduces the fundamentals of computer programming and problem solving using the current industry standard scripting languages. Emphasizes the fundamentals of structured and object-oriented programming, syntax, semantics, control structures, arrays, file I/O, testing/debugging, implementation, and the construction of graphical user interfaces. Applies these concepts to manipulate digital images, sound, movies, text, and web pages that are heavily used as digital media. Laptop Required. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 1610**
**Scripting for Animation and Games I**
**3**

Introduces the fundamentals of computer programming and problem solving using the current industry standard scripting languages. Emphasizes the fundamentals of structured and object-oriented programming, syntax, semantics, control structures, arrays, file I/O, testing/debugging, implementation, and the construction of graphical user interfaces. Applies these concepts to manipulate digital images, sound, movies, text, and web pages that are heavily used as digital media. Lab access fee of $45 applies.

**DGM 1620**
**Survey of Animation**
**3**

Introduces animation principles and studio processes used in the contemporary animation industry. Emphasizes the synthesis of technology and aesthetics in the production of an animated title. Includes an introduction to animation milestones and personalities. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 1645**
**Mixed Reality Essentials**
**2**

Introduces virtual reality using browser technology, mobile apps, head mounted displays and other emerging platforms.

**DGM 1660**
**Introduction to 3D Modeling and Surfacing**
**3**

Covers the 3D pipeline which includes pre-production (rough placeholder art), production (finished art), and post production (composite and effects). Instructs students to develop 3D models, UV maps, and 2D textures. Teaches how to integrate models into a realtime rendering engine. Lab access fee of $45 applies.

**DGM 210R**
**Special Topics in Digital Media**
**1 to 4**

Designed for students interested in specific digital media tools and concepts. Includes relevant and changing topics and tools used in production. Emphasizes hands-on experience along with lectures and demonstrations. This class may be taken for a total of nine credits, but curriculum may vary from one semester to another. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2110**
**Digital Cinema Production II**
**3**

* Prerequisite(s): DGM 1520

Presents professional digital cinema production techniques used in narrative filmmaking. Addresses problem-solving issues related to pre-production, production and post-production. Serves as a Production Assistant Certification course recognized by the Utah Film Commission. Course fee of $10 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2120**
**Web Essentials**
**3**

Provides the fundamentals necessary to plan, design, develop, deploy, and critique a web site which includes images, sound, video, forms, and separates content from presentation. Focuses on the fundamentals of web programming languages. Examines various ways to build an accessible web page. May be delivered hybrid and/or online. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2130**
**Digital Audio Essentials**
**3**

* Prerequisite(s): MAT 1010

Reviews basic sound principles, cable types, microphone types, and basic techniques of use. Teaches recording of basic sounds and musical instruments into a Digital Audio Workstation. Introduces multi-track audio, editing, EQing, mixing, and mastering a 3-minute piece with voice and music. Includes a final project consisting of a multi-track music project designed for use in film, commercial radio, or other multimedia applications. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2140**
**Electronics for Media**
**3**

Covers connectors and cable wiring standards and soldering techniques used in this field. Emphasizes electronic equipment and circuits used with electrical safety in media. Includes basic DC/AC theory such as voltage, current, resistance, power dissipation, batteries, and magnetism. Introduces the basic construction and theory of operation of circuits used in media containing electronic components, resistors, capacitors, inductors, transformers, diodes, transistors, electron tubes, operational amplifiers, and linear ICs. Designed for Digital Media students. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 220R**
**Special Topics in Digital Design**
**1 to 4**

Designed for students interested in specific authoring tools and concepts used in digital media processes. Includes relevant and changing topics and tools used in digital authoring. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Course fee of $10 for materials applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2210**
**3D Modeling and Animation Essentials**
**4**

* Prerequisite(s): Portfolio Acceptance

Addresses the basics of 3D modeling, rigging, texturing, animation, and rendering. Demonstrates how to utilize these techniques in a production pipeline for games and animation. Includes basic techniques and theories used in a 3D animation pipeline. Software fee of $15 applies. Course fee of $19 for equipment applies. Lab access fee of $45 for computers applies.

**DGM 2211**
**Rigging and Animation Essentials**
**3**

* Prerequisite(s): Portfolio Acceptance

Introduces fundamental rigging for a typical 3D character and simple 3D performance motion for animated films and games. Software fee of $15 applies. Lab access fee of $45 applies.

**DGM 221R**
**Interaction Design Practicum**
**1**

* Prerequisite(s): DGM 2250

Instructs in the design and production of a fully-featured digital media project, including concept, design, content creation and acquisition, testing, revision, mastering, and publication with hands-on guidance. May be repeated for a maximum of 3 credits toward graduation. Lab access fee of $45 applies.

**DGM 2221**
**Game Essentials**
**3**

* Prerequisite(s): Portfolio Review Acceptance

Provides a foundation for basic game development pipeline. Covers low poly count modeling in a variety of software packages and use of 3D models in an industry-standard game development engine. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2240**
**Interaction Design**
**3**
* Prerequisite(s): DGM 1230

Focuses on strategies and principles used in digital media development to enhance the user experience. Teaches how to understand stakeholder goals, identify and specify user needs and requirements through user research and design documentation, engage in interactions with target audiences through interviews, observation, and discussion, as well as create and test prototypes. Deals with solving real-world problems faced by consumers using products in the market. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2245**
**Mixed Reality Experiences I**
**3**
* Prerequisite(s): DGM 1645

Introduces students to the technology for photographing locations for Mixed Reality experiences. Covers multiple ways to photograph, stitch, augment, and publish completed experiences to multiple platforms.

**DGM 2250**
**Principles of Digital Design**
**3**
* Prerequisite(s): DGM 1220

Teaches principles of visual design, how to properly create engaging interfaces for digital media, and practice good integration with industry development tools. Addresses the complexity of designing rich media experiences around digital devices ranging from computer screens to personal information devices. May be delivered online. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2260**
**Immersive Experiences I**
**3**
* Prerequisite(s): DGM 1230

Focuses on the application of media technologies that possess the ability to create rich immersive experiences for distribution on optical media such as CD, DVD-ROM, and over the Internet. Introduces participants to a variety of authoring systems and development techniques when creating Digital Media experiences. May be delivered online. Laptop Required. Software fee of $15 applies. Course fee of $18 applies. Lab access fee of $45 for computers applies.

**DGM 2270**
**Digital Product Experiences I**
**3**
* Prerequisite(s): DGM 1230

Focuses on the development of engaging mobile apps for distribution on a myriad of devices. Teaches the fundamental building blocks of publishing digital media experiences of all types and may include interactive guide, catalogs, brochures, training manuals, kiosks, and exhibits. Covers the development of apps for touchscreen 'native' content and feature real-time updates. May be delivered online. Laptop & Device Required. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2271**
**Digital Media Design I**
**3**
* Prerequisite(s): DGM 2120

Introduces students to the underlying design and development principles that create favorable circumstances for user-centered digital media experiences. Establish the development techniques and processes required for Web and mobile apps, which may include native OS and Web Apps as well as interactive digital publication Apps. Further introduces topics such as responsive design, use of grids and layout patterns according to platform, as well as underlying development considerations such as content inventory and Information Design. Offers students a greater appreciation for good design and the basic skills necessary to produce world-class media experiences. May be delivered online. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2280**
**Interactive Media Production**
**3**
* Prerequisite(s): DGM 1230

Focuses on the use of digital visual effects in mobile publishing environments. Includes multi-layer effects in known mobile layouts, creation of digital mattes and parallax for unique visual user engagement, as well as integration techniques according to development platforms. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 230R**
**Special Topics in Digital Graphics**
**1 to 4**

Designed for students interested in specific graphic tools and concepts currently used in digital media production. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. This class may be taken for a total of nine credits, but curriculum may vary from one semester to another. Course fee of $10 for materials applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2320**
**Digital Photography and Compositing I**
**3**

Introduces digital image acquisition and manipulation. Teaches the mechanics of the digital camera, and introduces lighting, white balance, color temperature, digital ISO and electronic image stabilization. Discusses image compositing, EXIF data analysis and archiving. Software fee of $15 applies.. Lab access fee of $45 for computers applies.

**DGM 2340**
**Output and Color for Digital Cinema I**
**3**
* Prerequisite(s): DGM 1061

Introduces digital workflow management of digital still and cinema camera assets. Addresses codecs, asset backup, management, transcoding, preparation of assets for the NLE workflow and final asset output for various digital distribution channels. Introduces color correction and color grading techniques, principles and concepts in a variety of professional software platforms. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2341**
**Media Formats and Outputs**
**3**
* Prerequisite(s): DGM 1220 or instructor approval

Focuses on the digital workflow and management of still images, video, audio and digital effects media assets. Addresses use of codecs and format types for use in mobile media use scenarios. Introduces the proper handling of assets in various development platforms and user experience design best practices when using assets on touch-based devices. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 240R**
**Special Topics in Digital Audio**
**1 to 4**
* Prerequisite(s): DGM 1110

Designed for students interested in specific audio tools and concepts currently used in digital audio production. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Software fee of $15 applies. Lab access fee of $45 for computers, applies.

**DGM 2410**
**Core Recording Principles**
**3**
* Prerequisite(s): DGM 2130

Teaches mic choice and placement, acoustic positioning, in-line signal processing, level matching, impedance matching, phase error elimination, pre-mixing and recorded stems, DAWs, Pro-Tools intermediate skills, project budgeting, and artist and client relations. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2430**
**Core Mixing Principles**
**3**
* Prerequisite(s): DGM 2410

Teaches the science and art of audio mixing, centering on a broad range of musical and media post-production material. Covers initial mix plan, signal flow, and fix, fit and feature skills for all signal processors, including equalization, compression, limiting, delay, reverb, distortion, doubling, phase, flange, chorus, other modulation effects, characteristics of algorithms (digital, solid state, transformers, rectifiers, tube, electro-optical, convolution). Also, teaches mix room acoustics, treatments and workarounds.Lab access fee of $45 applies.

**DGM 2440**
**Sound for Film and Television**
**3**
* Prerequisite(s): DGM 2130

Teaches the basics of gathering sound for use in film and video productions. Covers proper boom miking and wireless mic techniques, and acoustics preparation to record dialogue and sound effects on location and on sound stages. Examines the processes utilized in editing audio of multimedia productions, including the balancing of artistic relationships, mixing and mastering of music, sound effects tracks and Foley. Offers practical experience in audio-only productions as well as audio-video relationships. Culminates in a digital cinema mixing session. Primarily a lab class, may couple with another video class to gather the sound for a cohesive project. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2460**
**Radio Production**
**3**

Teaches the history of radio, and the structure of typical radio stations, from management to programming and sales, and production and promotion. Covers method of producing radio promos, radio shows, commercials and news segments, as well as features and interviews. Examines the use of Digital Audio Workstations to produce several radio segments of the student's choosing. Includes lectures, demonstrations, and guest lecturers from radio stations in the community. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2481**
**Digital Audio Restoration**
**3**
* Prerequisite(s): DGM 2130

Teaches the value and use of various tools to restore, preserve, and archive audio from a variety of sources, including vinyl records, tapes, film soundtracks, etc. Additional topics include removal of ambient noise (fans, AC, etc) from class film projects, impulsive noise (clicks and pops), periodic noise (hum and buzz), and random noise (spectral subtraction of ambient noise). In addition, some attention will be given to the subject of audio forensics, or restoring audio for intelligence or law enforcement applications. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2490**
**Digital Audio Workstation Training I**
**3**
* Prerequisite(s): DGM 2130

Teaches proficiency in the use of a Digital Audio Workstation at the beginning level. Implements the first half of AVID Corporation's "ProTools User Level" certification, and successful completion of this course, together with its follow-on course, DGM 2491, will earn students their AVID ProTools certification at the "User" level. Lab access fee of $45 applies.

**DGM 2491**
**Digital Audio Workstation Training II**
**3**
* Prerequisite(s): DGM 2130, DGM 2490

Teaches proficiency in the use of a Digital Audio Workstation at the intermediate level. Implements the second half of AVID Corporation's "ProTools User Level" certification, and successful completion of this course, together with its preceding course, DGM 2490, will earn students their AVID ProTools certification at the "User" level. Lab access fee of $45 applies.

**DGM 250R**
**Special Topics in Digital Cinema**
**1 to 4**
* Prerequisite(s): DGM 2110

Designed for students interested in specific video tools and concepts currently used in digital media processes. Includes relevant and changing topics and tools used in industry. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Lab access fee of $45 for computers applies. Software fee of $15 applies. Course fee of $10 for equipment applies.

**DGM 2510**
**Visual Effects for Digital Cinema I**
**3**
* Prerequisite(s): DGM 1061

Introduces a variety of professional Visual Effects software used in conjunction with NLE (Non-Linear Editing) software in current industry use. Establishes a foundation of understanding of cinematic post-production workflows utilized by professional visual effects houses. Lab access fee of $45 applies.

**DGM 2540**
**Cinematography I**
**3**
* Prerequisite(s) or Corequisite(s): DGM 1520

Introduces the basic concepts of lighting, grip/electric work, and beginning cinematography. Teaches a full understanding of lighting instruments, power distribution, lighting support, rigging, dollies, and production equipment. Teaches how to work as a member of a team/department applying on-set protocols to meet the needs of production objectives. Software fee of $15 applies. Lab access fee of $45 for computers applies. Course fee of $46 for equipment applies.

**DGM 2545**
**Virtual Reality for Digital Cinema Storytelling**
**3**

Introduces the technical foundations of virtual reality for cinema production including capture, image stitching, editing, and output. Discusses potential narrative and documentary applications for the use of virtual reality as a storytelling vehicle. Allows students hands-on practice as they create various VR projects. Discusses current and evolving distribution and delivery channels for VR filmed content. Lab access fee of $45 applies.

**DGM 2570**
**Storytelling for Digital Media I**
**3**
* Prerequisite(s): DGM 1510

Focuses on traditional three-act structure and character-driven storytelling. Introduces dramatic and persuasive writing for filmed media content including short narrative films and documentaries. Applies cinematic storytelling approaches to emerging technologies such as interactive media, gaming, and virtual reality. Lab access fee of $45 applies.

**DGM 2600**
**The Animated Image**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Chronicles the development of Animation as a medium dependent on both aesthetics and technology from its inception in the late 19th century through contemporary scientific and entertainment venues. Introduces key international personalities and industry benchmarks. Discusses animation both as a means of self-expression and as a commercial enterprise. Includes film screenings and research assignments. Software fee of $15 applies.Lab access fee of $45 for computers applies.

**DGM 260R**
**Special Topics in Animation and Game Development**
**1 to 4**

Designed for students interested in specific animation tools and concepts currently used in digital animation production. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Lab access fee of $45 for computers applies. Software fee of $15 applies. Course fee of $12 for equipment applies.

**DGM 2610**
**Game Design I**
**3**
* Prerequisite(s): DGM 2221 and Portfolio Acceptance

Explores video and computer gaming from historic, economic, and production perspectives. Introduces game theory, analysis, design documentation, and development. Lab access fee of $45 for computers applies.

**DGM 2620**
**Principles of Animation I**
**3**
* Prerequisite(s): Portfolio Review Acceptance

Explores and applies animation pipeline practices. Emphasizes the study of objects in motion and the communication of key ideas in the development of a second-year animation project. Lab access fee of $45 for computers applies. Software fee of $15 applies. Course fee of $18 for software and plug-ins applies.

**DGM 2640**
**Character Development**
**3**
* Prerequisite(s): DGM 2210 and DGM 2620 and Portfolio Review Acceptance

In-depth study and application of 3D character development for animation and games. Requires a firm understanding of 3D modeling, basic rigging, basic texturing, and principles of animation. Students will design, model, rig, and animate 3D characters following industry processes. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2660**
**Digital Storyboarding for Animation**
**3**
* Prerequisite(s): Portfolio Review Acceptance

Introduces contemporary storyboarding practices, both linear and non-linear, key to communicating information clearly, and consistently in a cost effective manner. *Laptop Required. Lab access fee of $45 for computers applies. Software fee of $15 applies. Course fee of $12 for software and plug-ins applies.

**DGM 2661**
**Visualization for Digital Cinema-Pre-Directing**
**3**
* Prerequisite(s): DGM 1510

Introduces concepts of visualizing filmed media content during the pre-production process from storyboarding and shot design to production design. Focuses on the role of the director to communicate lighting, character movement, camera movement, camera angles and framing to key motion picture production departments to enhance and support cinematic story. Lab access fee of $45 applies.

**DGM 2670**
**Scripting for Animation and Games II**
**3**
* Prerequisite(s): Portfolio Review Acceptance

Focuses on the basic elements of scripting languages in modern 3D applications. Develops a firm understanding of basic scripting concepts in a 3D environment, including: libraries, expressions, arrays, conditionals, loops, and functions. Discusses simplification of complex user operations and the development of basic user interfaces. Utilizes industry standard applications such as Maya, Houdini, and Unity3D. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 270R**
**Special Topics in Web Design and Development**
**1 to 4**

Designed for students interested in specific web design tools and concepts currently used in multimedia creation. Includes relevant and changing topics and tools used in multimedia. Emphasizes hands-on experience along with lectures and demonstrations. Completers should be able to use the web design tools to create a typical multimedia project. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Course fee of $10 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 2740**
**Principles of Web Languages**
**3**
* Prerequisite(s): DGM 2120, DGM 2250

Focuses on solving various Web design and coding problems using current Internet technologies. Emphasizes solving unique coding problems using HTML, CSS, and jQuery that arise when implementing a Web design. May be delivered online. Software fee of $15 applies. Course fee of $18 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 2760**
**Web Languages I**
**3**
* Prerequisite(s): DGM 1600

Examines client-side languages that allow viewers to interact with the content of Web pages. Extensively uses methods for creating highly interactive web sites without the use of authoring tools. Teaches how to make the static content within a typical webpage more dynamic, interesting, and most importantly, useful. Culminates with a final project to design and create materials for use in a well-designed interactive web site. May be delivered online. Software fee of $15 applies. Course fee of $18 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 2780**
**Web Tools and Frameworks I**
**3**
* Prerequisite(s): DGM 2740

Introduces the necessary frameworks and tools needed to build structured, maintainable, and scalable web pages common in the industry. Incorporates project-based learning to help students gain solid web development experience through hands-on programming and problem solving a real world project. Software fee of $15 applies. Course fee of $18 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 281R**
**Internship**
**1 to 8**
* Prerequisite(s): Departmental Approval

For Digital Media majors only. Provides a transition from school to-work where learned theory is applied to actual practice through a meaningful on-the-job experience. Includes student, employer and coordinator evaluations, on-site work visits, and written assignments. Completers should obtain experience in establishing and accomplishing individualized work objectives that improve work performance. Internship is intended for entry level DGM students who are working at that level. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May be repeated for a maximum of 16 credits towards graduation. May be graded credit/no credit.

**DGM 296R**
**Seminar**
**1 to 3**

Provides short courses, workshops, and special programs in information management or current administrative topics. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits.

**DGM 301R**
**Digital Lecture Series**
**1**
* Prerequisite(s): University Advanced Standing

Uses guest speakers who lecture on current topics in digital media. May be repeated for a maximum of 3 credits toward graduation.

**DGM 302R**
**Digital Cinema Production Lecture Series-CineSkype**
**1**
* Prerequisite(s): (DGM 1520 or CINE 2150 or THEA 1023) and University Advanced Standing

Presents a series of feature-length films and the opportunity to discuss the challenges that went into their creation with the individual filmmaker(s). Introduces participants to directors, screenwriters, producers, and editors currently working in the industry. May be repeated for a maximum of three credits toward graduation. (Note: Some films screened may be considered controversial and carry an "R" rating.)

**DGM 3061**
**Professional NLE Certification**
**3**
* Prerequisite(s): DGM 1061 and University Advanced Standing

Provides guidance and materials allowing participants to certify in Non-Linear Editing software on various platforms. Focuses on certification on the User-level and Pro-level of Avid Media Composer. Extensively covers technical editing consideration including workflows, media management, color, sound, output, and scripting. Lab access fee of $45 applies.

**DGM 3110**
**Corporate Issues in Digital Media WE**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Covers business and legal issues in multimedia. Reviews good business practices for the multimedia industry. Studies universal marketing and sales principles and mastery, as well as e-commerce fundamentals. Includes copyright laws and procedures, obtaining permissions, creating and using contracts, protecting corporate assets, standards, security and privacy issues, and other legal issues regarding multimedia communication. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 312G**
**Digital Media for Intercultural Communication**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Explores issues, concepts, and practices for making digital media accessible to people from diverse cultures and people with disabilities. Covers design considerations and techniques for the Web and other digital technologies. Presents methods for understanding and comparing different cultures and ways of approaching and enhancing intercultural interactions. Addresses accessibility standards, guidelines, and laws important for digital media developers to know and implement. May be delivered online. Lab access fee of $45 for computers applies. Software fee of $15 applies. Course fee of $10 for equipment applies.

**DGM 320R**
**Advanced Topics in Digital Media Design**
**1 to 4**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Intended for advanced students with an interest in digital design and authoring. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of $45 for computers applies. Software fee of $15 applies. Course fee of $10 for equipment applies.

**DGM 321R**
**Advanced Interaction Design Practicum**
**1**
* Prerequisite(s): DGM 2250, DGM 2240

Provides opportunities to lead and mentor a small team. Instructs in the design and production of a fully-featured digital media project, including concept, design, content creation and acquisition, testing, revision, mastering, and publication with hands on guidence. May be repeated for a maximum of 3 credits toward graduation.

**DGM 3220**
**Digital Media Project Management**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Teaches the foundational management principles that contribute to both the quality and profitability of digital media products. Introduces technical project management skills to help with budgeting and scheduling as well as critical soft skills, such as how to manage product design, make good decisions, communicate effectively, and build productive work relationships. Also, teaches about different types of project documents that enable and support effective, successful projects. May be delivered online. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3240**
**Interaction Design Colloquium**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Provides advanced students with unique and current industry perspectives on interaction design through seminar discussions, workshops, and industry on-site experiences. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3260**
**Immersive Experiences II**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Focuses on advanced application of media technologies and design paradigms when creating rich immersive experiences for distribution as a net-based desktop or mobile application. Uses unique and emerging technologies that are critical for digital media majors to understand. Laptop required. Lab access fee of $45 for computers applies. Software fee of $15 applies. Course fee of $19 for software and plug-ins applies.

**DGM 3261**
**Mixed Reality Experiences II**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Explores the use of technology for creating Virtual Reality, Augmented Reality, and Extended Reality workflows. Covers how to develop Mixed Reality content for digital screens and headsets. Addresses the use of Mixed Reality environments in real world applications to remotely tour college campuses, museums, shops, sports venues, plan events at locations; show real estate, influence travel to vacation getaways; and create historical documentation. Prepares students for Mixed Reality Studio work. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3270**
**Digital Product Experiences II**
**3**
* Prerequisite(s): DGM 2270 and University Advanced Standing

Focuses on the development of engaging mobile apps for distribution on a myriad of devices. Covers advanced development of publishing digital media experiences of all types and includes techniques for coding immersive experiences beyond standard practices. Prepares students to develop for touchscreen 'native' content and feature real-time updates. Laptop and Device Required. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3271**
**Digital Product Design Studio**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Covers advanced development techniques of Product Design fused with User Experience Design / User Interface Design. Highlights problem solving and effective communication. Focuses heavily on how digital designers can influence the user experience, and participatory outcomes of such experiences, through well-planned interactions, digital layout, and adaptation to the physical hardware. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3280**
**Adaptive Media Experiences**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Focuses primarily on the ability to curate and realign rich content assets through internet-based Apps. Focuses on the application of media technologies that possess the ability to create adaptable content media experiences. Focuses primarily on the ability to use/reuse content in meaningful ways through unique and highly efficient distribution means. Describes how distribution can be to desktop, mobile, and advancing technologies in the home or automobile markets. Laptop Required. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3290**
**Developing Digital Media for Instruction and Training**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Teaches the lifecycle of training and development in a business setting. Uses the Instructional System Design (ISD) process, which includes identifying performance deficiencies and appropriate interventions, developing objectives, selecting appropriate learning technologies, developing course content, selecting effective instructional aids, delivering training, and evaluating training effectiveness. Reviews basic educational principles in teaching adult learners and managing classroom dynamics. Examines legal issues, cross-cultural preparation, and workforce diversity as they relate to training and development. Provides hands-on training experiences. Completers should be prepared to apply basic principles to training and development opportunities. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 330R**
**Advanced Topics in Digital Media Graphics**
**1 to 4**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Intended for advanced students with an interest in digital graphics and design. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Course fee of $10 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3320**
**Digital Photography and Compositing II**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Builds on skills acquired in Digital Photography and Imaging I. Uses photo imaging tools like Photoshop, Light Table, and Aperture in the creation and manipulation of digital images for use in a broad range of output specific formats. Teaches advanced image manipulation, and compositing and asset management to deliver finished digital image deliverables for such things as the web, DVD media, print, billboard, and wrap advertising media. Lab access fee of $45 for computers applies.

**DGM 340R**
**Advanced Topics in Digital Audio**
**1 to 4**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Intended for advanced students with an interest in digital audio. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3410**
**Audio Engineering for the Studio I**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Reviews basic sound principles (standing waves, studio acoustics, psycho-acoustics), microphone types and techniques of use. Covers theory and application of mixers, signal processors, and effects. Outlines proper construction and grounding of a recording studio. Introduces one or more digital audio workstations, which will be used to record a band or classical project. Requires the completion of a mixdown of a multi-track project. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3420**
**Studio Recording II**
**3**
* Prerequisite(s): DGM 3410, Portfolio Review Acceptance, and University Advanced Standing

Reviews principles of good audio engineering covered in the introductory class, but in greater depth, including, cable types, microphone types, mixers, and techniques of use. Emphasis will be on miking techniques for each individual instrument involved in the recording. Covers in-depth theory and application of mixers, signal processors, and effects. Addresses advanced stereo miking techniques and focuses on several key instruments, including piano and drums. Continues further in-depth topics on impedance matching, power requirements, and use of the decibel. Includes acoustic properties and sound transmission loss of common studio surface materials. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3430**
**Recording Studio Design Principles and Practices**
**3**
* Prerequisite(s): DGM 3410, Portfolio Review Acceptance, and University Advanced Standing

Addresses many issues found in the design, construction and maintenance of a recording studio. Explores the physics, mathematics, electronics, and practical issues to properly design and build a successful recording studio. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3440**
**Sound for Games**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing; Laptop capable of running the Unreal Developer's Kit and Unity.

Teaches sound design and implementation for video games using both the Unreal Developer's Kit (Unreal Engine) and the Unity Game Engine. Includes visual and text-based scripting, signal flow, resource allocation and preservation, priority, layering, mastering for end-format, computer-based, console-based, and mobile-targeted development, and whole-project planning and execution. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3460**
**Live Sound Reinforcement**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Teaches fundamental sound concepts: propagation, absorption, reflection, transmission, frequency response, effective manipulation of the decibel in calculations of loudness, power, and voltages. Covers intelligent use of microphone patterns, and loudspeaker and monitor placement. Investigates indoor sound vs. outdoor sound. Teaches proper cabling and connections, speaker crossovers, and theory of bi-amplification. Covers mixer diagrams and basic electronics. Incorporates practical experience acquired in giving technical support to UVU theater, music department, or public relations functions. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3481**
**Advanced Audio Restoration and Forensics**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Covers advanced principles and practices for digitally restoring difficult audio specimens, and includes forensic audio restorative and reconstructive techniques important to historical, investigative, and criminological fields as well. Also covers, in more depth, the cylinder recording period at the turn of the century. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3490**
**Digital Audio Workstation Training III**
**3**
* Prerequisite(s): Portfolio review acceptance; DGM 2490, DGM 2491, and University Advanced Standing

Teaches proficiency in the use of a Digital Audio Workstation at the advanced level. Is the UVU implementation of the first half of AVID Corporation's "ProTools Operator Level" certification, and successful completion of this course, together with its follow-on course, DGM 3491, will make AVID ProTools certification at the "Operator" level available. Lab access fee of $45 applies.

**DGM 3491**
**Digital Audio Workstation Training IV**
**3**
* Prerequisite(s): Portfolio review acceptance, DGM 3490, and University Advanced Standing

Teaches proficiency in the use of a Digital Audio Workstation at the expert level. Currently, this is the UVU implementation of the second half of AVID Corporation's "ProTools Operator Level" certification, and successful completion of this course, together with its preceding course, DGM 3490, will make AVID ProTools certification at the "Operator" level available. Lab access fee of $45 applies.

**DGM 350R**
**Advanced Topics in Digital Motion Picture Production**
**1 to 4**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Includes relevant and changing topics and tools used in digital motion picture industry. Emphasizes hands-on experience. Uses digital cinema and production management and development tools to create a typical digital media project. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Course fee of $10 for equipment applies. Software fee of $15 applies.

**DGM 351R**
**Digital Broadcasting**
**3**
* Prerequisite(s): DGM 2110, Portfolio Review Acceptance, and University Advanced Standing

Teaches planning, management and execution of live video productions integrating multiple cameras. Teaches the roles of the broadcast production team. Studies digital standards for broadcast equipment. Includes multiple 10 hour hands-on broadcast production labs. May be repeated for a maximum of 12 credits toward graduation. Course fee of $10 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3520**
**Digital Cinema Production III**
**3**
* Prerequisite(s): DGM 2110 and University Advanced Standing

Teaches skills to produce a micro-budget film. Introduces practical production techniques including paperwork for the Screen Actors Guild and for standard distribution deliverable requirements. Involves the completion of various finished short films both in groups and as individuals. Course fee of $10 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3530**
**Digital Cinema Production Management**
**3**
* Prerequisite(s): (Portfolio review acceptance or consent of instructor) and University Advanced Standing

Teaches the foundational principles which contribute to both quality and profitability in digital cinema projects that range from micro to mega budgets. Reviews team dynamics such as the relationship between producer and other production team members. Introduces industry standard budgeting and scheduling software tools, which can be used as management tools to guide multiple projects. Focuses on video/film workflow, from development and budgeting to pre-production, production and post-production. Requires the submission of an industry standard production book at the end of the semester. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3540**
**Cinematography II**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

A "hands-on" class that covers the role of the Director of Photography (DP) and Gaffer in drama-based broadcast television and digital cinematography. Teaches continuity of lighting, visual story telling, implied script subtext though light quality and color, continuity in direction, use of lenses and shot blocking for fixed and moving camera. Covers advanced grip and lighting equipment use and setups. Covers working with a producer, director, production designer, set decorator, boom operator and editor and on-set protocol. Software fee of $15 applies. Lab access fee of $45 for computers applies. Course fee of $46 for equipment applies.

**DGM 3545**
**Advanced Editing for Mixed Reality Content**
**3**
* Prerequisite(s): DGM 2545 and University Advanced Standing

Provides advanced training and practice in editing in multiple platforms for use of Mixed Reality content (including virtual and augmented reality, etc). Explores new and emerging technologies for stitching, editing, combining visual-image with immersive sound, and delivery in multiple formats. Lab access fee of $45 applies.

**DGM 3550**
**Producing I**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Examines the process of motion picture development and distribution with focus on the role of the producer in identifying, evaluating, developing, financing and securing distribution. Software fee of $15 applies. Lab access fee of $45 for computers applies

**DGM 3560**
**Digital Cinema Editing II**
**3**
* Prerequisite(s): DGM 1061, Portfolio Review Acceptance, and University Advanced Standing

Develops an understanding of how editing can shape cinematic storytelling using content from a variety of media and in various styles. Provides further practice in hands-on application on a variety of professional Non-Linear Editing platforms. Course fee of $13 for software and plug-ins applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3570**
**Storytelling for Digital Media II**
**3**
* Prerequisite(s): DGM 2570 or THEA 2742, Portfolio Review Acceptance and University Advanced Standing

Teaches advanced writing for cinema, television and emerging media. Includes writing assignments each week that will be read and analyzed according to the structure and execution of a goal. Discusses a specific scriptwriting subject each week such as finding the idea, researching, outlining and rewriting. Course fee of $13 for software and plug-ins applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3571**
**Animation Story Development Workshop**
**3**
* Prerequisite(s): ENGL 2010 and Portfolio Review Acceptance and University Advanced Standing

Covers short themed preproduction and development for animated and interactive titles. Includes research, outlining, writing using the iterative process, and preparation for story reel production. Lab access fee of $45 applies.

**DGM 3580**
**Digital Cinema Directing Workshop I**
**3**
* Prerequisite(s): DGM 1510, DGM 1520, DGM 2110, Portfolio Review Acceptance and University Advanced Standing

Offers an advanced workshop format class structure. Utilizes project-based opportunities to apply and hone skills in digital cinema direction, editing scripts, casting, rehearsing and performing a scene. Includes polishing concept for shooting, then shooting and editing for presentation and critique. Course fee of $13 for software and plug-ins applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3590**
**Documentary I**
**3**
* Prerequisite(s): (DGM 1061, DGM 1510, DGM 1520, portfolio review acceptance or instructor approval) and University Advanced Standing

Presents intermediate viewing and discussion of selected documentaries and instruction in various production skills necessary to create video documentaries. Explores the diversity of documentary styles and approaches including interview, archival, observational, etc. Focuses on character driven stories using traditional three act structures. Requires the completion of various exercises from conceptualization through post-production, culminating in production of short documentary project. Lab access fee of $45 applies.

**DGM 360R**
**Advanced Topics in Animation and Games**
**1 to 4**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Intended for advanced students with an interest in digital animation. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Course fee of $12 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3610**
**Game Design II**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Continues the study of game theory, analysis, and design documentation. Emphasizes game development using a game development engine. A laptop computer is required for this course. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3620**
**Technical Direction and Design for Animated Applications**
**3**
* Prerequisite(s): DGM 2221, DGM 2620, DGM 2670, Portfolio Review Acceptance, and University Advanced Standing

Introduces industry standard technical direction problem solving practices. Includes project management, aesthetic development, and game play design. Software fee of $15 applies. Course fee of $20 applies. Lab access fee of $45 for computers applies.

**DGM 3621**
**Hard Surface Modeling**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Teaches theories, tools, and principles of current industry modeling trends, specifically for video games and short animated films. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3641**
**Game Level Design**
**3**
* Prerequisite(s): DGM 2610, Portfolio Review Acceptance, and University Advanced Standing

Provides an advanced treatment of a three step process in level/environmental design: Research and analysis, concept and prototype development, and testing and comparative metics. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3650**
**Animation and Game Project I**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Emphasizes industry pipeline processes. Covers the application of lighting and rendering in 3D animation and game environments. Includes composition, technical lighting, layer-based rendering, and texture baking. A junior-level group project will be completed in the course of the semester. Lab access fee of $45 for computers applies.

**DGM 3660**
**Advanced Rigging and Character Effects**
**3**
* Prerequisite(s): DGM 2211, Portfolio Review Acceptance, and University Advanced Standing

Studies the process of rigging, and the motion of characters and objects in games and animation. Includes full character, muscle, facial, and dynamic rigs. Reinforces principles of animation. Lab access fee of $45 for computers applies.

**DGM 3670**
**Scripting for Animation and Games III**
**3**
* Prerequisite(s): DGM 2670, Portfolio Review Acceptance, and University Advanced Standing

Provides in-depth training in advanced scripting concepts and practices in 3D video game development. Focuses on the application of advanced technical topics as they impact game development. Addresses networking and distributed systems issues, including scalability and latency compensation techniques, for designing games for online multi-player environments. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3680**
**Animation and Game Project II**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Devoted to the pre-production of a multi-semester team project for gaming and animation students. Includes research, writing, scripting, designing, storyboarding and pre-visualization of a client-driven project. Software fee of $15 applies. Course fee of $19 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 370R**
**Advanced Topics in Web Design and Development**
**1 to 4**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Intended for advanced students with an interest in Internet authoring. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Course fee of $10 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3740**
**Web Content Management**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Instructs students on how to create a site that in content rich, dynamic, and meaningful to site visitors. Teaches participants how to effectively plan, develop, and arrange content through the use of information design principles, content management systems, and analysis tools. Culminates with students building a live site for a real-world client where students must solve real design, development, and delivery issues. Software fee of $15 applies. Course fee of $19 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 3750**
**Media Analytics**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Provides students access to all the leading and most effective traffic techniques, ranging from organic search traffic and all aspects of SEO, through paid traffic of all kinds, and on to free, direct traffic methods. Covers all the concepts, techniques, and tools for web and mobile traffic analysis. Offers students the opportunity to practice generating traffic to a real web page and practice using analytical tools to evaluate their results. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 3760**
**Web Languages II**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Covers server-side web development and database interaction. Offers the skills and knowledge necessary to produce web sites in a professional environment. Covers current technology and design standards for websites that are database driven using current languages and platforms. Demonstrates how database interaction can enhance a multimedia website. Includes lectures, demonstrations, and weekly projects. May be delivered hybrid. Software fee of $15 applies. Course fee of $19 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 3780**
**Web Tools and Frameworks II**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Participants learn advanced techniques for delivering exceptional Flash based Internet applications. Teaches advanced scripting fundamentals, how to deliver content through server-side database connectivity, and engaging the audience through highly interactive experiences. Software fee of $15 applies. Course fee of $19 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 3790**
**Rich Internet Application Development I**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Describes various Rich Internet Application development technologies. Investigates RIA development and delivery technologies such as JavaScript frameworks, API usage, and developer productivity tools with a special emphasis on the integration of Digital Media into Internet applications. Teaches the design and development workflow for interactive, media-rich applications delivered via networked browser, computer desktops, and mobile devices. Software fee of $15 applies. Course fee of $19 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 4000**
**Writing for Digital Media**
**3**
* Prerequisite(s): ENGL 2010, Portfolio Review Acceptance, and University Advanced Standing

Teaches the role of the written word in the digital arena and the writing skills for students to become effective communicators within the various forms of multimedia including web pages, digital animation, audio, video and cinema. Lab access fee of $45 applies.

**DGM 4261**
**Mixed Reality Studio**
**3**
* Prerequisite(s): DGM 3261, Portfolio Review Acceptance, and University Advanced Standing

Applies knowledge and skills from previous mixed reality courses to assemble and publish highly interactive mixed reality experiences to multiple platforms. Represents the culmination of previous mixed reality courses in which projects will be hands-on practical application of technologies preparing students for senior capstone projects. Lab access fee of $45 applies.

**DGM 4280**
**Interactive Media Strategies**
**3**
* Prerequisite(s): DGM 3280 and University Advanced Standing

Focuses on the advanced application of media technologies that possess the ability to create adaptable content media experiences. Focuses primarily on the ability to curate and realign rich content assets through Internet-based Apps. Teaches principles of distribution that can be applied to desktop, mobile, and advancing technologies in the home or automobile markets with a specific focus on dynamic retrieval and adaptation of content. Laptop Initiative Requirement. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4290**
**Designing Voice Experiences**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Teaches fundamentals of Voice Experience design and development for verbal digital interfaces. Addresses technical challenges for verbal and conversational digital experiences in real world applications. Introduces basic content creation and verbal logic theory for varying artificial intelligence platforms. Lab access fee of $45 applies.

**DGM 4310**
**Senior Capstone I**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

For senior Digital Media students. Provides a capstone experience working in digital media. Develops individual real world projects in consultation with a faculty advisor. Encourages team work. Course fee of $10 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4410**
**Senior Capstone II**
**3**
* Prerequisite(s): DGM 4310, Portfolio Review Acceptance, and University Advanced Standing

Conclusion of DGM 4310. Concludes the capstone experience for digital media students. Addresses post production issues such as testing, packaging, and documentation. Offers the opportunity to present projects to students, faculty, sponsors, and potential employers or clients. Course fee of $10 for equipment applies. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4420**
**Applied Digital Media Technology**
**3**
* Prerequisite(s): University Advanced Standing

For educators and general public interested in technology integration. Examines the ever-expanding array of options available to educators, business personnel and government agencies for creating and distributing rich media based materials. Explores what new technologies and creative practices are available and how to implement them into their present workflow. Focuses on getting the most out of Digital Media technology. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4430**
**Audio Mastering**
**3**
* Prerequisite(s): DGM 3420, Portfolio Review Acceptance, and University Advanced Standing

Deals with the final step in any audio production--Mastering. Covers the art of final EQ and Compression. Explores the issues of bit depth, sampling rates, dither, jitter, EQ techniques, and Dynamic Range manipulation (expanders and compressors). Looks into analog and digital signal processors, including reverb, and the final step of putting an album together with a brief discussion on vinyl pre-mastering. Teaches the use no fewer than 15 different compressors, both analog and digital for comparative listening tests. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 450R**
**Story Editing for Digital Media**
**3**
* Prerequisite(s): DGM 1510 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): DGM 2570 or THEA 2742

Teaches necessary skills for working with writers and producers preparing scripts for production through various media technologies. Uses Daniel Methodology to analyze stories in all stages from early concept to production scripts, identify strengths, diagnose weaknesses, and find possible solutions to strengthen the scripts. Teaches consulting techniques for working with writers and producers to communicate clearly and in a way that encourages and empowers them to suit their storytelling plan to the appropriate technologies. May be repeated for a maximum of 6 credits toward graduation. Lab access fee of $45 applies.

**DGM 4510**
**Visual Effects for Digital Cinema II**
**3**
* Prerequisite(s): DGM 2510 and University Advanced Standing

Provides an advanced practicum in a variety of professional Visual Effects software used in conjunction with NLE (Non-Linear Editing) software in current industry use. Further develops on the foundation of understanding of cinematic post-production workflows utilized by professional visual effects houses. Overviews a broad survey of types of visual effects in use today and the evolution of various programs and their shifting capabilities. Lab access fee of $45 applies.

**DGM 4511**
**Film Production Analysis II**
**3**
* Prerequisite(s): (DGM 1510 or instructor approval) and University Advanced Standing

Immerses participants in the theory and practice of effective storytelling through digital media. Features films and Daniel Methodology analysis as a foundation, then branches into applying Daniel Methodology to other media, including television series, documentaries, animation, gaming, interactive design and virtual reality. Prepares students for the rigorous requirements of the digital media industry in key creative professional roles, including writing, directing, producing and editing. Lab access fee of $45 applies.

**DGM 4530**
**Special Topics-Cinematography Masterworks**
**3**
* Prerequisite(s): DGM 1510, DGM 1520, DGM 2540, and University Advanced Standing

Surveys selected cinematographers and their works. Looks at each cinematographer's films in chronological order from their earliest to more recent and analyzes their progression throughout their career. Evaluates individual technique and style in depth, breaking down films, scene by scene. Lab access fee of $45 applies.

**DGM 454R**
**Cinematography III**
**3**
* Prerequisite(s): DGM 3540 and University Advanced Standing

Offers an advanced workshop format class structure. Utilizes project-based opportunities to apply and hone advanced professional skills in composition, lighting and camera movement. May be repeated for a maximum of 9 credits toward graduation. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4550**
**Producing II**
**3**
* Prerequisite(s): DGM 3550

Implements the advanced process of motion picture development and distribution with focus on the role of the producer in identifying, evaluating, developing, financing and securing distribution. Lab access fee of $45 applies.

**DGM 4560**
**Output and Color for Digital Cinema II**
**3**
* Prerequisite(s): DGM 1061, DGM 2340, Portfolio Review Acceptance or instructor approval, and University Advanced Standing

Focuses on advanced digital post-production workflow, digital output, and color grading for digital cinema productions. Furthers training in professional industry standard software used for color grading, output and compression. Prepares students for a career in post-production with emphasis on the careers of the Digital Imaging Technician and Color Grader. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 456R**
**Digital Cinema Editing III**
**3**
* Prerequisite(s): DGM 3560, Portfolio Review Acceptance, and University Advanced Standing

Presents an advanced practicum in Digital Cinema editing and craft. Prepares students for employment as professional editors and assistant editors in a variety of work environments on a variety of types of media. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of $45 applies.

**DGM 457R**
**Storytelling for Digital Media III**
**3**
* Prerequisite(s): DGM 1510 and (DGM 2570 or THEA 2742), University Advanced Standing
* Prerequisite(s) or Corequisite(s): DGM 450R

Focuses on advanced writing for longform media projects including feature narrative films, documentary projects, episodic television series, experimental new media, interactive games, etc. Introduces participants to the process, discipline and format necessary to outline, write and refine a character-driven media script that will ultimately have a running-time of greater than forty-five minutes. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of $45 applies.

**DGM 458R**
**Digital Cinema Directing Workshop II**
**3**
* Prerequisite(s): DGM 3580 and University Advanced Standing

Offers a professional level workshop format class structure for students interested in feature film and television direction, as well as other narrative screen-based content. Focuses include approaches to evaluating story and screenplays, directing actors, staging and blocking scenes, and approaches to visual/cinematic storytelling. May be repeated for a maximum of nine credits toward graduation. Lab access fee of $45 applies.

**DGM 459R**
**Documentary II**
**3**
* Prerequisite(s): DGM 1520, DGM 3590, and University Advanced Standing

Presents advanced viewing and discussion of selected documentaries and instruction in various production skills necessary to create video documentaries. Explores the diversity of documentary styles and approaches including interview, archival, observational, etc. Requires the completion of various exercises from conceptualization through postproduction, culminating in the production of professional level documentary project. May be repeated for a maximum of nine credits toward graduation. Lab access fee of $45 applies.

**DGM 4610**
**Designing Technology based Training**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Provides shadowing opportunities in an educational or business setting where students can see basic principles of training and development in action and gain insights into training design, development, implementation, and evaluation. Uses the course map content from the DGM 3290 course to pre-author a technology-based training program, which includes creating a course navigation map (flowchart) to determine course sequence and navigational paths, designing storyboard frames with multimedia elements, and generating the navigation map and storyboards into an authoring tool. Completers should be prepared to apply shadowing experiences, discussion insights, and pre-authoring computer skills to future training opportunities. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4620**
**Producing Technology based Training**
**3**
* Prerequisite(s): DGM 4610 and University Advanced Standing

Builds on information taught in DGM 3290 and DGM 4610. Generates story boards from a computer design tool into an authoring tool. Teaches basic principles of building and editing frames with text and multimedia elements. Provides practice and feedback, remediation as needed. Addresses individual learner needs and evaluation of program effectiveness. Uses program objectives to evaluate final program product. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4621**
**Performance Animation**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Teaches basic animation principles, such as: flexibility, timing and spacing, overlapping action, the successive-breaking-of-joints, and overlapping action. Covers theatrical performance animation, emotional facial, phoneme, and dialoged animation. Explores expressive character enactment, representative of life. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4630**
**Technical Direction for Animation and Game Development I**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Focuses on the production of digital special effects and compositing in 2D and 3D environments. Includes multi-layer effects, green screen, digital mattes, and grading. Tools may include visual effects editing and particle generation software. Software fee of $15 applies. Course fee of $19 for software and plug-ins applies. Lab access fee of $45 for computers applies.

**DGM 4640**
**Technical Direction for Animation and Game Development II**
**3**
* Prerequisite(s): DGM 4630, Portfolio Review Acceptance, and University Advanced Standing

Focuses on the use of digital special effects in a three-dimensional environment including high-end particle effects, digital fluids, and advanced simulation. Tools include industry standard Maya and Houdini. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 4790**
**Rich Internet Application Development II**
**3**
* Prerequisite(s): DGM 3790, Portfolio Review Acceptance, University Advanced Standing

Describes various Rich Internet Application development technologies with a focus on utilizing server-side resources. Investigates a wide variety of RIA technologies including cloud services, API development, and dynamic data stores. Teaches how to design and develop RIAs using a variety of tools, code frameworks, and delivery clients. Requires creation of interactive and useful media-rich web experiences for end users. Software fee of $15 applies. Lab access fee of $45 for computers applies.

**DGM 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

For Digital Media majors only. Provides a transition from school to-work where learned theory is applied to actual practice through a meaningful on-the-job experience. Includes student, employer and coordinator evaluations, on-site work visits, and written assignments. Completers should obtain experience in establishing and accomplishing individualized work objectives that improve work performance. Internship is intended for senior DGM students who are working at that level. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May be repeated for a maximum of 16 credits towards graduation. May be graded credit/no-credit.

**DGM 490R**
**Senior Capstone**
**3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

For senior Digital Media students. Provides a capstone experience working in digital media. Develops individual real-world projects in consultation with a faculty advisor. May be repeated for a maximum of 2 credits toward graduation.

**DGM 497R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

For bachelor's degree students and other interested persons. Offers independent study as directed in reading or in individual projects; offered at the discretion and approval of the department chairperson. May be repeated for a maximum of 6 credits toward graduation.

# Diesel Mechanics (DMT)

**DMT 1000**
**Related Oxyacetylene and Arc Welding**
**3**

Specialty course designed for diesel mechanics, other trade areas, and interested community members. For beginning students. Covers theory and practice of oxyacetylene and arc welding of mild steel. Includes identification of basic and filler metals and melting temperatures of various metals. Emphasis is placed on root penetration and fusion of welded materials. Completers should be able to weld in their professional area. Tool room fee of $19 for equipment applies.

**DMT 1005**
**Basic Shop and Safety Skills**
**2**

Covers the selection and usage of basic occupational hand tools. Presents fastener types and applications. Provides practice on proper drill and tap skills. Includes experience learning correct measuring skills. Addresses manufacturers electronic service literature and search engines. Classifies and employs shop measuring tools with their specific functions. Covers recognition of fundamental heavy truck/equipment engine, power-train and chassis components. Emphasizes shop safety guidelines and proper handling of hazardous materials. Requires safety certification.

**DMT 1110**
**Diesel Engine Overhaul**
**4**
* Corequisite(s): DMT 111L
* Prerequisite(s) or Corequisite(s): DMT 1005

Introduces diesel engine operating principles, factors affecting performance, design variations, and identification of components. Focuses on disassembly and reassembly of diesel engines following industry standard overhaul procedures. Includes the identification, inspection, and measuring of parts to determine condition for reuse. Uses failed components to assist in teaching troubleshooting skills. Provides theory of engine tune-up processes on various engines used by industry. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**DMT 111L**
**Diesel Engine Overhaul Lab**
**2**
* Corequisite(s): DMT 1110
* Prerequisite(s) or Corequisite(s): DMT 1005

Provides hands on experience in diesel engine operating principles, factors affecting performance, design variations, and identification of components. Includes disassembly and reassembly of diesel engines following industry standard overhaul procedures. Focuses the identification, inspection, and measuring of parts to determine condition for reuse. Utilizes failed components to assist in teaching troubleshooting skills. Tool room fee of $19 for equipment applies. Course Lab fee of $22 for materials applies.

**DMT 1120**
**Diesel Engine Operation Tune Up**
**4**
* Corequisite(s): DMT 112L
* Prerequisite(s) or Corequisite(s): DMT 1110, DMT 111L

Covers diesel engine components, controls, operating systems, and performance factors. Addresses engine component replacement, tune-up adjustments, and the requirements for engine dynamo-meter testing. Emphasizes basic engine operating factors and troubleshooting complaints such as: low power, smoke conditions, and engine faults. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**DMT 112L**
**Diesel Engine Operation Tune up Lab**
**2**
* Corequisite(s): DMT 1120
* Prerequisite(s) or Corequisite(s): DMT 1110 and DMT 111L

Examines diesel engine components, operating systems, and performance factors. Provides opportunity to perform hands on component replacement and tune-up adjustments. Provides the opportunity to run an engine under load in a dynamometer test cell. Troubleshoots common engine operating complaints, such as low power, smoke conditions, engine faults, etc. Tool room fee of $19 for equipment applies. Course Lab fee of $27 for materials applies.

**DMT 1510**
**Electrical Systems I**
**4**
* Prerequisite(s): AUT 1260 (or any MAT or MATH course 1000 or higher) with a C- or better
* Corequisite(s): DMT 151L

Teaches the definition of electricity: voltage, current, and resistance as well as the electrical rules of Ohm's law, Watt's law, Kirchhoff's circuit laws. Provides examples of the application of the above laws in both series and parallel circuits. Includes instruction on the proper use of DVOM's and their function in diagnosing and troubleshooting electrical circuitry on heavy trucks and equipment. Teaches electrical components and symbols. Teaches correct repair procedures for wiring, fuses, and connectors. Addresses starting and charging system operation and testing. Emphasizes all safety procedures practices. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**DMT 151L**
**Electrical Systems I Lab**
**2**
* Prerequisite(s): AUT 1260 (or any MAT or MATH course 1000 or higher) with a C- or better
* Corequisite(s): DMT 1510

Provides hands-on experience using a DVOM on series and parallel circuits. Identifies electrical components and examines their functions. Describes testing batteries, starting systems, and charging systems. Identifies the correct repairs on these systems and when applicable. Provides practice in electrical safety and preventative maintenance. Covers basic electrical repair techniques. Tool room fee of $19 for equipment applies. Course Lab fee of $30 for materials applies.

**DMT 1520**
**Electrical Systems II**
**2**
* Corequisite(s): DMT 152L
* Prerequisite(s) or Corequisite(s): DMT 1510 and DMT 151L

Covers heavy and medium duty vehicle electrical systems including lighting, climate control, computer controls and accessories. Emphasizes DOT lighting regulations for vehicles and trailers. Introduces fundamentals of electrical circuitry and schematics. Examines the computer controls on modern vehicle electrical systems. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**DMT 152L**
**Electrical Systems Lab II**
**1**
* Corequisite(s): DMT 1520
* Prerequisite(s) or Corequisite(s): DMT 1510 and DMT 151L

Focuses on lab work for the troubleshooting and repair of heavy/medium duty electrical systems and electronic engine management. Includes vehicle and trailer lighting, monitoring, and control systems. Emphasizes DOT safety regulations requirements. Tool room fee of $19 for equipment applies. Course Lab fee of $25 for materials applies.

**DMT 2230**
**Heating Ventilation Air Conditioning and Refrigeration Theory**
**2**
* Corequisite(s): DMT 223L
* Prerequisite(s) or Corequisite(s): DMT 1510 and DMT 151L

Teaches the principles of heat transfer using refrigerant as the medium. Emphasizes the identification and operation of individual system components. Discusses the different types of refrigerants used in the mobile industry as well as recovery, recycling, storage, handling, and disposal. Also covers the theory and operation of auxiliary power units used on highway trucks. Software fee of $10 applies. Course fee of $10 for materials applies. Lab access fee of $15 for computers applies.

**DMT 223L**
**Heating Ventilation Air Conditioning and Refrigeration Lab**
**1**
* Corequisite(s): DMT 2230
* Prerequisite(s) or Corequisite(s): DMT 1510 and DMT 151L

Teaches correct use of modern HVACR testing and repair equipment. Provides hands-on opportunity to troubleshoot and service modern HVACR systems. Examines and practices EPA approved handling of current refrigerants used in current vehicles and equipment. Provides hands-on opportunity to locate, identify, test, service, and troubleshoot different types of mobile AC systems using EPA approved equipment & procedures. Also provides hands-on experience with auxiliary power units used on highway trucks. Tool room fee of $19 for equipment applies. Course Lab fee of $19 for materials applies.

**DMT 2310**
**Fluid Power I Theory**
**4**
* Prerequisite(s): AUT 1260 (or any MATH MAT course 1000 or higher) with a C- or better
* Corequisite(s): DMT 231L

Outlines the fundamental principles of fluid power (hydraulics). Emphasizes the relationship between pressure, force, area, and resistance. Covers Bernoulli's principle in connection with hydraulic: flow, horsepower torque and the conservation of energy. Illustrates the application and operation of all of the essential components and valving found in in a hydraulic system. Identifies types of circuit designs and schematic symbols. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**DMT 231L**
**Fluid Power I Lab**
**2**
* Prerequisite(s): AUT 1260 (or any MATH MAT course 1000 or higher) with a C- or better
* Corequisite(s): DMT 2310

Provides practical lab experience for the identification, operation, and repair of basic hydraulic system components and circuits. Utilizes various lab equipment and machinery to highlight basic system designs and use of schematics. Emphasizes the safe and proper usage of hydraulic diagnostic equipment or tools necessary for component and system testing. Tool room fee of $19 for equipment applies. Course Lab fee of $17 for materials applies.

**DMT 2320**
**Fluid Power II Theory**
**4**
* Prerequisite(s): DMT 2310, DMT 231L
* Corequisite(s): DMT 232L

Covers the design and operation of variable displacement pumps and motors, emphasizing those that are load sensing and pressure compensating. Focusses on the electronic controls of fluid power systems including open and closed loop circuits. Analyzes corresponding electronic controls on hydraulic schematics. Presents the theory and operation of hydrostatic and automatic transmissions used with heavy equipment and medium/heavy duty trucks. Emphasizes component operation, maintenance, repair, testing, and troubleshooting. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**DMT 232L**
**Fluid Power II Lab**
**2**
* Corequisite(s): DMT 2320
* Prerequisite(s) or Corequisite(s): DMT 2310 and DMT 231L

Focuses on the use of hydraulic test equipment to diagnose and troubleshoot systems using electronic, proportional or load sensing components. Covers the testing and correct adjustment of load sensing/pressure compensated pumps. Provides for the disassembly, inspection, reassembly and testing of hydrostatic transmissions. Provides experience to build and troubleshoot electronically controlled hydraulic circuits, troubleshoot electronically controlled hydrostatic transmissions as well as Allison transmissions. Emphasizes the use of diagnostic tools and service manuals. Tool room fee of $19 for equipment applies.

**DMT 2410**
**Chassis Theory**
**4**
* Corequisite(s): DMT 241L

Provides theory on maintenance and repair of heavy duty chassis systems. Covers air brake systems, ABS systems, suspension systems, steering geometry, front end and tandem alignment, and frame maintenance. Emphasizes Department of Transportation highway safety requirements, and preventative maintenance. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**DMT 241L**
**Chassis Lab**
**2**
* Corequisite(s): DMT 2410

Covers troubleshooting and repair skills for heavy and medium duty trucks for air brake systems and ABS brake systems. Discusses alignment fundamentals. Uses hands on exercises to develop these skills. Focuses on proper maintenance and adjustment to foundation brakes and wheel ends. Requires performance tasks on various suspension designs and frame maintenance. Tool room fee of $19 for equipment applies. Course Lab fee of $22 for materials applies.

**DMT 2420**
**Power Train Theory**
**4**
* Corequisite(s): DMT 242L

Provides theory in maintenance and repair of heavy duty power trains systems. Teaches clutches, single and multiple counter shaft transmission, computer controlled transmissions, drive line geometry, differentials and Department of Transportation safety requirements. Emphasizes troubleshooting, highway safety, and preventative maintenance. Software fee of $10 applies. Lab access fee of $15 for computers applies.

**DMT 242L**
**Power Train Lab**
**2**
* Corequisite(s): DMT 2420

Provides hands-on experience in maintenance and repair of heavy duty power train systems. Applies tasks for clutches, single and multiple counter shaft transmission, computer controlled transmissions, drive line geometry, differentials and DOT safety requirements. Emphasizes troubleshooting, highway safety, and preventative maintenance. Tool room fee of $19 for equipment applies. Course Lab fee of $22 for materials applies.

**DMT 2530**
**Electronic Engine Management**
**2**
* Prerequisite(s): DMT 1510, DMT 151L, DMT 1520, and DMT 152L
* Corequisite(s): DMT 253L Recommended

Covers electronic fuel systems: parts, component ID, usage and operation. Includes instruction for electronic governors, set up, operation and diagnosis. Analyses advanced electronic fuel injectors and injection systems. Includes examination of sensor types, function and testing. Teaches the operation and component identification of current emission equipment as well as the present EPA emission standards.

**DMT 253L**
**Electronic Engine Management Lab**
**1**
* Prerequisite(s): DMT 1510, DMT 151L, DMT 1520, and DMT 152L
* Corequisite(s): DMT 2530

Covers the identification, location and function of all electronically controlled fuel system components, including sensors, governors, injectors, pumps, valving, and conductors. Explains the usage of computer based diagnostic equipment for troubleshooting and electronic engine management. Covers the identification, location and function of all emission system related components. Focusses on the proper maintenance and service of these systems.

**DMT 281R**
**Cooperative Work Experience**
**1 to 8**
* Corequisite(s): DMT 285R

Designed for Diesel Mechanics Technology majors. Provides paid, on-the-job work experience in the student's major. Work experience, the correlated class, and enrollment are coordinated by the Cooperative Coordinator. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and oral presentations. Provides experience in writing and completing individualized work objectives that improve present work performance. May be repeated for a maximum of 16 credits toward graduation. May be graded credit/no credit.

**DMT 285R**
**Cooperative Correlated Class**
**1**
* Corequisite(s): DMT 281R

Designed for Diesel Mechanics Technology majors. Identifies on-the-job problems through in-class discussion and study. Includes the study of identifying and maximizing service opportunities. Students register for this class with approval of the Cooperative Coordinator. Includes lecture, guest speakers, video tapes, role playing, case analysis, oral presentations, and written assignments. Completers should be better able to perform in their field of work or study.

**DMT 291R**
**Special Projects**
**1 to 5**
* Prerequisite(s): Advisor and Instructor Approval

For students majoring in diesel technology. Involves special projects. Allows independent projects that are designed to enhance beginning or advanced abilities. Repeatable for as many times as desired.

**DMT 298R**
**Technical Workshop**
**1 to 4**

For Diesel Technology students and other interested community members. Tailored to a specific topic, product, component, or vehicle related to the diesel service industry. Its purpose is to update technician training by addressing changes in products or equipment. Topics will vary. May be presented by an OEM, a dealer representative, or faculty member. Repeatable.

**DMT 299R**
**VICA**
**1**

Designed for Diesel Mechanics Technology majors. Supports and facilitates the goals and objectives of Vocational Industrial Clubs of America (VICA). VICA is a pre-professional student organization that develops social awareness, civic, recreational, and social activities. Students may participate in local, state, and national contests.

# Electrical Comp Engineering (ECE)

**ECE 1000**
**Introduction to Electrical and Computer Engineering**
**3**
* Prerequisite(s): MATH 1060 or higher

Introduces engineering-problem-solving techniques, design processes, modeling and analysis ofsimple electrical and computer circuits using MATLAB and LabVIEW software packages.Emphasizes engineering design procedures by incorporating group projects and presentations. Lab access fee of $45 applies.

**ECE 1020**
**Computer Engineering Problem Solving with MATLAB and LabVIEW**
**1**
* Prerequisite(s): MATH 1050 or higher

Introduces the field of Computer Engineering through programming in the MATLAB and LabVIEW languages. Teaches the design of various components of a prototype communication system while learning about the following aspects of MATLAB: scripts and function files, math functions, commands for array construction and manipulation, string expressions, logic operators, control flow, and graphics. No prior knowledge of computer engineering is assumed. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 2210**
**Fundamentals of Electric Circuit Analysis**
**3**
* Prerequisite(s): MATH 1210, PHYS 2210

Explores fundamental electric circuit analysis techniques. Develops analysis techniques using Kirchoff's laws, Thevenin and Norton equivalents, superposition, and phasors. Covers transient and steady-state time-domain analysis, and frequency analysis.Lab access fee of $45 for computers applies.

**ECE 2215**
**Fundamentals of Electric Circuit Analysis Lab**
**1**
* Prerequisite(s): MATH 1210, PHYS 2210

Covers fundamental electric circuit analysis techniques. Develops analysis techniques using Kirchoff's laws, Thevenin and Norton equivalents, superposition, and phasors. Covers transient and steady-state time-domain analysis, and frequency analysis. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 2250**
**Circuit Theory**
**3**
* Prerequisite(s): MATH 1210, PHYS 2210, ECE 1000

Develops linear circuit theory and its application in the analysis and design of RLC active circuits. Covers DC, AC, and transient analysis utilizing node and mesh analysis. Lab access fee of $45 for computers applies.

**ECE 2255**
**Circuit Theory Lab**
**1**
* Prerequisite(s): MATH 1210, PHYS 2210
* Corequisite(s): ECE 2250

Laboratory for ECE 2250 develops linear circuit theory and its application in the analysis and design of RLC active circuits. Covers DC, AC, and transient analysis utilizing node and mesh analysis. Introduces the use of CAD tools. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 2700**
**Digital Design I**
**3**
* Prerequisite(s): MATH 1050 or MATH 1055
* Corequisite(s): ECE 2705

Studies the design and application of combinational and sequential logic circuits with discrete and programmable logic devices. Lab access fee of $45 for computers applies.

**ECE 2705**
**Digital Design I Lab**
**1**
* Prerequisite(s): MATH 1050 or MATH 1055
* Corequisite(s): ECE 2700

Designed to accompany ECE 2700. Covers design of digital systems with discrete and programmable logic devices. Includes the use of CAD tools for system design and verification. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 2760**
**Introduction to Semiconductor Theory and Nanotechnology**
**3**
* Prerequisite(s): MATH 1060 or higher (MATH 1090 not included)

Introduces the theory of semiconductor materials and devices. Provides an understanding of Nano/microfabrication technology and the physics of semiconductor devices. Covers design principles for the fabrication of newly developed devices and applications. Lab access fee of $45 applies.

**ECE 3250**
**Energy Conversion**
**3**
* Prerequisite(s): ECE 2250, (Formal Acceptance into the Electrical Engineering Program, or Departmental Approval), and University Advanced Standing

Presents fundamental concepts of energy conversion including torque and power in singly/doubly excited electromagnetic systems, single and three-phase transformers, single and three-phase induction motors including speed control, three-phase synchronous generators and DC machines.Lab access fee of $45 applies.

**ECE 3350**
**Control Systems**
**3**
* Prerequisite(s): ECE 2250, University Advanced Standing, and (Formal Acceptance into the Electrical Engineering Program, or Departmental Approval)

Introduces the theory and practice of control systems engineering. Covers modeling in the frequency and time domains, analog and discrete transfer function models, reduction of multiple subsystems, system response specifications, control system characteristics, root locus analysis and design, frequency response analysis and design. Emphasizes computer-aided analysis. Lab access fee of $45 applies.

**ECE 3450**
**Electromagnetics and Transmission Lines**
**3**
* Prerequisite(s): PHYS 2220, ECE 2250, University Advanced Standing, and (Formal Acceptance into the Electrical Engineering Program, or Departmental Approval)

Introduces the fundamentals of electromagnetic field theory and application: vector analysis, electric and magnetic fields, potential theory, dielectric and magnetic material properties, conductance, capacitance, and inductance, Maxwell's equations and circuit concepts. Explains transmission lines as a bridge to understanding electromagnetic field theory. Covers basic principles of radiation and propagation in waveguides and antennas. Lab access fee of $45 applies.

**ECE 3710**
**Applied Probability and Statistics for Engineers and Scientists**
**3**
* Prerequisite(s): MATH 1210 and University Advanced Standing

Explores probability and statistical theory with an emphasis on engineering and computer science applications. Covers descriptive statistics, discrete and continuous random variables, probability distributions, hypothesis testing, expectation, estimation, ANOVA testing, and regression analysis. Includes computer analysis of data and simulation. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 3730**
**Embedded Systems I**
**3**
* Prerequisite(s): ECE 2700, ECE 2250, (Formal Acceptance into the Electrical or Computer Engineering Program, or Departmental Approval), and University Advanced Standing

Presents an introduction to the basic building-blocks and the underlying scientific principles of embedded systems. Covers both the hardware and software aspects of embedded processor architectures and assembly language programming. Develops the theory and technology necessary for the interconnection of devices and systems to microcontrollers by using hardware and software examples and students' projects. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 3740**
**Digital Design II**
**3**
* Prerequisite(s): ECE 2700, (Formal Acceptance into the Electrical Engineering Program or Computer Engineering program, or Departmental Approval), and University Advanced Standing

Covers the design and verification of digital systems. Emphasizes hierarchal design principles and the use of programmable logic devices (PLDs). Utilizes modern CAD tools and design languages (VERILOG). Lab access fee of $45 for computers applies.

**ECE 3750**
**Engineering Analysis**
**3**
* Prerequisite(s): MATH 1220, ECE 1000, and University Advanced Standing

Studies Linear systems, abstract vector spaces, matrices through eigenvalues and eigenvectors, solution of ordinary differential equations, Laplace transforms, first order systems, and complex numbers. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 3760**
**Electronic Systems**
**3**
* Prerequisite(s):ECE 2250, PHYS 2220, University Advanced Standing, and (Formal Acceptance into the Electrical Engineering Program or Computer Engineering program, or Departmental Approval)
* Corequisite(s): ECE 3765

Introduces semiconductor theory and the fundamentals of diode and transistor operation. Covers the use of discrete and integrated active devices in linear amplifier and switching applications. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 3765**
**Electronic Systems Lab**
**1**
* Prerequisite(s): ECE 2255, PHYS 2220, and University Advanced Standing
* Corequisite(s): ECE 3760

Designed to accompany ECE 3760. Covers electronic analog circuit design, simulation, construction, debugging and measurement of circuit performance quantities using advanced instrumentation techniques. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 3770**
**Signals and Systems**
**3**
* Prerequisite(s): ECE 3750, (Formal Acceptance into the Electrical Engineering Program or Computer Engineering program, or Departmental Approval), and University Advanced Standing

Examines the time and frequency domain analysis of continuous-time systems subjected to periodic and non-periodic input signals. Introduces signal and transform theory and the application of Laplace and Fourier transforms. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 3780**
**Communication Systems and Circuits**
**3**
* Prerequisite(s): ECE 3770, ECE 3710, (Formal Acceptance into the Electrical Engineering Program, or Departmental Approval), and University Advanced Standing

Introduces the fundamentals of electronic communication systems and circuits. Covers pulse code modulation, line coding, information rate, equalization, amplitude modulation, angle modulation, and noise in communication systems. Lab access fee of $45 applies.

**ECE 3785**
**Communication Systems and Circuits Lab**
**1**
* Prerequisite(s): ECE 3770, ECE 3710, and University Advanced Standing
* Corequisite(s): ECE 3780

Covers hands on experiments related to course work, in the area of communication systems and circuits. Includes digital and analog modulation for the baseband and bandpass communications. Provides appropriate wireless communication techniques for modern circuits and applications using mini projects. Lab access fee of $45 applies.

**ECE 4250**
**Power Systems Engineering**
**3**
* Prerequisite(s): ECE 3250, (Formal Acceptance into the Electrical Engineering Program, or Departmental Approval), and University Advanced Standing

Introduces power system analysis and design with the aid of a personal computer. Emphasizes AC power generation, distribution and usage. Covers single-phase and 3-phase power, motors,generators, power distribution and the grid, generation plants, smart grids, and power flow control. Lab access fee of $45 applies.

**ECE 4700**
**Computer Architecture for Engineering Applications**
**3**
* Prerequisite(s): ECE 3740 and University Advanced Standing

Uses register transfer languages and simulation tools to describe and simulate computer operation; central processing unit organization, microprogramming, input/output, pipelining, virtual memory concepts, VLIW, superscalar out of order, ILP, and memory system architectures. Lab access fee of $45 applies.

**ECE 4730**
**Embedded Systems II**
**3**
* Prerequisite(s): ECE 3730 and University Advanced Standing

Presents the design of hardware and software required for embedded, real-time systems. Covers types of real-time systems, fuzzy logic, sensors, real-time operating systems, C programming skills, and wireless sensor networks. Lab access fee of $45 for computers applies.

**ECE 4740**
**Queuing Theory**
**3**
* Prerequisite(s): STAT 2040, ECE 3750, and University Advanced Standing

Includes computer systems network modeling using stochastic processes: queuing theory models, performance analysis, resource allocations, large-system response parameters. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 4750**
**Digital Signal Processing**
**3**
* Prerequisite(s): ECE 3770, ECE 3710, and University Advanced Standing

Introduces the theory of digital signal processing and its application to practical problems. Covers spectrum representation, Nyquist sampling, z-transform, discrete Fourier transform, discrete-time Fourier transform, FIR (Finite Impulse Response) and IIR (Infinite Impulse Response) digital filter design. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 4755**
**Digital Signal Processing Lab**
**1**
* Prerequisite(s): ECE 3770 and University Advanced Standing

Performs software and hardware experiments illustrating the basic principles and techniques of digital signal processing. Teaches programming of real-time signal processing algorithms on a concrete DSP chip, and Accelerate the DSP code on the GPU. Lab access fee of $45 applies.

**ECE 4760**
**VLSI Design**
**3**
* Prerequisite(s): ECE 3760 and University Advanced Standing

Focuses on theories and techniques of VLSI design on CMOS technology. Studies the fundamental concepts and structures of designing digital VLSI systems, including CMOS devices and circuits, standard CMOS fabrication processes, CMOS design rules, static and dynamic logic structures, interconnect analysis, CMOS chip layout, simulation and testing, low power techniques, design tools and methodologies, VLSI architecture. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 4765**
**VLSI Design Laboratory**
**1**
* Prerequisite(s): ECE 3765 and University Advanced Standing

Covers the complete process of building a ready-to-fabricate CMOS integrated circuit using commercial design software. Includes the layout design of CMOS transistors, gate level design, design using VHDL, CHIP design and pin configuration, and simulation of the circuit for slack time and power consumption. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 4770**
**Artificial Neural Networks**
**3**
* Prerequisite(s): MATH 1210 and University Advanced Standing

Introduces a range of topics in the field of artificial neural networks: modeling of brains, applicable algorithms, and related applications. Develops the theory of a number of neural network models such as Perceptron, Multilayer Perceptron, and Hopefield networks. Emphasizes algorithms for implementing simple artificial neural networks and their applications. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**ECE 4780**
**Wireless and Mobile Communications**
**3**
* Prerequisite(s): ECE 3780 and University Advanced Standing

Covers the fundamentals of analog and digital wireless communications. Includes baseband and bandpass, analog and digital signaling techniques along with an appropriate mathematical background in Fourier transform, and probability and random processes. Introduces both software and hardware design of communication systems. Lab access fee of $45 applies.

**ECE 4800**
**Computer Engineering Senior Design Project**
**3**
* Prerequisite(s): ECE 3740 and University Advanced Standing

Serves as a project-oriented capstone course for computer engineering majors. Emphasizes major hardware and software design. Includes identification and completion of a suitable design project to be mutually selected by the faculty supervisor and student. Requires weekly written and oral presentations as well as a final written project report and an oral presentation. Requires completion of a program level assessment test. Software fee of $10 applies. Course fee of $27 for materials/testing applies. Lab access fee of $45 for computers applies.

**ECE 481R**
**Electrical and Computer Engineering Internship**
**1 to 3**
* Prerequisite(s): Admission to Computer Engineering program or Electrical Engineering program, Instructor Approval, and University Advanced Standing

Provides an opportunity to gain career-related experience while earning academic credit. Credit is determined by the number of hours a student works during the semester. May be Graded Credit/No Credit. May be repeated for a maximum of three credits toward graduation.

**ECE 4900**
**Electrical and Computer Engineering Capstone I WE**
**3**
* Prerequisite(s):ECE 3730 and University Advanced Standing

Electrical and Computer Engineering Capstone I and Capstone II focus on team-oriented design and technical writing by incorporating group projects, oral presentations and written reports. Incorporates engineering standards and realistic constraints including economic, environmental, sustainability, manufacturability, ethical, social, political, health and safety. Emulates the problems encountered by engineers working in commercial, industrial, and governmental entities. Capstone I and Capstone II must be taken in consecutive semesters. Lab access fee of $45 applies.

**ECE 490R**
**Advanced Current Topics in Computer Engineering**
**1 to 3**
* Prerequisite(s): Department Approval and University Advanced Standing

Provides exposure to emerging technologies and topics of current interest in computer engineering. Varies each semester depending upon the state of technology. May be repeated for a maximum of 6 credits toward graduation without prior written department approval. Lab access fee of $45 applies.

**ECE 491R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Prior written Department Chair approval and University Advanced Standing.

Offers independent study as directed by a faculty advisor in reading, individual projects, etc. Varies each semester depending upon the state of technology. A maximum of 3 credit hours may be counted towards graduation without prior written Department approval.

**ECE 4950**
**Electrical and Computer Engineering Capstone II WE**
**3**
* Prerequisite(s): ECE 4900 and University Advanced Standing

Electrical and Computer Engineering Capstone I and Capstone II focus on team-oriented design and technical writing by incorporating group projects, oral presentations and written reports. Capstone II meets one of two Writing Enriched courses required for graduation in Electrical Engineering and Computer Engineering. Capstone II incorporates engineering standards and realistic constraints including economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political. Emulates the problems encountered by engineers working in commercial, industrial, and governmental entities. Capstone I and Capstone II must be taken in consecutive semesters. Lab access fee of $45 applies

# Edu Child and Family Studies (ECFS)

**ECFS 208R**
**Directed Readings**
**1 to 4**

For second-year ECFS students. Includes readings with analysis and discussion of selected topics in child education and family relationships. Requires approval of the department for registration. May be taken for a maximum of four credits.

**ECFS 2900**
**Independent Study**
**1 to 5**
* Prerequisite(s): Approval of ECFS Department

Provides independent study through faculty-directed individual projects related to working with children and families. Possible areas of study include curriculum, behavior management, program administration, family studies, and case studies in applied theory.

**ECFS 3320**
**Gender Perspectives in Education**
**3**
* Prerequisite(s): University Advanced Standing

For educators, counselors, student teachers, those wanting to recertify, and other interested students. Explores gender issues that may affect the educational experience of girls and boys. Examines history, biases, myths, and stereotypes. Develops sensitivity to issues of gender through discovery learning. Assists participants to recognize cultural and individual issues as they pertain to gender.

**ECFS 4720**
**Characteristics and Identification of Gifted Students**
**3**
* Prerequisite(s): Permission of instructor and University Advanced Standing

Designed for senior teacher education students and in-service teachers. Reviews different conceptualizations of intelligence and giftedness and practices and instruments used for identification. Describes characteristics and cognitive, social and developmental needs of gifted students.

**ECFS 4730**
**Teaching Gifted Students**
**3**
* Prerequisite(s): ECFS 4720, Instructor Permission, and University Advanced Standing

For senior education students and in-service teachers in local schools. Describes the various settings in which gifted students are served. Reviews instructional strategies and assessment appropriate to teaching gifted students, and strategies for dealing with parents.

**ECFS 492R**
**Special Topics in Gifted Education**
**3**
* Prerequisite(s): (EDEL 3000 or EDSC 3000), Instructor Permission, and University Advanced Standing

Designed for senior education students and local in-service teachers. Includes topics, such as underserved populations of gifted students, contemporary issues in gifted education, creativity, etc. May be repeated 3 times for credit.

**ECFS 494R**
**Special Topics in Educational Psychology**
**3**
* Prerequisite(s): (EDEL 3000 or EDSC 3000), Instructor Permission, and University Advanced Standing

Explores topics in educational psychology as it relates to classrooms. Includes topics, such as motivation to learn and succeed, classroom application of learning and cognition, role of emotion in learning, etc. Varies each semester. May be repeated 3 times for credit.

# Economics (ECON)

**ECON 1010** **SS**
**Economics as a Social Science**
**3**

An introductory course which studies the operation of a mixed market system, including production, domestic and global trade, and labor-management economics. Includes business cycles and monetary and fiscal policies designed to modify those cycles. Canvas Course Mats $78/McGraw applies

**ECON 2010** **SS**
**Principles of Economics I**
**3**
* Prerequisite(s): MATH 1050, MATH 1055, MATH 1090 or higher or appropriate test score

Required for all business students. Includes basic concepts and tools from microeconomics with a few additional macroeconomic topics. Covers economic analysis used by consumers, producers, and other agents to make decisions. Provides insight into the consequences of those interactions in society. Additional topics include a framework to understand the role of macroeconomic policies in the US, including GDP measurement, inflation, and unemployment. Lab access fee of $30 for computers applies. Canvas Course Mats $78/ McGraw applies.

**ECON 2020** **SS**
**Principles of Economics II**
**3**
* Prerequisite(s): MATH 1050, MATH 1055, MATH 1090 or higher or appropriate test score, ECON 2010 strongly recommended

Includes basic concepts and tools from macroeconomics with a few additional microeconomic topics. Focuses on economic scenarios that depart from perfect competition, including market failures and imperfect competition. Teaches the Keynesian framework and its applications to fiscal policy, as well as monetary theory and policy. Required for all Finance and Economics majors. Lab access fee of $30 for computers applies. Canvas Course Mats $72/McGraw applies.

**ECON 3010**
**Intermediate Microeconomics**
**3**
* Prerequisite(s): MGMT 3345 and (MATH 1100 or MGMT 2240 with a B or higher in each), Matriculation into the Woodbury School of Business, and University Advanced Standing

Covers intermediate microeconomic theory for economics and finance majors planning on extending their economics training into econometrics, mathematical economics and other related courses. Reviews microeconomic theory and models to develop an understanding of, and ability to use, modern microeconomic theory, measurement, and policy.

**ECON 3020**
**Managerial Economics**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Extends the discussion of economic theory of markets, demand and supply, elasticity, and marginal analysis process to make more effective decisions. Emphasizes an applied approach using basic theoretical concepts. Discusses the concepts of production theory and cost analysis in both the short and long run. Describes how to apply economic decision making in a variety of competitive markets including perfect competition, monopoly, monopolistic competition and oligopoly. Reviews elements of risk and uncertainity in a microeconomic framework. Canvas Course Mats $72/McGraw applies.

**ECON 3030**
**Intermediate Macroeconomics**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Extends discussion of models of income determination, economic growth theory, analysis of fiscal and monetary policy theory, international trade issues, and alternative views related to the impact of macro theory in the US and world economies. Prepares economics majors for other advanced economic theory and policy courses.

**ECON 3040**
**Environmental Economics**
**3**
* Prerequisite(s): Instructor Approval and University Advanced Standing

Introduces economic issues of ecological and environmental theory and policy. Identifies the economic tools appropriate for the analysis of ecological and environmental challenges for an inter-disciplinary group of engineering, science, social science, and natural resources management professionals. Presents the microeconomic concepts useful for reviewing these types of issues. Evaluates public policy issues related to environmental, ecological, and natural resource challenges.

**ECON 305G**
**International Economics**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Covers theoretical and practical concepts of international trade, policy, and finance in a global economy. Reviews both micro topics such as comparative advantage and trade policy as well as macro issues such as balance of payments, exchange rates, and global capital markets. Includes coverage of cultural and intercultural relationships that exist within an economic context. Canvas Course Mats $96/ Pearson applies.

**ECON 3060**
**Money and Banking**
**3**
* Prerequisite(s): Matriculation into any Woodbury School of Business program and University Advanced Standing

Studies the US financial system including primary institutions and markets. Includes analysis of the Federal Reserve System, American and International financial markets. Reviews the impact of monetary policy on financial institutions and financial intermediation. Presents the term structure of interest rates, money, capital, and mortgage markets, and management of financial institutions and insurance companies.

**ECON 3370**
**Economic Modeling and Quantitative Analysis**
**3**
* Prerequisite(s): Matriculation into Woodbury School of Business, MGMT 3345, and University Advanced Standing

Discusses economic modeling, quantitative methods and applications in economics. Covers intermediate mathematical tools required for economic and financial analysis. Prerequisite course for econometrics.

**ECON 3810**
**Labor Economics**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Provides an analysis of the theory and practice of labor markets. Defines the factors that influence the demand and supply of labor in a modern economy. Develops the concepts for a theory of human capital. Reviews factors such as wage determination, occupational differences, problems of gender, labor turnover, discrimination, impacts of education and training, impacts of labor unions, immigration, changes in technology, and other related issues. Lab access fee of $25 for computers applies.

**ECON 3820**
**Economic Development**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Describes and evaluates economic models of development in third world and emerging economies. Includes a review of theories of economic growth, the importance of creating new economic institutions, the importance of education and human capital development, and the importance of creating stable political and social cultures in the development of modern economic systems. Lab access fee of $25 for computers applies.

**ECON 3830**
**History of Economic Thought**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Traces the evolution of formal economic theory primarily beginning with Adam Smith, the first classical economic theorist. Studies other classical writers including Ricardo and Malthus as well as Marx's criticisms. Studies neoclassical analysis through Marshall and the critiques of the Austrian school. Reviews the modern theorists including Keynes and the development of macroeconomics, the development of empirical and mathematical economic theories, monetarism, and other post-Keynesian analysis. Lab access fee of $25 for computers applies.

**ECON 4010**
**Advanced Microeconomics**
**3**
* Prerequisite(s): ECON 3010 and University Advanced Standing

Advanced course in microeconomics for economics majors. Addresses the issues related to modern economic theories of imperfect competition, the market of factors of production, cost analysis, the distribution of income, general equilibrium, and welfare economics.

**ECON 4020**
**Advanced Macroeconomics**
**3**
* Prerequisite(s): ECON 3030, MGMT 3345, and University Advanced Standing

Is an advanced course in macroeconomics for economics majors. Provides economics graduates an understanding of modern macroeconomic theory including traditional macro issues, models with incomplete nominal adjustment, inflation theory, dynamic inconsistency and recent theories of unemployment.

**ECON 4040**
**Game Theory**
**3**
* Prerequisite(s): ECON 4010, ECON 4320, and University Advanced Standing

Designed to give students the skills to assess economic and social issues where strategic interaction is relevant. Teaches students to condition their responses based on the reactions and behavior of other individuals rather than merely in response to outside constraints, which is the usual approach to optimization theory. Provides concepts, tools, and experience to deal with game theory situations.

**ECON 4100**
**Analysis of Financial Institutions and Markets**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Studies money, banking, and financial markets from an economics perspective. Examines the structure of interest rates and their influence in financial markets. Reviews financial instruments, financial intermediaries, banking institutions and the types of assets and liabilities common to those systems. Covers money supply and money demand within the central banking system.

**ECON 4150**
**Public Finance**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Designed as elective credit for Business Management and other bachelor of science degree majors. Develops knowledge, skills, and attitudes required for those employed in and analyzing the public sector. Describes the three levels within the public structure including respective purposes and functions, revenue generation alternatives, budgeting, deficit financing, public choice, income redistribution, public goods, and externalities. Lab access fee of $25 for computers applies. Canvas Course Mats $78/McGraw applies.

**ECON 4320**
**Mathematical Economics**
**3**
* Prerequisite(s): ECON 3010, and University Advanced Standing

Discusses advanced concepts in economic modeling, the application of mathematical models in economic analysis, and advanced research methods in economics. Covers advanced mathematical applications in economics and finance for students interested in advanced econometric analysis and model building. Lab access fee of $25 for computers applies.

**ECON 4340**
**Econometrics Applications**
**3**
* Prerequisite(s): ECON 3370 and University Advanced Standing

Provides an opportunity for economics students with mathematical and statistical skills to apply those capabilities in real-world applications of the science of econometrics. Examines some of the well-known examples of econometric analysis that formed the foundation of econometrics science. Develops analytical skill by defining data inputs and working through a series of projects of the type students might encounter in future professional experience. Lab access fee of $25 for computers applies.

**ECON 4500**
**US Economic Development and History**
**3**
* Prerequisite(s): Matriculation in the Woodbury School of Business, University Advanced Standing

Provides an analysis of the economic development of the United States. Describes the factors that led to the development of colonies in the Americas and the causes of the Revolution and formation of a government. Describes the economic causes for western expansion, transportation development, and the rise of American capitalism. Reviews the shift from agrarian to industrial development, the economic development of big business and big government, the impact of depression, and the economics of world war and peace. Lab access fee of $25 for computers applies.

**ECON 494R**
**Special Topics in Economics**
**3**
* Prerequisite(s): Departmental approval and University Advanced Standing

Provides short courses, workshops, and special programs in economics and current business and public policy topics. May be repeated for a maximum of 6 credits toward graduation.

**ECON 4960**
**Senior Seminar Current Economic Issues**
**3**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

Provides exposure to emerging topics of current interest in economics. Topics vary each semester. Lab access fee of $25 for computers applies.

**ECON 4970**
**Economic Research Design and Implementation**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

Defines the scientific approach to managerial decision-making and project management. Describes issues related to problem definition, model development, data collection, model implementation using the data, model validation, results analysis, and using the findings to implement changes to solve problems. Examines both quantitative and qualitative models and methods. Allows students to work on real-world projects through the Utah Community Research Group (Utah CRG) and its research partners.

**ECON 6300**
**Managerial Economics**
**3**
* Prerequisite(s): Acceptance in the MBA program

Applies concepts and theories, based on managerial economic to business problems. Analyzes cost theory, pricing, market structures, and forecasting.

**ECON 6330**
**Econometrics**
**3**
* Prerequisite(s): Acceptance in the MBA program

Provides graduate level introduction to applied regression tools, including simple and multivariate regression analysis; linear, nonlinear, and qualitative dependent variable models; distributed lags; seemingly unrelated regression, and model specification and validation tests.

# Edu Early Childhood Education (EDEC)

**EDEC 1640**
**Childrens Music and Movement**
**2**

Covers historical foundations of music for young children. Explores strategies for teaching music and movement. Explores music appreciation, creative and structured music, and transitions and movement activities for young children. Investigates musical instruments and their use. Provides opportunities to teach music and movement activities to children. Examines music and movement curricula, academic content and learning environments. Course fee of $10 for materials applies.

**EDEC 2300**
**Including Young Diverse Learners**
**2**
* Prerequisite(s): PSY 1100; ACT (or equivalent) composite score of 21+, or completion of (ENGL 1010 or ENGH 1005 or higher) with a minimum grade of C-

Introduces the implications of diversity and exceptionality in young children. Emphasizes the impact of diversity in children's educational settings. Includes basic assessment strategies. Introduces teaching strategies to address children with special needs and/or from diverse populations. Emphasizes inclusive and adaptive strategies for supporting young children with exceptionalities. Covers partnerships, families, and communities. Includes 10 hours of field experiences.

**EDEC 2500**
**Child Development Birth to Eight Years**
**3**
* Prerequisite(s): PSY 1100; ACT (or equivalent) composite score of 21+, or (ENGL 1010 or ENGH 1005 or higher) with a minimum grade of C-

Covers developmental theories and milestones of a child's development. Emphasizes growth in all developmental domains. Focuses on supportive parental and care giver behaviors. Addresses the influence of out-of-home care. Examines the role of play when creating supportive environments. Investigates risk factors that impede optimal development. Includes 15 hours of structured observation, assessment, and interactions with young children.

**EDEC 2600**
**Introduction to Early Childhood Education**
**2**
* Prerequisite(s): ACT (or equivalent) composite score of 21+, or (ENGL 1010 or ENGH 1005 or higher) with a minimum grade of C-

Introduces the field of early childhood education. Focuses on the historical, theoretical and philosophical foundations of early childhood education. Emphasizes developmentally appropriate practices, constructivism, and integrated, child-centered curriculum. Covers learning in all domains and content areas. Explores the components that identify quality programs for young children. Addresses ethical and professional teaching practices. Includes 8 hours of classroom observations. Canvas Course Mats $51/Sage applies.

**EDEC 2610**
**Child Guidance**
**3**
* Prerequisite(s): ACT (or equivalent) composite score of 21+, or (ENGL 1010 or ENGH 1005 or higher) with a minimum grade of C-

Focuses on the adult role in fostering the social and emotional development of young children. Emphasizes strategies adults can use to build positive self-concept, appropriate social behaviors, empathy, independence, responsibility and effective communication in children. Addresses the value of play to enhance children's social development. Introduces strategies to reduce aggressive behaviors. Examines factors that effect resiliency in young children. Includes 20 hours of structured field observations and interactions with young children.

**EDEC 2620**
**Early Childhood Curriculum**
**3**
* Prerequisite(s): ACT (or equivalent) composite score of 21+, or (ENGL 1010 or ENGH 1005 or higher) with a minimum grade of C-, EDEC 2600 recommended

Examines the philosophy of Developmentally Appropriate Practice in connection to teaching preschool children, preparing the classroom environment, and planning/ implementing instruction. Investigates a variety of curriculum models. Addresses the role of play to support learning in all areas of development. Introduces the principles of intentional teaching. Focuses on creating and teaching child-guided and teacher-guided learning experiences using early childhood standards. Covers integrating content when planning lessons. Includes curriculum mapping to facilitate integration of state core curriculum standards in early childhood classrooms. Includes 20 hours of field experiences in an early childhood classroom. Course fee of $10 for materials applies.

**EDEC 2630**
**Literacy and Literature for Early Childhood**
**3**
* Prerequisite(s): ACT (or equivalent) composite score of 21+, or (ENGL 1010 or ENGH 1005 or higher) with a minimum grade of C-

Introduces practical aspects of fostering literacy development in young children. Focuses on emerging and early literacy in the home, early care, and education settings. Investigates strategies for holistic integration of various literacy processes. Addresses the role of appropriate children's literature to support early language and literacy development. Examines methods for developing positive attitudes towards reading, writing and books.

**EDEC 2700**
**Early Childhood Practicum**
**3**
* Prerequisite(s): ACT (or equivalent) composite score of 21+, or (ENGL 1010 or ENGH 1005 or higher) with a minimum grade of C-, EDEC 2600 with a B- or higher
* Corequisite(s): EDEC 2720
* Prerequisite(s) or Corequisite(s): EDEC 2610 and EDEC 2620

Provides support-teaching and lead-teaching experiences in partnership preschool programs. Includes planning and implementing learning plans. Focuses on appropriate interactions with children in whole groups, small groups and individually. Addresses positive and effective guidance strategies. Provides parent education opportunities. Provides individual and collaborative reflection on teaching practices. Addresses professional and ethical teaching practices. Requires an assigned field experience with children. Course fee of $25 for materials applies.

**EDEC 2720**
**Early Childhood Assessment**
**2**
* Prerequisite(s): ACT (or equivalent) composite score of 21+, or (ENGL 1010 or ENGH 1005 or higher) with a minimum grade of C-, EDEC 2600 with a B- or higher
* Corequisite(s): EDEC 2700
* Prerequisite(s) or Corequisite(s): EDEC 2610 and EDEC 2620

Addresses assessment of children in an early childhood classroom during the practicum experience. Focuses on authentic assessment of young children, using anecdotal observations, child work samples, photos, checklists, event samplings, and logs. Emphasizes using child assessment to inform curriculum planning. Prepares participants to create child portfolio assessments for use in parent conferences. Includes creating a professional teaching portfolio assessment.

**EDEC 3820**
**Assessment in the PreK-K classroom**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): EDEC 2620

Addresses assessment with children in pre-k or kindergarten classrooms. Focuses on authentic assessment of young children using anecdotal observations, child work samples, checklists, event samplings, and logs. Emphasizes assessment to inform curriculum planning. Addresses the connection between daily child assessment to Utah Early Childhood Core Standards or Utah State Kindergarten Core standards. Prepares participants to create child portfolio assessments for use in conference with parents. Includes personal professional portfolio assessment.

# Edu Elementary Education (EDEL)

**EDEL 1010 (Cross-listed with: EDSC 1010)**
**Introduction to Education**
**2**

Facilitates matriculation into professional education programs. Examines the relationships of teaching, learning, motivating, and instructing in classroom settings. Includes observation in public schools to help students understand these relationships and appreciate the role of professional educators in today's society. Requires substantial commitment of time to off-campus field experiences.

**EDEL 2200**
**Computer Technology in Education**
**2**

Explores the evaluation, selection, and use of technology for children. Develops students' confidence in the use of a variety of technologies. Includes authentic hands-on experiences with digital tools. May be delivered online.

**EDEL 2330**
**Childrens Literature**
**3**

Focuses on current and classic children's literature for ages 0-12. Examines picture books, beginning readers, chapters books and novels. Addresses evaluating the literary quality of children's books in a variety of genres. Covers book awards and selection criteria for quality literature. Examines reading motivation and enjoyment. Investigates controversial issues in children's literature. Canvas Course Mats $30/Pearson applies.

**EDEL 3000**
**Educational Psychology**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Stresses research-based teaching/learning principles used in a classroom setting to enhance learning. Includes study of parent education, involvement, and support strategies, and collaboration with community agencies and professionals. Emphasizes the application of theory to practice with emphasis on teacher-student instructional interaction and teacher/parent/community agency interactions. Designed to help students understand how children develop and learn and how that knowledge should influence classroom teaching.

**EDEL 3050**
**Foundations of American Education**
**2**
* Prerequisite(s): University Advanced Standing and Admission to Professional Education Program or permission of department chair

Provides a broad and comprehensive overview of American education. Facilitates the understanding of current educational practices in America as a result of the social, historical, economic, and political forces that have had influence on the education system. Provides opportunities for students to evaluate their own belief system concerning education.

**EDEL 3100**
**Kindergarten Classroom**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Examines the philosophy of Developmentally Appropriate Practice in connection to interactions with kindergarten children, preparing the classroom environment, and planning/implementing instruction. Addresses the role of play to support learning in all areas of development. Includes strategies for supporting children's social, emotional, and cognitive development. Introduces the principles of intentional teaching. Emphasizes lesson planning in all content areas. Addresses the teacher's responsibility in creating a child-centered environment that supports creativity, critical thinking, communication, and collaboration.

**EDEL 3250**
**Instructional Media**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Integrates technologies into classroom instruction. Prepares future teachers to use technologies to differentiate their instruction to meet the needs of all students. Explores ways technology can be used to revitalize pedagogy. Provides future teachers with the ability to develop lesson activities that empower students to make meaningful connections and develop 21st Century skills.

**EDEL 330G**
**Multicultural Understanding**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Discusses implications of human diversity for major societal institutions. Addresses the impact of diversity in children's education environments, ages birth through adolescence. Focuses on linguistic, cultural, ethnic, familial, religious, developmental, and gender diversity. Emphasizes inclusive, anti-bias classroom strategies for supporting learning and development of diverse students. Encourages examination of personal beliefs and attitudes about diversity.

**EDEL 3350**
**Curriculum Design and Assessment**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Covers curriculum design and assessment for program effectiveness and student achievement. Discusses instructional models, skills and techniques for engaging students in course content and assessing learning. Teaches beginning lesson plan design.

**EDEL 4200**
**Classroom Management I**
**1**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Introduces students to basic classroom management ideas. Provides learning strategies for managing students and materials in the classroom environment. Explores basic classroom management theories and practices.

**EDEL 4210**
**Classroom Management II**
**1**
* Prerequisite(s): EDEL 4200 and University Advanced Standing
* Corequisite(s): Admission to Professional Education Program or permission of department chair

Establishes a foundation for selecting a model to follow for the development of a classroom management plan. Considers the role of the teacher and students in developing rules and establishing habits in a classroom setting.

**EDEL 4230**
**Classroom Management III**
**1**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Presents strategies for routine management of the classroom environment and materials, and the initial set up of a classroom and management plans.

**EDEL 4240**
**Classroom Management IV**
**1**
* Prerequisite(s): University Advanced Standing, EDEL 4230, admission to Professional Education Program or permission of department chair
* Corequisite(s): EDEL 4880, EDEL 4980, and EDEL 4990

Mentors teacher candidates through school-based collaboration with cooperating teacher or intern coach to determine best practices for classroom management. Includes developing a resume, tips on interviewing for a teaching position, and assistance with a teacher performance assessment.

**EDEL 4400**
**Literacy Methods I**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Presents practical and theoretical foundations for fostering reading competence in children, kindergarten through grade 3. Addresses literacy models, research-based reading instruction, and literacy assessments. Includes collaborative activities and public school field experience with children. Emphasizes findings of the National Reading Panel, International Reading Association standards and positions in literacy instruction, as well as Utah Common Core curriculum requirements.

**EDEL 4410**
**Literacy Methods II WE**
**3**
* Prerequisite(s): Admission to Professional Education Program or permission of department chair; University Advanced Standing

Presents practical and theoretical foundations for fostering reading competence in children, grade 3 to 6. Surveys three essential components of learning to read: fluency, vocabulary, and comprehension, as well as reading motivation and academic reading. Addresses the explicit gradual release of responsibility model and think-alouds. Provides collaborative activities and public school field experience where original lesson plans are taught. Emphasizes findings of the National Reading Panel, International Reading Association standards and positions in literacy instruction, as well as Utah Common Core curriculum requirements.

**EDEL 4420**
**Language Arts Methods**
**3**
* Prerequisite(s): (Admission to Professional Education Program or department chair permission) and University Advanced Standing

Presents methods for teaching reading and language art concepts to children, grades K-6. Includes classroom instruction and field experiences with children.

**EDEL 443G**
**Teaching English as a Second Language WE**
**3**
* Prerequisite(s): Admission to Professional Education Program or permission of department chair; University Advanced Standing

Introduces teachers to the teaching of English as a second language not only for linguistic development, but for cognitive, academic and social development. Includes classroom instruction and field experiences with children. Presents methods for promoting reading competence and fostering literacy in limited English-speaking children, grades K-6. Prepares teachers to teach English as a second language in U.S. public schools. Covers both theoretical and applied aspects of second language learning and teaching and provides techniques, activities, strategies and resources to plan instruction for English language learners (ELLs).

**EDEL 4510**
**Elementary Math Methods I**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Introduces methods for teaching math concepts to children, grades K-6. Focuses on developing a mathematical mindset, choosing worthwhile mathematical tasks, and planning lessons. Includes classroom instruction and field experiences with children.

**EDEL 4520**
**Elementary Science Methods**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Presents methods for teaching science concepts to children, grades K-6. Includes classroom instruction and field experiences with children. Includes hands-on laboratory experiences.

**EDEL 4530**
**Elementary Social Studies Methods**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Presents methods of teaching social studies concepts to children, grades K-6. Includes classroom instruction and field experiences with children.

**EDEL 4540**
**Elementary Creative Arts Methods**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Presents methods for integrating music, art, dance, and drama experiences across the curriculum in grades K-6. Includes classroom instruction and field experiences with children.

**EDEL 4550**
**Elementary Math Methods II**
**3**
* Prerequisite(s): University Advanced Standing, EDEL 4510, and admission to Professional Education Program or permission of department chair

Presents methods for teaching math concepts through the contexts of specific mathematical content to children, grades K-6. Includes classroom instruction and field experiences with children.

**EDEL 4620**
**Differentiation for Special Populations**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Includes theory and philosophy for teachers working with diverse populations, grades K-6. Outlines critical need for knowing students' personal, cultural, and community assets, as well as academic strengths and needs. Addresses strategies for pre- and formative assessment determining instruction that differentiates content, learning processes, and products for students' readiness, interests, and learning profiles.

**EDEL 4880**
**Student Teaching--Grades K-6**
**9**
* Prerequisite(s): University Advanced Standing, admission to Professional Education Program or permission of department chair, and successful completion of all other professional coursework.
* Corequisite(s): EDEL 4240, EDEL 4980, and EDEL 4990

Provides a culminating 12-week teaching experience in an elementary classroom, grades K-6. Enhances knowledge, skills, and attitudes in preparation for a teacher preparation assessment. Course Lab fee of $200 for practical experience applies.

**EDEL 491R**
**Independent Study**
**2 to 4**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

For Bachelor Degree seeking students and other interested persons. Offers independent study as directed at the discretion and approval of the department chairperson. May be repeated for a maximum of 3 credits toward graduation.

**EDEL 4980**
**Elementary Education Capstone Seminar**
**1**
* Prerequisite(s): University Advanced Standing, admission to Professional Education Program or permission of department chair, and successful completion of all other professional coursework.
* Corequisite(s): EDEL 4240, EDEL 4880, and EDEL 4990

Integrates previous coursework and current student teaching or internship experience. Includes designing, teaching and assessing a comprehensive learning segment in both literacy and math. Engages preservice teachers in professional analysis and reflection.

**EDEL 4990**
**Teacher Performance Assessment Project**
**2**
* Prerequisite(s): University Advanced Standing, admission to Professional Education Program or permission of department chair, and successful completion of all other professional coursework
* Corequisite(s): EDEL 4240, EDEL 4880, and EDEL 4980

Introduces the teaching and learning cycle: planning, instruction, and assessment. Assists students in completing an authentic assessment tool that shows how they develop and evaluate student learning. Documents authentic practices from the student's teaching experience that address planning, instruction, assessment, analyzing teaching, and academic language to reveal the impact of a candidate's teaching performance on student learning. Course lab fee of $300 for the teacher performance assessment applies.

# Edu Secondary Education (EDSC)

**EDSC 1010 (Cross-listed with: EDEL 1010)**
**Introduction to Education**
**2**

Facilitates matriculation into professional education programs. Examines the relationships of teaching, learning, motivating, and instructing in classroom settings. Includes observation in public schools to help students understand these relationships and appreciate the role of professional educators in today's society. Requires substantial commitment of time to off-campus field experiences.

**EDSC 2000**
**Teacher Education in the Latino Culture**
**2**
* Prerequisite(s): Departmental Approval

Introduces LET students to the teacher education system. Explores what it means to be a teacher in the Latino culture with emphasis on being a teacher in Utah. Examines general education classes along with teacher education classes in order to help students understand their importance in the education system. Demonstrates the importance of culture and ancestry in teacher education.

**EDSC 2010**
**Content Area Tutoring**
**2 to 6**
* Prerequisite(s): Instructor Approval

For those interested in working for tutorial programs on campus. Includes methodology, theory and practice of tutoring and completers will have met the requirements for CRLA tutor certification. Features experience tutoring students who have a variety of learning styles. Prepares teachers to appropriately train and use tutors for all students under their direction.

**EDSC 3000**
**Educational Psychology**
**3**
* Prerequisite(s): Admission to Professional Education Program and University Advanced Standing

Stresses research-based teaching and learning principles used in secondary classroom settings to enhance student learning and motivation. Emphasizes the application of theory to practice. Designed to help students in the professional secondary teacher preparation program prepare for state teacher licensing requirements. Requires service-learning.

**EDSC 3050**
**Foundations of American Education**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Provides a broad and comprehensive overview of American education. Facilitates the understanding of current educational practices in America as a result of the social, historical, economic, and political forces that have had influence on the education system. Provides opportunities for students to evaluate their own belief system concerning education.

**EDSC 3250**
**Instructional Media**
**2**
* Prerequisite(s): Admission to Professional Education Program and University Advanced Standing

Focuses on using technology in 7-12th grade and addresses the integration of technology in all curricular areas for all students. Investigates theoretical and practical issues surrounding the use of multimedia, Internet resources, Web 2.0 functionality, educational software, and social networking within the curriculum. Examines applications and processes of Educational Technology, 21st Century learning skills, and the impact of national educational technology standards for content areas to teacher pedagogy and development in the classroom.

**EDSC 4200**
**Classroom Management I**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Provides effective classroom management procedures (including classroom setup). Develops strategies to build strong student-teacher relationships and classroom management philosophy, rules, and consequences. Identifies strategies for 1st day success and strategies to handle behavior problems encountered in the classroom.

**EDSC 4250**
**Classroom Management II**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair
* Corequisite(s): (EDSC 4850 and EDSC 4990) or (EDSP 4990 and EDSP 4885 or EDSP 4895)

Develops strategies for planning and conducting instruction. Establishes appropriate strategies for handling chronic misbehavior and students with behavioral or emotional disorders. Explores practical and appropriate responses, including internal control and behavior modification strategies with an emphasis on self-monitoring. Prepares preservice secondary teachers to interact well with parents.

**EDSC 4440**
**Content Area Literacies**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Prepares preservice secondary teachers to facilitate reading, writing and study skills achievement in the content areas at the secondary school level. Includes field experience in public schools.

**EDSC 445G**
**Multicultural Instruction ESL**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Prepares pre-service secondary teachers to understand and facilitate achievement in the content areas for ethnically and linguistically diverse students at the middle school and high school level. Covers foundations of multicultural education and instructional methodology for adaptations for ethnically and linguistically diverse students. Emphasizes inclusive, anti-bias classroom strategies for supporting learning and development of diverse students. Encourages examination of personal beliefs and attitudes about diversity. Introduces teachers to the teaching of English as a second language not only for linguistic development, but for cognitive, academic and social development. Covers both theoretical and applied aspects of second language learning and teaching and provides techniques, activities, strategies and resources to plan instruction for English language learners (ELLs).

**EDSC 455G**
**Secondary Curriculum Instruction and Assessment**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Examines state standards to prepare preservice secondary teachers to write objectives, lesson plans, and units using appropriate models of instruction and assessment. Includes a field experience component.

**EDSC 4850**
**Student Teaching Secondary**
**4 to 10**
* Prerequisite(s): University Advanced Standing, admission to Professional Education Program or permission of department chair, and successful completion of all other professional coursework
* Corequisite(s): EDSC 4250 and EDSC 4990

Provides a thirteen-week teaching experience in a secondary classroom, grades 7-12. Includes application of knowledge, skills, and attitudes derived in previous course work and program experience. Requires students to be recommended for a secondary education license from the Utah State Board of Education. Course Lab fee of $200 for practical experience applies.

**EDSC 491R**
**Independent Study**
**2 to 4**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

For Bachelor Degree seeking students and other interested persons. Offers independent study as directed at the discretion and approval of the department chairperson. May be repeated for a maximum of 4 credits toward graduation.

**EDSC 4990**
**Teacher Performance Assessment Project WE**
**2**
* Prerequisite(s): Admission to Professional Education Program or permission of department chair, and successful completion of all other professional coursework; University Advanced Standing
* Corequisite(s): EDSC 4250 and EDSC 4850

Introduces the teaching and learning cycle: planning, instruction, and assessment. Assists students in completing an authentic assessment tool that shows how they develop and evaluate student learning. Documents authentic practices from the student's teaching experience that address planning, instruction, assessment, analyzing teaching, and academic language to reveal the impact of a candidate's teaching performance on student learning. May be Graded Credit/No Credit. Course lab fee of $300 for edTPA Performance Assessment applies.

# Edu Special Education (EDSP)

**EDSP 2840**
**Instruction and Assistive Technology**
**2**

Provides students with an overview of the field of instructional and assistive technology (IT and AT) and an understanding of how to successfully integrate varied uses of technology into their specific learning environment. Develops students' proficiencies for evaluating technology needs and teaching technology-enhanced learning activities to support students with diverse needs in the classroom.

**EDSP 3000**
**Educational Psychology**
**3**
* Prerequisite(s): Admission to Professional Education Program and University Advanced Standing

Stresses research-based teaching and learning principles used in classroom settings to enhance student learning and motivation. Emphasizes the application of theory to practice. Helps students in the professional teacher preparation program prepare for state teacher licensing requirements. Requires service-learning.

**EDSP 340G**
**Exceptional Students**
**2**

Covers the role of teachers in the inclusion of exceptional children, working with parents and specialists, and in developing individual educational plans for exceptional children. Introduces characteristics and special needs of exceptional children who have physical, emotional, social, mental, or health exceptionalities. Stresses curriculum modification planning necessary for special needs students. Addresses ethical behaviors specific to teaching exceptional children. Requires ten hours of field work.

**EDSP 4100**
**Instructional Strategies and Program Management for Students with Mild/ Moderate Disabilities**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Provides an overview of the individual education plan (IEP), service delivery patterns, assessment and programming variables, organizational variables, and instruction and classroom management models necessary for teaching students with mild and moderate disabilities. Provides strategies in how to select, adapt, and use a repertoire of evidence-based instructional strategies to advance learning.

**EDSP 4110**
**Special Education Law/Policies/Procedures**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Provides overview of the role of the federal, state, and local government in special education issues with special emphasis on case and regulatory law, including Utah regulation. Focuses on six major principles of the Individuals with Disabilities Education Act as they relate to the free and appropriate public education for all students.

**EDSP 4120**
**School to Post-School Transition Planning**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Provides students with knowledge, strategies, and resources necessary to prepare students with disabilities for the transition from school to postsecondary education, employment, community participation, and independent living. Provides skills for transition planning and helping students access services necessary to reach their desired outcomes and become as independent as possible. Emphasizes the person-centered planning process, which embeds decisions based on students' preferences, interests, and abilities.

**EDSP 4130**
**Math Instruction for Students with Mild/ Moderate Disabilities**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair
* Corequisite(s): EDSP 4131

Provides specific strategies and techniques to use in teaching students with learning difficulties both in pull-out special educational settings and in more inclusive general education settings. Provides math curricula aligned with the Utah Core standards using Utah Effective Teaching standards. Emphasizes how to implement targeted interventions in Math at the Tier 3 level for students who are not making progress at the Tier 1 and Tier 2 interventions.

**EDSP 4131**
**Math Practicum**
**1**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair
* Corequisite(s): EDSP 4130

Provides students the opportunity spend time in practicum placements to practice applying skills, competencies, and techniques to teach math to students with mild or moderate disabilities. Provides students with an opportunity to work with practicum coordinators to analyze and solve instructional and management problems by making data-based decisions.

**EDSP 4135**
**Reading and Writing Instruction for Students with Mild/Moderate Disabilities K-12**
**2**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair
* Corequisite(s): EDSP 4136

Provides specific strategies and techniques to use in teaching students with learning difficulties both in pull-out special educational settings and in more inclusive general education settings. Features reading and writing curricula aligned with the Utah Core standards using Utah Effective Teaching standards. Emphasizes evidence-based practices and empirically supported instruction for teaching reading and writing to students with disabilities combined with data based decision making.

**EDSP 4136**
**Reading Practicum**
**1**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair
* Corequisite(s): EDSP 4135

Provides students practicum placements to practice applying skills, competencies, and techniques to teach reading and writing to students with mild or moderate disabilities. Provides students with practicum coordinators to analyze and solve instructional and management problems by making data-based decisions.

**EDSP 4140**
**Collaboration and Consultation with Parents and School Staff WE**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Provides strategies for collaborating and communicating with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways. Provides a review of interagency collaboration and consultation for life skills. Emphasizes creating multidisciplinary teams and professional learning communities who are prepared to assist parents and other teachers in collaborative problem solving.

**EDSP 4160**
**Assessment and Evaluation in Special Education**
**3**
* Prerequisite(s): University Advanced Standing and admission to Professional Education Program or permission of department chair

Provides an overview of multiple methods of assessment. Presents the connection between gathering assessment information and applying results to decisions regarding students' eligibility for special education services. Includes administering eligibility assessment tests, interpreting results, and communicating results of assessment tools.

**EDSP 4170**
**Instruction in Life Skills for Students with Severe and Significant Disabilities**
**3**
* Prerequisite(s): (Admission to Professional Education Program or permission of department chair) and University Advanced Standing

Provides special education pre-service teachers with knowledge and understanding of the characteristics and needs of individuals with severe and significant disabilities. Includes Instructional programs and practices for Students with Moderate and Severe Disabilities. Evaluates procedures for data based evaluation of student progress.

**EDSP 4180**
**Curriculum and Instruction for Students with Severe and Significant Disabilities**
**3**
* Prerequisite(s): (Admission to Professional Education Program or permission of department chair) and University Advanced Standing

Examines the history of instructional models and characteristics for students with moderate and severe disabilities. Creates instruction and assessment that includes accommodations, adaptations and materials appropriate for teaching individuals with moderate and severe disabilities. Evaluates methods of assessment for purposes of classification and educational placement.

**EDSP 4200**
**Classroom Management I**
**2**
* Prerequisite(s): (Admission to Professional Education Program or permission of department chair) and University Advanced Standing

Provides effective classroom management procedures (including classroom setup). Develops strategies to build strong student-teacher relationships and classroom management philosophy, rules, and consequences. Identifies strategies for 1st day success and strategies to handle behavior problems encountered in the classroom.

**EDSP 4250**
**Classroom Management II**
**2**
* Prerequisite(s): (Admission to Professional Education Program or permission of department chair) and University Advanced Standing

Develops strategies for planning and conducting instruction. Establishes appropriate strategies for handling chronic misbehavior and students with behavioral or emotional disorders. Explores practical and appropriate responses, including internal control and behavior modification strategies with an emphasis on self-monitoring. Prepares preservice teachers to interact well with parents.

**EDSP 4440**
**Content Literacy**
**3**
* Prerequisite(s): (Admission to Professional Education Program or permission of department chair) and University Advanced Standing

Prepares preservice teachers to facilitate reading, writing and study skills achievement in the content areas. Includes field experience in public schools.

**EDSP 445G**
**Multicultural Education/ESL**
**3**
* Prerequisite(s): (Admission to Professional Education Program or permission of department chair) and University Advanced Standing

Prepares pre-service teachers to understand and facilitate achievement for ethnically and linguistically diverse students in the classroom. Covers foundations of multicultural education and instructional methodology for adaptations for ethnically and linguistically diverse students. Emphasizes inclusive, anti-bias classroom strategies for supporting learning and development of diverse students. Encourages examination of personal beliefs and attitudes about diversity. Introduces teachers to the teaching of English as a second language not only for linguistic development, but for cognitive, academic and social development. Covers both theoretical and applied aspects of second language learning and teaching and provides techniques, activities, strategies and resources to plan instruction for English language learners (ELLs).

**EDSP 455G**
**Curriculum Design and Assessment**
**3**
* Prerequisite(s): (Admission to Professional Education Program or permission of department chair) and University Advanced Standing

Examines state standards to prepare preservice teachers to write objectives, lesson plans, and units using appropriate models of instruction and assessment. Includes a field experience component.

**EDSP 4885**
**Special Education Student Teaching--Grades K-6**
**4 to 10**
* Prerequisite(s): Admission to Professional Education Program, Successful completion of all professional education courses, and University Advanced Standing
* Corequisite(s): EDSC 4250 and EDSP 4990

Provides a 13-week teaching experience in a special education classroom setting, grades K-6. Provides consultation and feedback through observation forms administered by their university consultant and student teaching mentor. Monitors application of knowledge, skills, and attitudes derived in previous course work and program experience. May be graded Credit/No Credit. Course Lab fee of $200 for practical experience applies.

**EDSP 4895**
**Special Education Student Teaching--7-12**
**8**
* Prerequisite(s): Admission to Professional Education Program or permission of department chair, successful completion of all other professional coursework, and University Advanced Standing
* Corequisite(s): EDSC 4250 and EDSP 4990

Provides a 13-week teaching experience in a special education classroom setting, grades 7-12. Provides consultation and feedback through observation forms administered by their university consultant and student teaching mentor. Monitors application of knowledge, skills, and attitudes derived in previous course work and program experience. Course Lab fee of $200 for practical experience applies.

**EDSP 4990**
**Teacher Performance Assessment Project WE**
**2**
* Prerequisite(s): University Advanced Standing, admission to Professional Education Program or permission of department chair, and successful completion of all other professional coursework
* Corequisite(s): EDSC 4250 and (EDSP 4885 or EDSP 4895)

Introduces the teaching and learning cycle: planning, instruction, and assessment. Assists students in completing an authentic assessment tool that shows how they develop and evaluate student learning. Documents authentic practices from the student's teaching experience that address planning, instruction, assessment, analyzing teaching, and academic language to reveal the impact of a candidate's teaching performance on student learning. May be graded credit/no credit. Course lab fee of $300 for edTPA Performance Assessment applies.

# Education Curr and Instruction (EDUC)

**EDUC 5100**
**Personal Finance in Education**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Focuses on teaching how to better manage personal finances. Requires students to develop lesson plans on personal financial planning, including goal setting, time value of money, personal financial statements, cash management, credit cards, credit, loans, buying skills, insurance, taxes, housing, investment alternatives, estate and retirement plans.

**EDUC 520R**
**Special Topics in Education**
**.5 to 3**
* Prerequisite(s): University Advanced Standing

Provides professional educators, administrators, policy makers, and interested members of the public with increased understanding of the latest research affecting K-12 education. Focuses on helping participants keep abreast of effective teaching strategies and curriculum design, alternative learning structures, innovative teaching technologies, educational policies and legislation, etc. May be repeated as many times as desired.

**EDUC 5300**
**Content-based Curriculum and Instruction and Assessment**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides a foundation in curriculum theory and practice. Introduces instructional design theories, principles and models. Outlines the historical development, current processes and practices of curriculum development, instructional design, implementation, and assessment. Examines applications and processes of curriculum decision making and the impact of national standards on curriculum design and development at the classroom, district, state, and national levels. Requires 15 field experience/practicum hours in addition to class time.

**EDUC 5340**
**Methods of Second Language Acquisition for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers to teach content in students' second language in U.S. public schools. Includes applied aspects of second language learning and teaching. Provides general and special educators, and dual language or second language specialists the techniques, activities, strategies, and resources needed to plan instruction for second language learners. Emphasizes the development of teaching skills in language development, literacy, and content-area instruction for K-12 students. Requires 15 hours of field experience/practicum hours as part of course assignments.

**EDUC 5350**
**Theories of Second Language Acquisition for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines the intricate web of variables that interact in the second language learning process, including linguistic, cognitive, social, cultural, and political factors. Examines each of these factors in turn and develops understanding of how they work together to foster or inhibit successful second language learning and acquisition. Requires 15 hours of field experience/practicum hours as part of course assignments. Course fee of $45 applies.

**EDUC 5360**
**Multicultural Education for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Identifies the connections between language, culture, and identity. Examines multicultural education in the classroom through a focus on the historical, sociological, and philosophical foundations of education in the development of the United States and its education system. Outlines methods to create multicultural / multilingual curricula with a special focus on culturally/ linguistically-responsive instruction and assessment techniques.

**EDUC 5370**
**Assessment for Second Language Learners for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines methods and practice for the testing of bilingual students at the classroom level. Focuses on assessment of language proficiency in English language learners (ELL) and the assessment of academic achievement of bilingual students in specific content areas. Develops and reviews tasks (test items), response formats, scoring systems, and test administration procedures as critical to attaining validity and fairness. Examines major current testing policies for linguistic minority students. Practicum required. Course fee of $45 applies.

**EDUC 5380**
**Second Language Literacy Development for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides teachers with a theoretical framework for understanding literacy and linguistic development of students learning in a second language. Provides an understanding of the literacy instructional needs of these students. Increases knowledge and skill in instructional practices that support second language literacy learning.

**EDUC 5390**
**Family and Community Involvement for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides strategies classroom teachers may use for facilitating community participation in the education of minorities. Examines how the teacher's role impacts the adjustment of students to the classroom environment. Studies the techniques of family-school collaboration as well as constructive methods of evaluation. Practicum required. Course fee of $45 applies.

**EDUC 5500**
**Teaching K-6 Numbers and Operations for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Designed for K-6 teachers. Covers the content of Number and Operations to develop a comprehensive understanding of our number system and relate its structure to computation, arithmetic, algebra, and problem solving. Includes number, number sense, computation, and estimation through a coordinated program of activities that develop number concepts and skills. Special attention in this course will be given to planning lessons in the mathematical content of number and operations and problem solving strategies. Emphasizes interpreting and assessing students' work and learning, and the integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs). Course fee of $45 applies.

**EDUC 5510**
**Teaching K-6 Rational Numbers and Proportional Reasoning for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides practicing teachers a deeper understanding of rational numbers, operations with rational numbers, proportionality, and instructional strategies to facilitate the instruction of this content for elementary students. Course fee of $45 applies.

**EDUC 5520**
**Teaching K-6 Algebraic Reasoning for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides practicing teachers a deeper understanding of algebraic expressions, equations, functions, real numbers, and instructional strategies to facilitate the instruction of this content for elementary students. Course fee of $45 applies.

**EDUC 5530**
**Teaching K-6 Geometry and Measurement for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides practicing teachers a deeper understanding of the geometry and measurement content that exists in the state core and instructional strategies to facilitate the instruction of this content. Special attention in this course will be given to applying content understanding in geometry and measurement to classroom practice, interpreting and assessing students' work and learning, and to integrating NCTM process standards and the Utah Intended Learning Outcomes (ILOs) into instruction. Course fee of $45 applies.

**EDUC 5540**
**Teaching K-6 Data Analysis and Problem Solving for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Develops a firm problem-solving foundation. Using skills and strategies applied in mathematical contexts practicing teachers will learn to think, work with others, present solutions orally to the whole class, and write up detailed solutions. Provides practicing teachers a deeper understanding of probability and data representation and analysis. Special attention in this course will be given to applying content understandings to classroom practice, to interpreting and assessing students' work and learning, and to integrating NCTM process standards and the Utah Intended Learning Outcomes (ILOs) into instruction.

**EDUC 5550**
**Teaching K-6 Assessment and Intervention for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides practicing teachers a deeper understanding of the various types of assessment and their appropriate use for guiding instruction, intervention, and evaluation of student learning of mathematics content. Special attention will be given to the application of mathematical content understandings to planning for classroom instruction and assessment of student learning that is consistent with NCTM process standards and Utah instructional learning outcomes.

**EDUC 5600**
**Learning Development and Individual Learning Differences in Gifted Education**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Introduces the characteristics and needs of gifted children and youth. Includes types of programs available to gifted children and youth, the historical and philosophical foundations required of professionals in the field, the history of the gifted child movement, and advocacy for gifted children and youth.

**EDUC 5610**
**Social and Emotional Needs of the Gifted**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides an introduction to creating safe learning environments that foster emotional well-being, positive social interaction, leadership, and cultural understanding for success in a diverse society. Develops knowledge of the impact of giftedness and diversity on social-emotional development. Provides support on how to design environments, within a continuum of services, that encourage independence, motivation, and self-efficacy of individuals from all backgrounds.

**EDUC 5620**
**Assessment in Gifted Education**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines how to collect multiple types of assessment information so that all students are able to demonstrate gifts and talents. Develops competence in differentiating curriculum and instruction by using pre- and post-, performance-based, product-based, and out-of-level assessments. Promotes the importance of using non-biased, technically adequate, and equitable approaches in order to identify students from diverse backgrounds for gifted programs.

**EDUC 5630**
**Theory into Practice in Gifted and Talented Education**
**2**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers to understand societal influences on the development of curricula. Helps teachers to develop long- and short-range units of instruction anchored in both general and special curricula for gifted and talented students, taking into consideration each individual's abilities and needs, the learning environment, and cultural and linguistic factors.

**EDUC 5635**
**Methods and Materials in Gifted Education for Practictioners**
**2**
* Prerequisite(s): Utah Teaching License or permission from the Dean of the School of Education

Requires teacher-participants to locate, create, and or adapt curricular materials needed to implement differentiated instruction for gifted and talented learners. Helps teachers develop materials and methods of instruction that will encourage creative problem-solving and should be adaptable for a variety of student abilities and needs, the learning environment, and cultural and linguistic factors that may influence instruction.

**EDUC 5640**
**Improvement of Curriculum Instruction in the Content Areas**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides research-based models of curriculum and instruction related to students with gifts and talents. Includes responding to student needs by planning, selecting, adapting, and creating culturally relevant curriculum and by using a repertoire of evidence-based instructional strategies to ensure specific student outcomes. Explains the purpose of using a comprehensive and sequenced core curriculum that is aligned with local, state, and national standards, and how to differentiate and expand it in order to meet the unique needs of students with gifts and talents. Develops competence in selecting, adapting, and planning for the use of a variety of evidence-based instructional strategies to advance learning of gifted and talented individuals.

**EDUC 5650**
**Leadership in Gifted and Talented Education**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Prepares teachers to effectively use leadership principles to collaborate with students and their families, other educators, and related service providers to advocate for individuals with gifts and talents as they promote the learning and well-being of individuals with gifts and talents across settings and diverse learning experiences.

**EDUC 5660**
**Reading Assessments and Instructional Interventions for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps practicing teachers become proficient in developing and using a variety of formal and informal assessments and instructional procedures to increase or accelerate students' reading achievement as appropriate. Prepares teachers to screen for reading problems, diagnose reading strengths and needs, and monitor progress to ensure students achieve optimal growth in reading within the context of a Multi-Tiered System of Supports. Develops procedures for gathering, analyzing, and interpreting data to inform instruction, and presents an overview of methods for communicating findings to stakeholders.

**EDUC 5661**
**Foundations of Literacy**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps practicing teachers acquire foundational and declarative knowledge about literacy instruction, including historical perspectives on reading instruction, an introduction to theories and models of literacy acquisition, and discussions of research related to lifelong literacy and its instructional implications. Requires students to examine the history of the field of literacy, including the debates and various stances of reading researchers and the instructional directives developed as a result of the research.

**EDUC 5662**
**Instruction with Literature and Informational Texts for Children and Young Adults**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Provides an overview of literary and informational texts for children and young adults, with emphasis on classic and recent publications, and their appropriate use in the classroom. Discusses important authors, historical context, and background, and considers current trends and classroom applications in literacy.

**EDUC 5663**
**Content Area Reading and Writing Instruction for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps practicing teachers develop an in-depth understanding of the research findings, issues, principles, and practices related to exemplary, research-based literacy instruction in the content areas.Prepares teachers to provide every student with meaningful and engaging opportunities to learn high-level skills through reading, writing, and speaking while working with graphics and texts, including images, video, and audio, in the K-12 curriculum. Teaches how to evaluate texts in various content areas or topics to identify the qualitative and quantitative features of a text and address reader and task considerations.

**EDUC 5664**
**Instructional Implications of Literacy Development for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Focuses on emergent literacy development for students in grades K-12 and how that development is well-designed for appropriate literacy learning environments, experiences, and instructional interventions for emergent language learners. Covers the history, major perspectives, and theories about how students understand and develop literacy. Develops understandings of developmentally appropriate instruction, reading behaviors, and literacy development within the larger framework of the communicative arts, i.e., oracy, written expression, reading, spelling, handwriting, listening, the visual and performing arts, and the social community, i.e., family, socio-economic conditions, culture, ethnicity, language, etc.

**EDUC 5665**
**Reading Comprehension Instruction for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps practicing teachers acquire knowledge and understanding of current theories and models that impact reading comprehension and apply that knowledge in instruction. Focuses on understanding reading comprehension, increasing the range, quality and complexity of reading materials used by students, and supporting student responses to text. Builds teachers' ability to help their students use texts efficiently and effectively to develop and express complex, critical thinking.

**EDUC 5666**
**Effective Writing Instruction for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines theories, concepts, and methodologies that promote the development of strategic writers. Prepares teachers to provide research-based methods for teaching K-12 students to develop a range of writing skills and applications including how to compose opinion/argumentation, informational/expository, and narrative writing. Facilitates teachers' ability to assess K-12 student writing.

**EDUC 5700**
**Foundations of Dual Langage Immersion Education**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Presents a historical overview and the theoretical and research foundations for dual language and immersion education. Emphasizes the practical application of theory and research in immersion programs.

**EDUC 5710**
**Instructional Strategies and Curriculum and Classroom Management for the Elementary Classroom**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Designed to acquaint secondary teachers seeking a K-12 Dual Language Immersion (DLI) endorsement with instructional strategies and classroom management for the elementary classroom. Focuses on helping students to understand the elementary curriculum and plan units of instruction, and to build a repertoire of teaching strategies, tasks, and resources for use in the elementary classroom. Requires 15 hours of field experience/practicum hours in a DLI classroom in addition to class time.

**EDUC 5750**
**Energy in STEM for Elementary Teachers**
**3**
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Provides teachers with a deep and useful understanding of energy and the nature of how students use concepts of energy to make sense of phenomena across life, earth, and physical science. Enhances teacher insights into: 1) how matter and energy interact, 2) the relationships of energy to forces and interactions within fields, and 3) pedagogical content knowledge around teaching and learning about energy. Also connects knowledge of energy concepts to practices in technology, engineering, and mathematics.

**EDUC 5760**
**Force in STEM for Elementary Teachers**
**3**
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Provides teachers with a deep and useful understanding of force and the nature of how students use concepts of force to make sense of phenomena across life, earth, and physical science. Enhances teacher insights into: 1) how force, matter and energy interact, 2) the relationship of force to energy and interactions within fields, and 3) pedagogical content knowledge around teaching and learning about force. Also connects knowledge of concepts of force to practices in technology, engineering and mathematics.

**EDUC 5770**
**Matter in STEM for Elementary Teachers**
**3**
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Provides teachers with a deep and useful understanding of matter and the nature of how students use concepts of matter to make sense of phenomena across life, earth, and physical science. This understanding enhances teacher insights into: 1) how matter and energy interact, 2) the relationships of matter to forces and interactions within fields, and 3) pedagogical content knowledge around teaching and learning about matter. Also connects knowledge of concepts of matter to practices in technology, engineering and mathematics.

**EDUC 5780**
**Nature of Science and Engineering**
**3**
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Explores the nature of science using science and engineering principles, practices, and processes. Explores applications to Science, Technology, Engineering and Mathematics using learner-based pedagogy. Develops teaching practices to assist participants in educating K-6 students in selected Earth and Life Science Standards.

**EDUC 5790**
**STEM Practices with a Focus on Technology and Problem-Based Learning**
**3**
* Prerequisite(s): Recommended: Education Majors or Licensed Educators

Engages participants in developing meaningful understandings of problem-based approaches to teaching, learning, and the integration of STEM practices across the curriculum using appropriate technology. Requires the development and creation of problem-based, hands-on experiences.

**EDUC 5800**
**Cognition Education and Technology for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines the increasingly pervasive role of electronic media in educating and socializing young students, especially as it affects the K-12 classroom. Explores the range of content available to these students, their families, and their classrooms and reviews research on the role of media in shaping individual identity and affecting school performance; analyzes public policies that affect teachers and students.

**EDUC 5810**
**Instruction Curriculum & Educational Leadership in the Digital Age for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Examines issues surrounding the use of technology in curricular and instructional design, especially in designing coursework for an online learning environment. Requires students to incorporate appropriate digital media formats to create an online learning environment. Addresses issues of school leadership, as participants may become mentors in the area of educational technology.

**EDUC 5820**
**Designing and Producing Media for Instruction for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Helps students produce educational media materials for their particular classroom. Requires students to collaborate with others to design, produce, test, and revise a unique project tailored for their instructional practice. Requires students to use a variety of digital tools to conceptualize, design, fashion, and evaluate media projects.

**EDUC 5830**
**Digital Models of Instruction for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Focuses on using instructional design and Web page design principles for specific classroom populations. Examines the best instructional use of online options, including flipped and hybrid course design, and gaming. Requires completion of an instructional design plan for an instructional unit of the participants' choice for a learner group of their choice.

**EDUC 5840**
**Universal Design for Learning for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Focuses on universal design for learning (UDL) that differentiates curricula and learning environments for a wide range of student abilities and disabilities. Requires students to learn to apply the UDL approach in designing differentiated learning experiences for their classrooms using educational technology.

**EDUC 5850**
**Digital Course Design Capstone for Practitioners**
**3**
* Prerequisite(s): Professional educator license or permission of the Dean of the School of Education

Teaches students to design and create media for content-specific units of instruction. Requires students to use technology specific to a given discipline, and to incorporate instructional design and digital media to create an online unit of study.

**EDUC 6010**
**ABA Concepts and Principles**
**3**
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education

Provides students with a strong foundation in the basic concepts and principles of ABA, including the history and philosophical assumptions of behavior analysis and autism spectrum disorder. Graduate fee of $515 applies.

**EDUC 6020**
**Ethics and Professional Competencies in Applied Behavioral Analysis**
**3**
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education

Defines ethical responsibilities required in the field of applied behavior analysis. Introduces policy and practice related to informed consent, protection of confidentiality, selection of least intrusive and least restrictive behavior change procedures within the context of case methodology. Emphasizes legal issues and ethical decision making processes. Covers professional, disciplinary, and ethical standards for Board Certified Behavior Analyst certification in depth. Graduate fee of $515 applies.

**EDUC 6030**
**Developing and Changing Behaviors**
**3**
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education

Explains various behavioral assessments and intervention strategies. Focuses on single subject designs and procedures for measuring behavior, displaying data, and interpreting results. Examines ways to evaluate and analyze behavior change. Graduate fee of $515 applies.

**EDUC 6031**
**Interventions in Schools**
**3**
* Prerequisite(s): Matriculation into School of Education graduate program or approval of graduate program director

Introduces developmentally relevant counseling treatment or intervention plans. Includes development of measurable outcomes for clients. Teaches evidence-based counseling strategies and techniques for prevention and intervention. Provides strategies to promote client understanding of and access to a variety of community-based resources. Emphasizes suicide prevention models and strategies. Explores crisis intervention, trauma-informed, and community-based strategies, such as Psychological First Aid.

**EDUC 6032**
**Career Counseling**
**3**
* Prerequisite(s): Matriculation into School of Education graduate program or approval of graduate program director

Prepares candidates to provide college and career guidance to students. Implements indicators and interventions for college readiness to promote the Utah College and Career Readiness Mindsets and Competencies. Encourages collaboration with administrators, teachers, and parents to promote a college-going mission across the school, community, and organizational landscape to create a school-wide college-going culture to prepare students for post-secondary education and careers. Utilizes data to identify gaps in access, attainment, and achievement to remove systemic barriers to college access.

**EDUC 6040**
**Measurement in Single Subject Design**
**3**
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education

Introduces methods for collection and interpretation of various types of data. Focuses on the importance of making data-driven decisions for behavior change procedures based on functional relationships. Graduate fee of $515 applies.

**EDUC 6050**
**Functional Behavior Assessment and Treatment**
**3**
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education

Focuses on using methods and tools for selecting and defining target behaviors and for behavior measurement. Provides experience in methods to develop new behavior using imitation, modeling, shaping, and chaining and methods to decrease behaviors using extinction, differential reinforcement and antecedent interventions. Reviews and extends the study of functional behavior assessment, verbal behavior, generalization and maintenance of behavior change. Graduate fee of $515 applies.

**EDUC 6060**
**Advanced Topics in Applied Behavior Analysis**
**3**
* Prerequisite(s): Admission to the Master of Education program or permission of the Dean of the School of Education

Focuses on advanced topics in behavior analysis, including current research, changes in relevant legislation, emerging areas of behavior analysis, measurement technology, school applications, teaching methodology, innovative interventions, and ethics. Graduate fee of $515 applies.

**EDUC 6070**
**Training Supervision and Performance Monitoring in Applied Behavior Analysis**
**3**
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean

Examines the training, supervision, and performance monitoring from an applied Behavior Analytic perspective. Provides students with a strong foundation in effective training as it applies to parents, staff, and supervisees. Develops competency in supervision of ABA interns. Provides an overview of systems-level analysis, including organizational assessment, quality assurance, performance, and outcome monitoring. Graduate fee of $515 applies.

**EDUC 6080**
**Cognition, Education, and Technology**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Examines the increasingly pervasive role of electronic media in educating and socializing young students. Explores the range of content available to these students and their families; documents the developing child's patterns of use and understanding of media; examines theories and methods for assessing media effects; reviews research on the role of media in shaping individual identity and responses to social issues; and analyzes public policies that affect teachers and students.

**EDUC 6081**
**Instruction, Curriculum and Educational Leadership in the Digital Age**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Examines issues surrounding teachers and the use of technology in curricular and instructional design. Emphasizes designing coursework for an online learning environment. Explores the history and models of instructional design and teaches incorporation of appropriate digital media formats to create an online learning environment. Introduces the integrated nature of Technological Pedagogical Content Knowledge (TPACK) and the National Educational Technology Standards (NETS) as frameworks for identifying and applying the knowledge needed to teach and assess student learning with technology. Addresses issues of leadership, as students may become mentors in the area of educational technology.

**EDUC 6082**
**Designing and Producing Media for Instruction**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Designed to help students produce educational media materials. Offers students the opportunity to collaborate with others to design, produce, test, and revise a unique project for television, multimedia, the web, mobile applications, video games, radio, photography, or other formats. Teaches the use of a variety of tools and formats, including digital storytelling, video, online research tools, WebQuests, advanced Excel, Google tools, Web 2.0, and GPS. Requires the conceptualization, design, fashioning, and evaluation of media projects. Explores several analytic frameworks drawn from both instructional design and education research.

**EDUC 6083**
**Digital Models of Instruction**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Focuses on using instructional design and Web page design principles. Examines the best instructional use of online options, including flipped and hybrid course design, and gaming. Requires completion of an instructional design plan for an instructional unit of the participants' choice for a learner group of their choice.

**EDUC 6084**
**Universal Design for Learning**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Focuses on universal design for learning (UDL) that creates curricula and learning environments that are designed to achieve success for a wide range of student abilities and disabilities. Covers the UDL approach, which takes advantage of advances in the fields of cognitive neuroscience of learning, educational technologies, and multimedia. Teaches how to apply the UDL approach in designing differentiated learning experiences using educational technology.

**EDUC 6085**
**Digital Course Design Capstone**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Teaches students to design and create media for content-specific units of instruction. Covers the use of technology specific to a given discipline, and teaches how to incorporate instructional design and digital media to create an online unit of study.

**EDUC 6100**
**Research Methodology**
**3**
* Prerequisite(s): Matriculation into a School of Education graduate program or matriculation into Master of Science-Mathematics, M.S., program, or approval of graduate program director.

Introduces the principal methodologies used in research in education. Presents basic information about the purposes of research, the scientific method, and basic qualitative and quantitative research. Identifies methods for locating, reading, interpreting and using research reports and in applying measurement issues and research methods to classroom problems. Investigates teacher research practices and ways it can be used to study teaching and teacher education.

**EDUC 6110**
**Applied Statistics for Education**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean

Introduces elementary statistics in educational settings and includes descriptive statistics, sampling, central tendency, and inferential methods. Emphasizes reading, understanding and evaluating statistics in research reports.

**EDUC 6120**
**Personal Leadership and Organizational Design**
**3**
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration or Admission to Educational Leadership, Graduate Certificate leading to USBE Education Leadership License Area of Concentration

Introduces students to critical concepts about leadership theories and practice. Provides both historical perspective and current understanding to approaches, methods, and practices of leaders. Provides insight into how leadership skills and organization strategies produce increased productivity and better learning/working environments for P-12 students' academic success and well-being. Provides opportunity for class members to examine their own beliefs and develop a personal model of leadership. Emphasizes attributes that promote integrity, fairness, transparency and trust.

**EDUC 6130**
**School Operations and Management-Finance/Law/Safety**
**3**
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration or Admission to Educational Leadership, Graduate Certificate leading to USBE Education Leadership License Area of Concentration

Explores school finance, law, and safety as primary themes in school management and operations. Provides an overview of current K-12 management conditions and theory. Discusses these themes 1) best management theories and practices for not-for-profit organizations, 2) rules and regulations that govern school finance, 3) court rulings in areas of student speech, discipline, and other points of tensions in public schools, and 4) school organization to keep students physically and emotional safe.

**EDUC 6140**
**Instructional Leadership and Data-based Decision Making**
**3**
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration or Admission to Educational Leadership, Graduate Certificate leading to USBE Education Leadership License Area of Concentration

Advances student understanding, skill, and capacity to facilitate coherent systems of curriculum development, impactful instruction, valid assessment. Builds professional capacity for data interpretation and decision making for the success and well-being of students and faculty.

**EDUC 6150**
**School Operations and Management-Communication/Planning/HR/Evaluation**
**3**
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration or Admission to Educational Leadership, Graduate Certificate leading to USBE Education Leadership License Area of Concentration

Explores school communication, planning, human resources, and evaluation as primary themes in school management and operations. Provides an overview of current K-12 management conditions and theory. Reviews the role of legislation, policy, and leadership on the primary themes. Prepares students to communicate with stakeholders, strategically plan for school improvement, know best practices in the hiring and retention of public school staff.

**EDUC 6160**
**Leading Professional Learning Communities**
**3**
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration or Admission to Educational Leadership, Graduate Certificate leading to USBE Education Leadership License Area of Concentration

Introduces students to critical concepts about building a school culture that leverages the strengths of collective solutions. Provides background information on the development of professional learning communities (PLCs) and how they can impact high student performance. Scaffolds student knowledge on how to organize and implement PLCs. Identifies leadership skills required to effectively manage change within the school setting. Introduces assessments to use in identifying challenges and summarizing impact of PLC fairness, transparency and trust.

**EDUC 6170**
**Leading Change/Innovation/Educational Entrepreneurship**
**3**
* Prerequisite(s): Admission to Master of Education: Educational Leadership Emphasis leading to USBE Education Leadership License Area of Concentration or Admission to Educational Leadership, Graduate Certificate leading to USBE Education Leadership License Area of Concentration

Introduces critical concepts of school change. Addresses strategies to encourage and manage innovation and entrepreneurship. Prepares students to aid learners in developing deeper abilities to create, critique, and collaborate to solve complex challenges facing society. Prepares students to successfully manage change and innovation in teaching and learning in the 21st century. Guides students in learning to anticipate needed changes and to develop skills to effectively lead innovation in their school settings.

**EDUC 6200**
**Masters Project**
**3**
* Prerequisite(s): Matriculation into a School of Education graduate program or matriculation into Master of Science-Mathematics, M.S., program, or approval of graduate program director

Provides working knowledge of action research methods in the public schools. Sets the standards for the professional M.Ed. action research-based project. Utilizes APA guidelines. Establishes techniques and strategies for successful project completion.

**EDUC 6201**
**Teacher Performance Assessment Project**
**2**
* Prerequisite(s): Admission to Secondary Teaching, Graduate Certificate Program
* Corequisite(s): EDUC 6203

Introduces the teaching and learning cycle: planning, instruction, and assessment. Assists students in completing an authentic assessment tool that shows how they develop and evaluate student learning. Documents authentic practices from the student's teaching experience that address planning, instruction, assessment, analyzing teaching, and academic language to reveal the impact of a candidate's teaching performance on student learning. Graduate fee of $300 applies.

**EDUC 6202**
**Classroom Management Practicum**
**3**
* Prerequisite(s): Admission to Secondary Teaching, Graduate Certificate Program

Provides first-hand, supervised, clinical experience in observing and implementing effective class management practices.

**EDUC 6203**
**Student Teaching Graduate Licensure**
**6**
* Prerequisite(s): Admission to Secondary Teaching, Graduate Certificate Program
* Corequisite(s): EDUC 6201

Includes 400 hours of student teaching experience in a secondary classroom, grades 7-12. Includes application of knowledge, skills, and attitudes derived in previous course work and program experience. Is required for students to be recommended for a secondary education license from the Utah State Office of Education. May be Graded Credit/No Credit. Graduate fee of $200 applies.

**EDUC 6210**
**Masters Project School Counseling Internship**
**3**
* Prerequisite(s): Matriculation into School of Education graduate program or approval of graduate program director and Completion of School Counseling Practicum

Provides Internship students with weekly interaction with supervisors that averages one hour per week of individual and/or triadic supervision throughout the internship, provided by (1) the site supervisor, (2) counselor education program faculty, or (3) a student supervisor who is under the supervision of a counselor education program faculty member. Engages internship students in an average of 1½ hours per week of group supervision on a regular schedule throughout the internship. Provides group supervision by a counselor education program faculty member or a student supervisor who is under the supervision of a counselor education program faculty member. Requires students to complete 300 of the 600 required clock hours of supervised counseling internship in roles and settings with clients relevant to their specialty area.

**EDUC 6300**
**Curriculum Design**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean

Provides a foundation in curriculum theory and practice. Introduces instructional design theories principles and models. Outlines the historical development, current processes and practices of curriculum development, instructional design, implementation, and assessment. Investigates research and theory about educational contexts, motivation, curriculum, learning, and development as they relate to models of instruction. Examines applications and processes of curriculum decision making and the impact of national standards for content areas to curriculum design and development in classroom and district settings.

**EDUC 6310**
**Assessing Educational Practices**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean

Examines theoretical and practical concepts that are foundational in educational evaluation and assessment. Explains learning assessments. Focuses on assessment instruments, assessment design, appropriate use of assessment techniques and the data derived from assessments to understand student progress and instructional design to promote student learning.

**EDUC 6320**
**21st Century Instruction and Assessment**
**3**
* Prerequisite(s): Matriculation into a School of Education graduate program or matriculation into Master of Science-Mathematics, M.S., program, or approval of graduate program director

Focuses on instructional design and delivery incorporating 21st century learning design and assessment. Introduces a range of instructional models and assessment tools. Requires planning and implementing instruction and assessment using several selected models.

**EDUC 6330**
**Diversity and Differentiation in the Classroom**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean

Provides an in-depth understanding of differentiated instructional design and delivery. Focuses on planning and implementing instruction for a diverse classroom community.

**EDUC 6340**
**English as a Second Language Methods**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor

Prepares teachers to teach English as a second language in U.S. public schools. Includes both theoretical and applied aspects of second language learning and teaching. Provides general and special educators and second language specialists techniques, activities, strategies and resources to plan instruction for English language learners (ELLs). Emphasizes oral language development, literacy and content-area instruction for teaching K-12 students.

**EDUC 6350**
**Theories of Second Language Acquisition**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor

Describes the variables that interact in the second language learning process, including linguistic, cognitive, social, cultural, and political factors. Examines learning a second language as both an individual and social experience. Examines the linguistic, cognitive, psychological, and emotional elements of learning a second language. Identifies the interactions between the individual and the contexts in which s/he interacts and then attempts to understand how they work together to foster or inhibit successful second language learning and acquisition.

**EDUC 6360**
**Multicultural Education**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor

Identifies the connections between language, culture, and identity. Examines multicultural education through a focus on the historical, sociological, and philosophical foundations of education. Emphasizes the role of ethnicity in the development of the United States and its education system. Outlines multicultural / multilingual curricula with a special focus on culturally/ linguistically-responsive instruction and assessment techniques.

**EDUC 6370**
**Assessment of Second Language Learners**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor

Examines theory, methods, and practice in the testing of bilingual students at both the classroom level and the large-scale level in the context of school accountability. Focuses on assessment of language proficiency in English language learners (ELL) and the assessment of academic achievement of bilingual students in specific content areas. Develops and reviews tasks (test items), response formats, scoring systems, and test administration procedures as critical to attaining validity and fairness. Examines testing major current testing policies for linguistic minority students. Practicum required.

**EDUC 6380**
**Literacy and Linguistics in English as a Second Language**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor

Focuses on how teachers can best meet the literacy and language needs of students from a variety of cultural, socioeconomic and language groups. Explores frameworks for providing high-quality literacy instruction to all students. Analyzes classrooms and schools that have been successful in accomplishing this. Examines ethnic identities and personal conceptions of diversity, and how these may impact instructional decisions. Analyzes students and families represented in their classrooms. Discusses ways to build bridges between home and school cultures.

**EDUC 6390**
**Family and Community Involvement**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean or the instructor

Provides strategies for facilitating community participation in the education of minorities. Examines the role of the teacher in the classroom and community with the intention of developing insight and understanding of how the teacher's role in these areas impacts the adjustment of adolescents during grades 7-12. Considers models and methods for facilitating positive relationships. Studies the techniques of family-school collaboration as well as constructive methods of evaluation. Practicum required.

**EDUC 6400**
**Teachers as Leaders**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean

Introduces students to critical concepts about transformational leadership. Provides awareness of how leadership skills and task importance motivates people; focuses on the team or organization strategies that produce increased productivity and better work for colleagues and students. Focuses on issues and strategies for teacher leadership.

**EDUC 6410**
**Contemporary Issues**
**3**
* Prerequisite(s): Admission to Graduate Status Admission to the School of Education Masters Degree Program Or permission of the Dean

Presents contemporary theories of learning and teaching from personal and public perspectives and how those theories converge with professional practice in classrooms and schools. Provides a study of the philosophical foundations of curriculum and instruction in American schools, the social and cultural conditions that influence education, and new concepts in education curriculum materials, and methods of instruction.

**EDUC 6420**
**Diversity in Higher Education**
**3**
* Prerequisite(s): Admission to graduate status, admission to Master of Education program, or permission of the Dean

Examines multiple critical lenses informing the higher education landscape on issues related to marginalization, identity, silence, under-representation and other factors that American higher education has historically been inadequate at addressing. Guides students to develop a personal framework based in reflexivity around biases. Synthesizes collegial, institutional, historical and contextual nuances to provide foundational knowledge. Develops a dispositional and interdisciplinary approach to facilitate inclusion within particular higher education roles and activities.

**EDUC 6430**
**Law-Policy-Ethics in Higher Education**
**3**
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean

Examines legal frameworks, liability, compliance, constitutional and civil rights, competing rights of institutions, faculty, staff, and students, and contractual obligations in higher education. Explores the legal, ethical, institutional, and political processes that influence higher education and the relationship between law and the system of higher education. Critiques legal issues as a way to define the role and meaning of higher education in today’s society.

**EDUC 6440**
**Leadership in Higher Education**
**3**
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean

Examines organizational theory, models, governance, and management processes in higher education, leadership perspectives and leadership theory. Explores leadership as a discipline that transcends functional area, serving as a framework to lead and guide within higher education. Investigates leadership theories and formulates personal approach as an educational leader.

**EDUC 6450**
**Planning-Budget-Organizational Effectiveness**
**3**
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean

Examines the principles and practices of strategic planning, evaluation, accountability, and financial management in higher education institutions, operating units, and academic programs.

**EDUC 6460**
**Student Success and Development**
**3**
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean

Presents various theories relevant to college student development and applies those theories to the field through class discussion, papers, and special projects. Introduces students to the major theories of learning, development, and retention and connects them with current practice.

**EDUC 6470**
**Foundations and Contexts of Higher Education**
**3**
* Prerequisite(s): Admission to graduate status, admission to the Master of Education program, or permission of the Dean

Examines diverse models and systems of higher education in an effort to provide contexts for effective work and leadership in higher education environments. Explores the nuances of higher education institutions in terms of political dynamics, shared governance, technology, innovation, organizational culture, and external/internal constituent expectations and perceptions. Discusses U.S. and international models of higher education and future possibilities.

**EDUC 6500**
**Teaching K-6 Numbers and Operations**
**3**
* Prerequisite(s): Admission to School of Education graduate program; professional educator license; or permission of the Dean of the School of Education

Designed for K-6 teachers. Covers the content of Number and Operations to develop a comprehensive understanding of our number system and relate its structure to computation, arithmetic, algebra, and problem solving. Includes number, number sense, computation, and estimation through a coordinated program of activities that develop number concepts and skills. Special attention in this course will be given to how children learn and connect the fundamental concepts of number systems, children's developmental trajectories in the mathematical content of number and operations, how children construct their understanding of various number systems and arithmetic, children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs).

**EDUC 6510**
**Teaching K-6 Rational Numbers and Proportional Reasoning**
**3**
* Prerequisite(s): Admission to School of Education graduate program, professional educator license; EDUC 6500, or permission of the Dean of the School of Education.

Provides practicing teachers a deeper understanding of rational numbers, operations with rational numbers, proportionality, and instructional strategies to facilitate the instruction of this content for elementary students.

**EDUC 6520**
**Teaching K-6 Algebraic Reasoning**
**3**
* Prerequisite(s): Admission to School of Education graduate programs; professional educator license; or permission of the Dean of the School of Education.

Provides practicing teachers a deeper understanding of algebraic expressions, equations, functions, real numbers, and instructional strategies to facilitate the instruction of this content for elementary students.

**EDUC 6530**
**Teaching K-6 Geometry and Measurement**
**3**
* Prerequisite(s): Acceptance to graduate studies in the School of Education; professional educator license, or permission of the Dean of the School of Education.

Provides practicing teachers a deeper understanding of the geometry and measurement content that exists in the state core and instructional strategies to facilitate the instruction of this content. Special attention in this course will be given to how children learn and connect the fundamental concepts of geometry and measurement, children's developmental trajectories in this mathematical content, how children construct their understanding of various geometric concepts, children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs).

**EDUC 6540**
**Teaching K-6 Data Analysis and Problem Solving**
**3**
* Prerequisite(s): Professional educator license; admission to graduate program in the School of Education; or permission of the Dean of the School of Education.

Develops a firm problem-solving foundation. Using skills and strategies applied in mathematical contexts practicing teachers will learn to think, work with others, present solutions orally to the whole class, and write up detailed solutions. Provides practicing teachers a deeper understanding of probability and data representation and analysis. Special attention in this course will be given to children's typical error patterns, problem solving strategies, interpreting and assessing students' work and learning, and integration of the NCTM process standards and the Utah Intended Learning Outcomes (ILOs).

**EDUC 6550**
**Teaching K-6 Assessment and Intervention**
**3**
* Prerequisite(s): Professional educator license; admission to graduate level in the School of Education; or permission of the Dean of the School of Education.

Provides practicing teachers a deeper understanding of the various types of assessment and their appropriate use for guiding instruction, intervention, and evaluation of student learning of mathematics content. Teaches how to screen students for mathematics problems or potential mathematics problems, diagnose students' mathematics strengths and needs, and monitor students' progress to ensure students will make optimal progress in mathematics. Teaches procedures for managing and analyzing assessment data.

**EDUC 6600**
**High Ability Education**
**3**
* Prerequisite(s): Admission into the Master of Education program

Prepares teachers of GT learners to better understand the field as an evolving and changing discipline influenced by history, philosophies, research-based principles and theories, relevant laws and policies, cultural and historical points of view, and human issues that influence professional practice, including assessment, instructional planning, delivery, and program evaluation. Explores characteristics of gifted individuals with emphasis on identifying needs and a general overview of possible services for gifted learners. Prepares teachers to advocate for GT students and their programs in schools and school districts. Emphasizes discussing and finding applications from current research in gifted, talented, and advanced education.

**EDUC 6610**
**Social and Emotional Needs of High Ability Learners**
**3**
* Prerequisite(s): Admission to the Master of Education program

Explores current research and material relevant to the social and emotional issues that may arise for gifted and talented students. Focuses on current research through discussions, projects, and classroom observation. Develops a deeper understanding of social and emotional issues that students with gifts and talents experience in K-12 classrooms. Applies findings from current and seminal literature in the field. Includes classroom observations of connections between cognitive development and affective domain. Includes 15 hours of field experience/practicum in addition to class time.

**EDUC 6620**
**Identification/Evaluation of High Ability Learners**
**3**
* Prerequisite(s): Admission to Master of Education program

Prepares teachers to use the results of a variety of assessment tools for both identification and learning progress decisions. Defines the processes of identification, legal policies, and ethical principles of measurement and assessment related to referral, eligibility, program planning, instruction, and placement. Includes current and historic documents and research to contrast ideas of determining “giftedness” throughout history with modern conceptions underlying gifted and talented education. Includes 15 field experience/ practicum hours in addition to class time.

**EDUC 6630**
**Theory into Practice for High Ability Education**
**3**
* Prerequisite(s): Admission to Master of Education program

Prepares teachers to understand societal influences on the development of curricula. Focuses on long- and short-range units of instruction anchored in both general and special curricula for gifted and talented students. Addresses individual’s abilities and needs, the learning environment, and cultural and linguistic factors. Includes current research-based classroom practices.

**EDUC 6635**
**Methods and Materials for High Ability Learners**
**3**
* Prerequisite(s): Admission to Master of Education program

Requires teacher-participants to locate, create, and or adapt curricular materials and methods of instruction needed to implement differentiated instruction for gifted and talented learners. Encourages creative problem-solving for a variety of student abilities and needs, the learning environment, and cultural and linguistic factors that may influence instruction. Requires application of current findings from the literature to the evaluation of methods and materials for gifted and talented instruction.

**EDUC 6640**
**High Ability Curriculum and Instruction in the Content Areas**
**3**
* Prerequisite(s): Admission to Master of Education program

Prepares teachers of gifted and talented students with the selection, adaptation, creation, and implementation of differentiated instructional models and strategies, especially those related to fostering creativity. Evaluates current research on outcomes from instruction based on creative processes that are designed to foster creative, critical, and analytic thinking. Requires15 field experience/practicum hours in addition to class time.

**EDUC 6660**
**Reading Assessments and Instructional Interventions**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Focuses on curriculum-based measurement, the assessment/instructional cycle, and how to use assessment data to design and implement instructional interventions to increase students' reading achievement. Studies the four federal assessment categories: screening, progress monitoring, diagnosis, and outcomes, as well as assessment instruments within the various categories and the 3-tiered model. Focuses on building students' oral language and background knowledge, teaching alphabet knowledge and phonemic awareness, teaching students to use and recognize and use common phonic spelling patterns, building vocabulary, increasing fluency, teaching students to apply comprehension strategies, and fostering students reading engagement. Describes reading assessments and interventions that are appropriate at the primary, intermediate, and secondary levels.

**EDUC 6661**
**Literacy and Cognition of Reading**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Provides foundational knowledge about literacy instruction, including an historical perspective on reading instruction, an introduction to theories and models of literacy acquisition, a study of language systems and language acquisition, and theories related to the literacy development of people across the lifespan and their instructional implications. Includes the debates and various stances of reading researchers, and the instructional directives that grew out of the research.

**EDUC 6662**
**Early Literacy Instruction**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Designed to help students understand the history, major perspectives and theories about how young children understand literacy. Focuses on developmentally appropriate instruction and the value of play relating to oral and print literacy in kindergarten and the primary grades. Examines literacy development within the larger framework of the communicative arts, i.e., oracy, written expression, reading, spelling, handwriting, listening, the visual and performing arts, and the social community, i.e., family, socioeconomic conditions, culture, ethnicity, language, etc.

**EDUC 6663**
**Content Area Reading**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Designed to help practicing teachers develop an in-depth understanding of the research findings, issues, principles and practices related to exemplary, research-based reading and writing instruction in the content areas. Covers the use of textbooks and nonfiction reading materials for young students who are beginning readers and writers. Focuses on how to assist all learners to read, understand and learn from nonfiction reading materials. Covers assisting students at all grade levels in their reading of materials and writing of text related to science, social studies, history, math art, music, etc.

**EDUC 6664**
**Adolescent Literacy**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Provides practicing secondary teachers with concepts, models, and strategies to support adolescent literacy instruction. Familiarizes teachers with practical constructs for understanding adolescent literacy, its importance, how it can be fostered and employed for student learning, how the challenges of adolescent literacy differ from the challenges of early reading instruction, and how systematic interventions can help remediate chronic failure in literacy and learning. Teaches effective literacy improvement practices that can be realistically implemented in the context of secondary teachers' many demands.

**EDUC 6665**
**Reading Comprehension Instruction**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Focuses on reading comprehension instruction as the essence of reading. Emphasizes the theoretical foundations that support comprehension such as schema theory and the construction-integration theory. Includes the following five research-supported strategies: activating prior knowledge, questioning, analyzing text structure, creating mental or visual images and summarizing. Teaches how to offer explicit teacher-led comprehension strategy instruction that will lead to helping their students coordinate a set of comprehension strategies. Teaches how to help students construct meaning through rich discussions and interactions around a variety of text structures and genres. Prepares teachers to provide scaffolded support including demonstrations, pictures, diagrams, and collaboration with other students.

**EDUC 6666**
**Effective Writing Instruction**
**3**
* Prerequisite(s): Admission to Graduate Status, Admission to the School of Education Masters Degree Program, Or permission of the Dean

Focuses on using effective strategies for teaching writing across the curriculum and for diverse populations. Teaches application of the writing process, writing workshop, and interactive writing procedures in the classroom. Covers the development of orthographic knowledge and how to assess student work using the Qualitative Spelling Inventory and the Six-Trait Writing Model.

**EDUC 6750**
**Energy in Elementary STEM Education**
**3**
* Prerequisite(s): Admission to Graduate Status; Admission to the School of Education Masters Degree Program; Or permission of the Dean or the instructor

Prepares teachers to teach English as a second language in U.S. public schools. Includes both theoretical and applied aspects of second language learning and teaching. Provides general and special educators and second language specialists techniques, activities, strategies and resources to plan instruction for English language learners (ELLs). Emphasizes oral language development, literacy and content-area instruction for teaching K-12 students.

**EDUC 6760**
**Force in Elementary STEM Education**
**3**

Provides teachers with a deep and useful understanding of force and the nature of how students use concepts of force to make sense of phenomena across life, earth, and physical science. Explores the theory of and enhances teacher insights into: 1) how force, matter and energy interact, 2) the relationship of force to energy and interactions within fields, and 3) pedagogical content knowledge around teaching and learning about force. Also connects knowledge of concepts of force to practices in technology, engineering and mathematics, and engages participants in evaluating technology appropriate to elementary STEM instruction. Requires participants to make connections between current learning theories and methods of STEM instruction.

**EDUC 6770**
**Matter in Elementary STEM Education**
**3**

Models effective and engaging instructional practices for teaching about matter in the elementary classroom, and connects knowledge of concepts of matter to practices in technology, engineering and mathematics. Requires participants to design and implement STEM lessons that will help elementary students use content knowledge about matter to make sense of phenomena across life, earth, and physical science. Designed to help participants gain insights into: 1) how matter and energy interact, 2) the relationships of matter to forces and interactions within fields, and 3) pedagogical content knowledge for teaching about matter. Involves participants in active instructional strategies and pedagogical theories. Focuses on designing learning environments that support collaborative learning and engagement in STEM lessons.

**EDUC 6780**
**Science and Engineering in Elementary STEM Education**
**3**

Explores the nature of science using science and engineering principles, practices, and processes. Investigates applications of learning theory to Science, Technology, Engineering and Mathematics using problem-based learning experiences. Requires participants to develop teaching practices to assist them in integrating engineering practices across disciplines as they apply Utah Science Standards to elementary STEM instruction.

**EDUC 6790**
**Technology and Problem-Based Learning in Elementary STEM Education**
**3**

Engages participants in developing meaningful understandings of problem-based approaches to teaching, learning, and the integration of STEM practices across the curriculum using appropriate technology. Requires participants to demonstrate their skills through the development of problem-based, hands-on learning experiences for elementary students, based on findings from current research and theory of cognitive development. Critically evaluates technology for STEM education, based on current national guidelines.

**EDUC 691R**
**Project I**
**1**
* Prerequisite(s): EDUC 6200 and Matriculation into a School of Education graduate program or matriculation into Master of Science-Mathematics, M.S., program, or approval of graduate program director

Provides instruction regarding writing a formal classroom-based research project proposal to present to the School of Education Graduate Board. Supports students in obtaining human subject clearance. May be repeated for a maximum of 2 credits toward graduation. Course will be graded credit/no credit.

**EDUC 692R**
**Project II**
**1**
* Prerequisite(s): EDUC 691R and Matriculation into a School of Education graduate program or matriculation into Master of Science-Mathematics, M.S., program, or approval of graduate program director

Provides support regarding Implementation of the classroom-based applied research project. Course will be graded credit/no credit. May be repeated for a maximum of 2 credits toward graduation.

**EDUC 693R**
**Project III**
**1**
* Prerequisite(s): Matriculation into a School of Education graduate program or matriculation into Master of Science-Mathematics, M.S., program, or approval of graduate program director
* Prerequisite(s) or Corequisite(s): EDUC 691R and EDUC 692R

Provides support regarding completion of a classroom-based applied research project and acceptance of the classroom-based applied project by the School of Education graduate Board. Course will be graded credit/no credit. May be repeated for a maximum of 9 credits toward graduation.

**EDUC 694R**
**Directed Individual Study**
**.5 to 3**
* Prerequisite(s): Admission to Graduate Status; Admission to the School of Education Masters Degree Program or permission of the Dean

Provides individual instruction for Master of Education students wishing to further their understanding of the field of education. Focuses on individual research regarding instructional methods and/or assessment. May be repeated for a maximum of 6 credits. Graded Credit/No Credit.

# Eng Graphics Design Tech (EGDT)

**EGDT 1000**
**Introduction to Engineering Drawing and Technical Design**
**2**

Covers basic sketching, instruments and their use, lettering, geometric construction, dimensioning, multi-view drawings, and section views, using CAD (computer-aided drafting) and traditional hand tools. Teaches introductory skills required in several first-year drafting technology courses. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1010**
**Electrical Drafting and Design**
**3**
* Prerequisite(s): EGDT 1040 with a grade of C- or higher

Introduces several types of electrical drawings such as Block, Connection, Logic, Schematic, Wiring, and Panel Diagrams. Covers basic DC theory, electricity and electrical terms. Includes the principles of Ohm's law, Watt's law, Logic Truth Tables, Series and Parallel Circuits, and Printed Circuit Board Design. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1020**
**3D Architectural Modeling**
**3**

Utilizes a Building Information Modeling system (BIM) to design 3D architectural models. Covers 3D modeling design theory, parametric modeling methods, generation of residential and commercial construction plans and details, building components and systems, and manipulation of model information. May be delivered hybrid and/or online. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1040**
**Fundamentals of Technical Engineering Drawing**
**3**

Introduces fundamental technical engineering drawings, practices, and standards used by various engineering disciplines. Provides basic sketching, computer-aided drafting (CAD) tools, geometric construction, drawing layout, standard dimensioning, multi-view drawings, sectioning, plotting, checking, correcting, and other CAD and drafting skills. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1050**
**Introduction to 3D Printing**
**2**

Introduces basic knowledge and skills related to 3D printing. Covers the acquisition of 3D print files and teaches basic 3D computer modeling skills using common 3D modeling software. Introduces 3D printing software and the use of 3D printers to produce prototype or functional models. Requires students to create and print projects given as class assignments and model and print a project of their choosing. Lab access fee of $45 applies.

**EGDT 1060**
**MicroStation Infrastructure Design**
**3**

Teaches the MicroStation Open Roads drafting software system used to draw and plot various types of infrastructure projects. Demonstrates civil design skills needed in an infrastructure design workflow for a typical UDOT or civil engineering transportation project. Includes Digital Terrain Models (DTM's), horizontal and vertical alignments, plan and profiles, grading design, and utilities/piping design and drafting. Focuses on the development of a civil engineering infrastructure plan set for a typical state highway or freeway. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1070**
**3 Dimensional Modeling Inventor**
**3**

Teaches basic 3D computer modeling course which emphasizes the development of 3D machine parts, assemblies, and drawings in a constraint-based modeling environment using AutoDesk Inventor. Emphasizes the feature based design process, which simulates actual manufacturing processes with 2D sketching tools and with 3D modeling tools including extrusions, revolutions, sweeps, lofts, coils, shells, placed features, patterns, and many others. Also teaches creation of basic multi-part assemblies, constraint-driven assembly animation, and generation of detailed production drawings. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1071**
**3 Dimensional Modeling--Solidworks**
**3**

Teaches basic 3D computer modeling, which emphasizes the development of 3D machine parts, assemblies, and drawings in a constraint-based modeling environment using Solidworks. Emphasizes the feature based design process, which simulates actual manufacturing processes with 2D sketching tools and with 3D modeling tools including extrusions, revolutions, sweeps, lofts, coils, shells, placed features, patterns, and many others. Also teaches creation of basic multi-part assemblies, constraint-driven assembly animation, and generation of detailed production drawings. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1080**
**AutoLisp**
**2**
* Prerequisite(s): EGDT 1040 with a grade of C- or higher

Covers creating and storing AutoLisp files and programs. Includes customizing the AutoCAD menu for personal and drafting use. Teaches creating new macros for speeding up repetitive drawing tasks. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1090**
**Introduction to Architectural Drafting and Design**
**2**

Covers basic procedures used in the development of residential plans. Includes architectural drafting standards, symbols, and techniques. Uses lectures and text reading assignments related to the drawings and worksheets. Introduces students to the architectural profession and related fields. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1100**
**Architectural Drafting and Design**
**3**
* Prerequisite(s): EGDT 1020 with a grade of C- or higher

Covers procedures used in developing a complete set of architectural residential plans. Includes architectural drafting standards and code requirements. Reinforces math skills using dimensioning and estimating exercises. Utilizes lectures and text reading assignments with related worksheets and drawings. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1200**
**Mechanical Drafting**
**3**
* Prerequisite(s): EGDT 1070 or EGDT 1071, both with a grade of C- or higher

Requires previous knowledge of linework, lettering, geometric construction, and dimensioning. Teaches engineering sketching and detail drawing from design layouts. Uses Machinery's Handbook, ANSI Standard and manufacturer's reference materials involving retaining rings, bearings, oil seals, and other hardware. Emphasizes geometric dimensioning and tolerancing. Includes precision dimensioning, surface finish, materials, screw threads, and machining processes and applications. Course fee of $10 for materials applies. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1300**
**Structural Drafting**
**3**
* Prerequisite(s): EGDT 1040 with a grade of C- or higher

Covers fundamentals of structural design. Studies structural steel detailing of beams, columns, braces, templates, marking and numbering systems, bill of materials, welding symbols, and erection drawings to AISC standards. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 1400**
**Surveying Applications and Field Techniques I**
**3**

For people seeking a surveyor's license, civil engineering majors, Engineering Graphics and Design Technology majors, Construction Management majors, and anyone else wishing to learn fundamentals of surveying. Covers history of surveying, mathematics, field notes, measurement and computations, basic surveying instruments and equipment, leveling procedures, bearing computations, topography, mathematical traverse closures, area computations, and basic property surveying. Completers should be able to work in the job-entry phase of the surveying field. Course fee of $12 for materials applies. Software fee of $18 applies. Lab access fee of $45 computers applies.

**EGDT 1600**
**Technical Math Algebra**
**3**
* Prerequisite(s): MAT 0920 or equivalent with "C-" grade or better or appropriate test scores

Covers the basic principles of algebra, geometry, and trigonometry as they relate to problem solving on the job. Includes solving equations, percent, proportion, variation, calculator operations, measurements, formula rearrangement, functions and graphs, and solving right and oblique triangles.

**EGDT 1610**
**Technical Math Geometry Trig**
**3**
* Prerequisite(s): EGDT 1600 or equivalent course with a grade of C- or higher

Covers more advanced principles of algebra, geometry, and trigonometry as they relate to problem solving on the job. Includes systems of equations, powers and roots, trigonometry functions, vectors, polynomials, quadratic equations, exponents and radicals, and circle concepts.

**EGDT 1720** **FF**
**Architectural Rendering**
**3**

Discusses how Architectural Rendering plays an important role in the way we view and present the world around us. Includes: elements in the physical and natural world, as well as the influences human cultures have on our society through the construction of buildings, structures, and other works of man. Introduces the necessary skills and practices required in architectural rendering theory and presentation. Develops skills in perspective, layout, shading, color theory and presentations of interior and exterior architectural rendering projects.Course fee of $10 applies.

**EGDT 2010**
**Advanced Electrical CAD**
**2**
* Prerequisite(s): EGDT 1010 and EGDT 1040, with "C-" grade or higher

For second year Drafting Technology majors. Concentrates on the completion of electrical-electronic diagrams using CAD procedures. Those layout procedures studied will include logic and schematic diagrams. Printed wiring board and AC motor control wiring diagram layout from reference schematics will also be covered. Includes a basic introduction to AC electrical theory including inductance and capacitance and their relationship to AC motors and motor controls. Completers should have entry-level skills for an electrical-electronic drafting position. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2020**
**Descriptive Geometry**
**3**
* Prerequisite(s): EGDT 1040 with a grade of C- or higher

Covers advanced orthographic projection principles used to render views of objects from any conceivable direction. Explains the creation of views needed to solve problems graphically rather than mathematically. Includes true length and angle, true size and shape, clearance, bearing, slope and grade, intersections, shortest distance, dihedral angle, and revolution. Reinforces the use and application of accurate scaling techniques. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2040**
**Piping Drafting**
**2**
* Prerequisite(s): EGDT 1040 with a grade of C- or higher

Includes single-line and double-line pipe symbols. Covers both isometric and orthographic projection. Studies piping connections such as welded, screwed, soldered, flanged, and bell and spigot. Uses manufacturer's and reference materials specifications. Includes information on copper tubing and brass fittings. Uses hydraulic theory and formulas. Also uses computer (CAD) to develop drawings. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2050**
**Plate Layout**
**2**
* Prerequisite(s): EGDT 2020 with a grade of C- or higher

A continuation of Descriptive Geometry (EGDT 2020). Patterns are made of rolled or folded surfaces such as bins, hoppers, duct work, vent pipes, tanks, storage containers, etc. Patterns are also made for pipe end cuts, pipe intersections, transition pieces and twist angles. Emphasizes three types of pattern development: (1) parallel line, (2) radial line, (3) triangulation. Includes practical problems in finding the line of intersection between surfaces and drawing patterns. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2100**
**Architecture Materials and Methods**
**3**
* Prerequisite(s): EGDT 1020 with a grade of C- or higher

Introduces traditional architectural materials and methods of design and construction. Covers wood, masonry, and concrete construction as well as finish materials. Builds skills related to organizing, detailing, dimensioning, and scheduling construction documents for a commercial type building. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2200**
**Advanced Mechanical**
**3**
* Prerequisite(s): EGDT 1200 and (EGDT 1070 or EGDT 1071) all with a grade of C- or higher

Employs 3D modeling software to enhance design processes, including sketching, parametric modeling, 3D assemblies, and producing 2D working drawings. Included are sheet metal, structural parts, mass property, and stress analysis. Software fee of $18 applies. Lab access fee of $45 computers applies.

**EGDT 2300**
**Advanced Structural CAD**
**3**
* Prerequisite(s): EGDT 1300 and (MATH 1060 or EGDT 1610) both with a grade of C- or higher

A second year class for students who have completed first year structural drafting and want to enhance their knowledge of structural steel detailing. Includes the proper views and dimensioning practices for columns, stairways, handrails, cross-bracing, anchor bolt layout, erection drawing, and field bolt lists. Completers should be ready for entry-level employment as a structural steel detailer for small detailing companies or large construction companies. Software fee of $18 applies. Lab access fee of $45 computers applies.

**EGDT 2310**
**Structural Steel Modeling**
**3**
* Prerequisite(s): EGDT 1040 and EGDT 1300 both with a grade of C- or higher

Teaches Tekla Structures modeling software. Includes modeling of structural steel buildings, hoppers, stairs, piping, and miscellaneous steel projects. Prepares students for detail and erection drawings which are produced for fabrication and erection of structural steel projects. Software fee of $18 applies. Lab access fee of $45 computers applies.

**EGDT 2400**
**Surveying Applications and Field Techniques II**
**3**
* Prerequisite(s): EGDT 1040 or equivalent, EGDT 1400 and (EGDT 1600 or MATH 1060) both with a grade of C- or higher

Covers advanced concepts in the U.S. Public Land and State Plane Coordinate systems. Utilizes advanced surveying instruments such as total station, automatic level, GPS equipment, and data collectors. Covers advanced leveling procedures, volume computations, monumentation, mapping, boundary surveys, and route surveys. Features the writing of legal property descriptions. Builds upon knowledge of safe surveying procedures. Includes use of surveying calculation softwares. Covers horizontal curve calculations and highway staking. Completers should be able to work as an instrument person on survey crews and also prepare the drawings related to the surveys. Lab access fee of $45 for computers applies Software fee of $18 applies. Course fee of $12 for materials applies

**EGDT 2500**
**3 Dimensional Modeling--Civil 3D**
**3**
* Prerequisite(s): EGDT 1040, EGDT 1400

Describes design workflows of typical civil engineering firms. Employs functions of Autodesk Civil 3D application software for civil design and modeling. Includes Digital Terrain Models (DTM's), street alignments, plan and profiles, grading, and utilities/piping design and drafting. Develops a full set of civil engineering improvement plans for a residential subdivision. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2600**
**Applied Structures I - Statics**
**3**
* Prerequisite(s): MATH 1050 or MATH 1055 or (EGDT 1600 and 1610)

Covers architectural structures for low-rise and light construction projects. Applies trigonometry and technical math. Covers lateral, wind, seismic, and snow loads. Introduces the basic principles of statics including; force systems, moments, resultants of force systems, analysis of structures, centroids and centers of gravity, and moments of inertia.

**EGDT 2610**
**Applied Structures II - Strength of Materials**
**3**
* Prerequisite(s): EGDT 2600 with a grade of C- or higher

Examines architectural long-span and high-rise structures with an emphasis on steel and concrete construction. Covers stresses, strains, properties of materials, Poisson's ratio, thermal effects, shear force, bending moments, lateral loads, deflection, connections, beam design and column design.

**EGDT 2710**
**Special Problems Mechanical**
**2**
* Prerequisite(s): EGDT 2200 with a grade of C- or higher

An advanced course in mechanical layout and design using solid modeling techniques. Students, with approval, may design and layout projects of their choice. Final details are fabricated in the machine shop. Lab access fee of $45 for computers applies.

**EGDT 2720**
**Special Problems Surveying**
**2**
* Prerequisite(s): EGDT 2400 and (MATH 1060 or EGDT 1610) both with a grade of C- or higher

For people seeking a surveyor's license, civil engineering, drafting and construction management majors. Covers instrument maintenance and calibration, basic photogrammetry and surveying for photogrammetry, mine surveying, construction surveying, resection, and legal aspects of land surveying. Completers should have job skills for surveying and civil technology. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2730**
**Special Problems Civil Drafting**
**2**
* Prerequisite(s): EGDT 1400 with a grade of C- or higher

For people seeking a surveyor's license or intended Civil Engineering and Engineering Graphics and Design majors desiring a civil drafting emphasis. Covers preparation of drawings associated with surveying and civil engineering and design. Projects include: property surveys and subdivision design, geotechnical investigations, wastewater treatment, storm drains, highway design, topographic mapping, earthen and concrete dams, and NICET certifications. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2740**
**Special Problems Architectural**
**2**
* Prerequisite(s): EGDT 1100 with a grade of C- or higher

A special problems course in architectural drafting. Teaches how to layout and detail a floor plan using a 3D modeling package. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2750**
**Special Problems Architectural Rendering**
**2**

For students who wish to develop additional architectural rendering skills to enhance their job performance. Covers theory of perspective, laying out a building perspective from blueprints, inking techniques to develop a finished rendering, and quick coloring methods for ink renderings. Course fee of $10 for materials applies.

**EGDT 2760**
**Special Problems Structural**
**2**
* Prerequisite(s): EGDT 1300 with a grade of C- or higher

Provides opportunities for in-depth study in structural steel drafting. Teaches beam sizing and selection for design drawing. Requires a special class project with complete objectives and goals outlined and presented to the instructor for approval. Emphasizes project documentation. Computer graphics are an important part of this course. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 2780**
**Special Problems Electrical**
**2**
* Prerequisite(s): EGDT 1010 with a grade of C- or higher

For students who wish to advance beyond EGDT 2010 through the development of an outside project which incorporates advanced theory and drawing procedures. The instructor will review project outline to ensure that it meets course objectives and will monitor student progress, establishing progressive goals. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 281R**
**Internship**
**1 to 3**
* Prerequisite(s): Department approval and completion of: EGDT 1010, EGDT 1040, EGDT 1070 or EGDT 1071, EGDT 1020, EGDT 1100, EGDT 1200, EGDT 1300, and EGDT 1400, all with a C- or higher

Provides on-the-job work experience in the student's major. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and presentations. Provides experience in writing and completing individualized work objectives that improve present work performance. May be repeated for a maximum of 3 credits toward graduation. May be graded Credit/No Credit.

**EGDT 285R**
**AEC Design Lecture Series**
**.5**

Provides student opportunities to network and collaborate with industry professionals. Provides exposure to career options within the architecture and other related design industries. Emphasizes the importance of professional ethics and communicating with others. May be Graded Credit/No Credit. May be repeated for a maximum of 3 credits toward graduation.

**EGDT 2860**
**Cooperative Correlated Instruction SkillsUSA**
**.5**

SkillsUSA is a first year class for Engineering Graphics and Design Technology majors. Includes leadership training, parliamentary procedure, job interview skills, prepared speaking, extemporaneous speaking, and organizational skills. Upon completion, the student should understand the SkillsUSA organization and how it helps to build leadership skills.

**EGDT 2870**
**Portfolio and Career Preparation**
**1**

Required for Engineering Graphics and Design Technology majors. Teaches necessary job acquisition skills. Instructs students in the job search process, including production of typical types of correspondence, job interview techniques, and creation of presentation-quality portfolios. Correspondence includes letters of application, resumes, follow-up letters, letters of acceptance and rejection, and references. Interview techniques include interview preparation, appearance, and question/answer techniques. Final project is portfolio of samples of work in all areas of Engineering Graphics & Design Technology learned for the degree. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**EGDT 3450**
**Civil Design Systems**
**3**
* Prerequisite(s): EGDT 2500, EGDT 3500, and University Advanced Standing

Teaches theories, principles, and practices of traffic systems design, gravity and pressure piping systems design, surface grading systems, and hydrology. Explores various computational and design software used to develop finished construction drawings for public and private infrastructure projects.

**EGDT 3500**
**Advanced Civil Drafting and Design**
**3**
* Prerequisite(s): [(EGDT 1040 or EGDT 1060) and EGDT 1400 each with a grade of C- or higher] and University Advanced Standing

Covers the analysis, design and preparation of drawings associated with the surveying and civil engineering fields. Exposes the student to the NICET certification process. Focuses on GPS and GIS technologies to acquire design data. Develops a working knowledge of the Utah Department of Transportation Standard Plans and Specifications. Projects include: property surveys, topographic mapping, subdivision design, geotechnical investigations, Water and Wastewater Treatment Plants, storm drainage, highway design, traffic flow diagrams, and earthen and concrete dams. Lab access fee of $45 for computers applies.

# Literacies and Composition (ENGH)

**ENGH 0890**
**Literacies and Composition Across the University**
**5**
* Prerequisite(s): Appropriate placement scores.

Teaches reading-based writing (reading-to-write). Helps students bridge the gap between personal and academic writing and practice ways their personal literacies, experiences, opinions, and observations extend to particular academic conversations. Emphasizes extensive reading throughout the semester using models for organization, style and primary sources for classroom discussions and essay content. Lab access fee of $15 for computers, software applies.

**ENGH 1005** **CC**
**Literacies and Composition Across Contexts**
**5**
* Prerequisite(s): ENGH 0890 or appropriate placement scores.

Focuses on reading-based writing with strong rhetorical concentration; expands critical reading, writing, and thinking concepts from 0890 and prepares students for reading, writing, and thinking in ENGL 2010 and other future courses and future situations. Provides strong skills development in digital literacy for multi-media content creation, research, and presentations. Provides a project-based curriculum, along with best-practices pedagogies, providing students with authentic contexts, audiences, and opportunities to be intrinsically motivated to develop writing and reading skills and knowledge. May be delivered hybrid and/or online. Canvas Course Mats of $33/Fountain Head Press applies. Lab access fee of $15 applies.

# English (ENGL)

**ENGL 1010** **CC**
**Introduction to Academic Writing**
**3**
* Prerequisite(s): Appropriate test scores taken within the last five years.

Teaches rhetorical knowledge and skills, focusing on critical reading, writing, and thinking. Introduces writing for specific academic audiences and situations. Emphasizes writing as a process through multiple drafts and revisions. May be delivered hybrid and/or online.

**ENGL 101H** **CC**
**Introduction to Writing**
**3**
* Prerequisite(s): Appropriate test scores taken within the last five years.

Teaches rhetorical knowledge and skills, focusing on critical reading, writing, and thinking. Introduces writing for specific academic audiences and situations. Emphasizes writing as a process through multiple drafts and revisions. Includes major essay assignments, writing and collaboration, research writing, journals, and portfolios. Honors sections challenge the student to take more qualitatively substantive and/or advanced approaches to course content and assignments.

**ENGL 2010** **CC**
**Intermediate Writing/Academic Writing and Research**
**3**
* Prerequisite(s): Appropriate ACT test scores taken within the last three years or completion of ENGL 1010 or ENGL 101H with a grade of C- or higher, or ENGH 1005 with a grade of C or higher.

Emphasizes academic inquiry and research. Explores issues from multiple perspectives. Teaches careful reasoning, argumentation, and rhetorical awareness of purpose, audience, and genre. Focuses on critically evaluating, effectively integrating, and properly documenting sources. May be delivered hybrid and/or online.

**ENGL 201H** **CC**
**Intermediate Writing Humanities/Social Sciences**
**3**
* Prerequisite(s): Appropriate ACT test scores taken within the last three years or completion of ENGL 1010 or ENGL 101H with a grade of C- or higher, or ENGH 1005 with a grade of C or higher.

Emphasizes academic inquiry and research in the humanities and social sciences. Explores issues from multiple perspectives. Teaches careful reasoning, argumentation, and rhetorical awareness of purpose, audience, and genre. Focuses on critically evaluating, effectively integrating, and properly documenting sources. In addition to major essay assignments, may include in-class writing and collaboration, an annotated bibliography, oral presentations, and portfolios. Honors sections challenge the student to take more qualitatively substantive and/or advanced approaches to course content and assignments.

**ENGL 2030** **HH**
**Writing for Social Change**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher

Introduces theories and strategies of persuasion to help students understand and use basic tools of civic literacy, including critical thinking, reading, and writing. Uses writing to engage with complex social issues. Includes analysis and production of texts such as letters to the editor, opinion-editorials, writing for non-profit organizations, and political speeches.

**ENGL 2050**
**Editing**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Covers the essentials of editing manuscripts for publication. Provides students with the necessary knowledge of punctuation, grammar and usage as well as the symbols and conventions of editing.

**ENGL 2120**
**Fantasy Literature**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Surveys major fantasy authors from the 19th century to the present. Teaches key elements of the genre, including world creation, character, and significant themes. May include a creative writing component.

**ENGL 2130** **HH**
**Science Fiction**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Presents a chronological survey of major Science Fiction authors from Mary Shelley (1818) to the present. Emphasizes the importance of character, setting, plot, and scientific ideas in analyzing literature. Uses discussion, lectures, videos, and films to help students increase appreciation for the literary genre and its works. Completers will have a better understanding of science fiction, plus enhanced writing skills.

**ENGL 2150 (Cross-listed with: CINE 2150)** **HH**
**Critical Introduction to Cinema Studies**
**3**
* Prerequisite(s): ENGL 2010

Studies film as an aesthetic and cultural medium. Teaches the fundamentals of film, including narrative form, mis en scene, cinematography, editing, sound, and non-narrative forms. Teaches film analysis, including ideological approaches, and considers film as a cultural institution. May be delivered hybrid.

**ENGL 217G (Cross-listed with: CINE 217G, COMM 217G) HH**
**Race Class and Gender in U S Cinema**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Raises cultural awareness through aesthetic, critical, and interdisciplinary examination of the evolution of the representation of race, class, and gender in American cinema. Focuses on both Hollywood and independent minority filmmakers. Some films screened may carry an "R" rating.

**ENGL 220G HH**
**Introduction to Literature HH**
**3**

Introduces literary appreciation of world literatures. Teaches criticism and terminology as applied to various types of literature, including fiction, poetry, and drama. Requires students to consider texts from positions, of Race, Ethnicity, Culture, Gender, Sexuality and (Dis)ability, Uses discussion, lecture, films, videos, and tests.

**ENGL 2210 HH**
**Introduction to Folklore**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Introduces the study of folklore. Presents the dynamics of the traditional expressions of a variety of folk groups. Emphasizes folklore performance and its cultural context. Provides practical experience in folklore collection.

**ENGL 2230 HH**
**Myths and Legends in Literature**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Introduces students to myths and legends that are the foundation of literature. Uses discussion, storytelling, videos, journals, and portfolios.

**ENGL 223H HH**
**Myths and Legends in Literature**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Provides a thorough foundation for the study of classical mythology; explores common myth themes through guided research and projects in world myth; analyzes myth through a variety of theoretical perspectives. Focuses on lecture, discussion, written and oral presentations, myth analysis, exams, and papers.

**ENGL 2250 HH**
**Creative Process and Imaginative Writing**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 with a grade of C- or higher

Introduces students to the basic literary elements of writing short fiction, drama, creative non-fiction, poetry, or combinations of these. Uses readings from a wide range of contemporary authors, guest speakers, workshops, and student writing to enhance the techniques and aesthetics of creative writing.

**ENGL 225H HH**
**Creative Process and Imaginative Writing**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 with a grade of C- or higher

Introduces students to the basic literary elements of writing short fiction, drama, creative nonfiction, poetry, or combinations of these. Uses readings from a wide range of contemporary authors, guest speakers, workshops, and student writing to enhance the techniques and aesthetics of creative writing. Smaller class size to facilitate increased student interaction and inquiry.

**ENGL 2300 HH**
**Shakespeare**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

For General Education students and English majors. Introduces several Shakespeare plays with particular attention to analysis and critical review of Shakespeare's works. Teaches comprehension of Shakespeare's works and their continued cultural stature. Explores aspects of dramatic performance and a selection of Shakespeare's poetry. May include discussion, lectures, films, papers, examinations, and attending or performing in plays or scenes from plays. Completers should be able to interpret Shakespearean literature and explain the relationship of Shakespeare's works to the world of today.

**ENGL 230H HH**
**Shakespeare**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

For General Education students and English majors. Introduces several Shakespeare plays with particular attention to analysis and critical evaluation of Shakespeare's works. Teaches comprehension of Shakespeare's works and their continued cultural stature. Explores aspects of dramatic performance and a selection of Shakespeare's poetry. May include discussion, lectures, films, papers, examinations, and attending or performing in plays or scenes from plays. Completers should be able to interpret Shakespearean literature and explain the relationship of Shakespeare's works to the world of today.

**ENGL 2310 HH**
**Technical Communication**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Teaches basic technical writing skills used in a variety of professional settings. Emphasizes audience analysis, document design, and using precise language for a particular audience.

**ENGL 2510 HH**
**American Literature before 1865**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Surveys American essays, letters, biographies, fiction, and poetry up to 1865. Studies literature as a reaction to American and world events and to the general condition of the American people through discussion, lecture, videos, and writing.

**ENGL 2520 HH**
**American Literature after 1865**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Surveys American essays, letters, biographies, fiction, drama, and poetry from 1865 to the present. Studies literature as a reaction to American and world events and to the general condition of the American people through discussion, lecture, videos, and writing.

**ENGL 2600 HH**
**Critical Introduction to Literature**
**3**
* Prerequisite(s): Completion of ENGL 2010 with a grade of C- or higher.

Surveys contemporary critical, theoretical, and ideological approaches to literature (such as structuralist, poststructuralist, psychoanalytical, feminist / gender, Marxist, new historical, postcolonial, etc.). Introduces key literary terms and engages close reading techniques. Includes lectures, screenings, student presentations, analyses and written reports, exams, and a final essay in MLA format and documentation.

**ENGL 2610 HH**
**British Literature before 1800**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Presents a survey of British literature with emphasis on the most important works of the best writers from 450-1800 A.D. Introduces Old English, Middle English, Renaissance, and Neo-Classical British literature. Uses discussion, lecture, films, videos, tests, and papers.

**ENGL 2620 HH**
**British Literature after 1800**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Introduces British Romanticism, Victorianism, Modernism, and post-Modernism. Emphasizes important works of the best writers from approximately 1800 to the present. May include discussion, lecture, videos, films, tests, and papers.

**ENGL 2730**
**Introduction to Gender Studies**
**3**
* Prerequisite(s): ENGL 2010

Analyzes gender from an interdisciplinary model. Explores such issues as the definition of masculinity and femininity, the function of gender roles and stereotypes, and what it means to have sexed bodies and minds. Analyzes questions of gender through the different frameworks of literature, anthropology, sociology, history, biology, psychology, and philosophy.

**ENGL 276R**
**Themes in Literature**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Analyzes specific themes/topics in literature (generic or other). Requires reading and study of representative works. Includes short papers, tests and presentations. Possible course themes are: horror, fantasy, nonfiction, detective fiction, and western American literature, among others. May be repeated for up to 6 credits toward graduation.

**ENGL 281R**
**Internship**
**1 to 8**
* Prerequisite(s): Approval of Cooperative Coordinator

Designed for English majors. Provides experience in the student's major. Students who receive credit for an internship must establish learning objectives with their Faculty Sponsor at the beginning of their internship and reflect on their learning through academic work (i.e. papers, journal, etc.). Students are required to submit an evaluation of their experience at the end of the semester. Credit is determined by the number of hours a student works during the semester. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**ENGL 290R**
**English Scholarly Forum**
**1**
* Prerequisite(s): ENGL 2010

Requires attendance at academic campus events of student's choice (conferences, lectures, colloquia, symposia, workshops, reading groups, etc.) and composing reflective, written assignments. Includes informal meetings with instructor at the beginning and end of the course. May be taken three times for credit.

**ENGL 299R**
**Independent Study**
**.5 to 3**

Provides independent study as directed in reading and individual projects at the discretion and approval of the Dean and/or Department Chair. Limited to three credits toward graduation with an AS/AA degree.

**ENGL 3000**
**Professional Considerations for the English Major**
**1**
* Prerequisite(s): Completion of ENGL 2010 with a grade of C- or higher and University Advanced Standing

Discusses various career choices for English majors. Familiarizes students with curricular emphases and department faculty. Emphasizes internships and other available activities. Features a regular rotation of English faculty guest speakers.

**ENGL 3010**
**Rhetorical Theory**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Considers prominent theories of rhetoric and accompanying methods for the production of texts in various contexts, encouraging adopting, amending, and/or developing hybrid theories of rhetoric.

**ENGL 3020**
**Modern English Grammars**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Explores language structures, discovering connections between grammar (linguistic structure) and language uses (discourse and/or rhetoric). Includes the study of and practice in informed decision-making in the process of developing language structures (grammatical choices) appropriate to a particular rhetorical aim.

**ENGL 3030**
**Writing in the Disciplines**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Focuses on analysis and production of discipline-specific texts. Teaches rhetorical knowledge and skills and emphasizes summarizing, paraphrasing, quoting, critical analysis, synthesizing ideas, and interrogating multiple perspectives. Includes written, oral, visual, and other modes of communication.

**ENGL 3040**
**History of the English Language**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Focuses on the origins of our language and how it has grown and continues to change. Introduces historical origins of the English language and changes that produced our present speech in its many dialects, creoles, and pidgins. Combines linguistic and rhetorical histories.

**ENGL 3050**
**Advanced Editing and Design for Print Media**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing; ENGL 2050 recommended

Refines student editing, design, and publishing skills. Provides students with the opportunity to take manuscripts from editing to press-ready. Teaches industry standards for current publishing tools. Includes projects such as designing books, marketing literature, and corporate identities. Covers design, typography, and pre-press issues as they relate to writing and editing documents. Recommended for students involved with student publications, including journals and campus newspaper.

**ENGL 3060 (Cross-listed with: HUM 3060)**
**Visual Rhetoric**
**3**
* Prerequisite(s):ENGL 2010 with a grade of C- or higher and University Advanced Standing

Investigates the growing academic and cultural interest in the rhetorical nature of visual texts. Teaches critical thinking about the consumption and productions of images and multimodal texts. Explores visual grammars and other theories of visual rhetoric as articulated by contemporary image, language, and scholars of rhetoric. Encourages the development of theoretical and practical knowledge through reading, discussion, and analysis as well as through the production of visual texts and written work.

**ENGL 3070**
**Public Rhetorics**
**3**
* Prerequisite(s): ENGL 2010 with a C- or higher and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 3010

Investigates the structure and nature of rhetorical identities and arguments in public discourse. Introduces genres of public discourse to examine their rhetorical construction and circulation to mass audiences. Explores and critiques theories of democratic deliberation. Studies texts in media such as advertising, blogs, film, social networking venues, television, and websites through specific theories of public rhetoric. Examines arguments regarding the complex nature of public ethos. Includes reading, discussion, analysis, research, and production of public rhetorics through a variety of media and methods.

**ENGL 3085**
**Rhetorical Approaches to Popular Culture**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 3010

Explores popular culture as a contested site of meaning-making, identity-formation, and shared experiences. Reviews historical theories that construct the status of the popular or the mainstream versus the comparative labels of the "highbrow" and the "subcultural." Analyzes how media access, socioeconomic context, cultural movements, and generational differences formulate taste preferences and different styles of engagement with popular texts. Focuses on the rhetorical practices of pop culture creation and consumption with an emphasis on personal and political ramifications. Examines texts that are industry-produced and texts created through the practices of fans, critics, and theorists.

**ENGL 3090**
**Academic Writing for English Majors WE**
**3**
* Prerequisite(s): ENGL 2600 with a grade of C- or higher and University Advanced Standing
* Corequisite(s): ENGL 3000 Recommended

Centers on scholarly research and writing in fields related to English Studies, drawing on students' areas of focus. Emphasizes analysis, rhetorical theories of writing, development, style, oral presentations, and primary and secondary research techniques. Prepares students to extend their abilities with researched writing in other upper-division courses and teaches students advanced scholarly attitudes toward researched writing.

**ENGL 3110 (Cross-listed with: COMM 3110, THEA 3110)**
**Non Fiction Cinema History**
**3**
* Prerequisite(s): ENGL 2150 and University Advanced Standing

Surveys the history of non-fiction/documentary film from 1896 to the present. Includes study of early pioneers from Flaherty's NANOOK OF THE NORTH to the current trend of reality television and popular documentaries. Some films screened may carry an "R" rating.

**ENGL 314G (Cross-listed with: COMM 314G, THEA 314G)**
**Global Cinema History**
**3**
* Prerequisite(s): (ENGL 2150 or THEA 1023) and University Advanced Standing

Studies the evolution of global film styles, movements, stars, and genres with a focus on international cinema chronologies outside the United States. Some films screened may be considered controversial and carry an "R" rating.

**ENGL 3150 (Cross-listed with: CINE 3150)**
**Cinema and Television Theory**
**3**
* Prerequisite(s): (CINE 2150 or ENGL 2150) and University Advanced Standing

Examines major theoretical approaches to the screen arts. Explores how cinema and television reflect and are created by historical and contemporary cultural contexts. Includes the study of various approaches such as fan studies, spectatorship, stars, authorship, genre, long-form narrative and production. Includes lecture, film and media screenings, and critical discussions of assigned readings.

**ENGL 3300**
**Collaborative Communication for Technology Professions**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Teaches technical communication skills and methodologies in demand by business and industry. Provides collaborative experience in the development of a professional, team-oriented project, using suitable technology. Integrates textual and visual rhetorics through effective design practices. Emphasizes primary and secondary research as well as usability testing. Lab access fee of $12 for computers applies.

**ENGL 3320**
**Grant and Proposal Writing**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Introduces students to private and governmental funding sources. Demonstrates successful proposal and grant writing strategies. For interested upper-division students and Technical Writing emphases and minors.

**ENGL 3340**
**Digital Document Design**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Teaches web-based document design and other digital genres. Introduces HTML, CSS, and industry standard tools. Emphasizes rhetorical differences between digital and print documents and focuses on the collaborative and viral nature of web texts.

**ENGL 3420**
**Intermediate Fiction Writing**
**3**
* Prerequisite(s): [(ENGL 2250 or ENGL 225H) and ENGL 2600 each with a C- or higher] and University Advanced Standing

Provides intermediate instruction in practices and techniques for generating, writing, and revising original short fiction. Focuses on contemporary fiction and critical theories associated with contemporary fiction. Explores and provides practice in various categories of fiction. Utilizes the creative writing workshop as the primary method of critical engagement with and critique of original short fiction.

**ENGL 3430**
**Play Writing for Creative Writers**
**3**
* Prerequisite(s): [(ENGL 2250 or ENGL 225H) and ENGL 2600, each with a C- or higher] and University Advanced Standing

Provides intermediate instruction in practices and techniques for generating, writing, and revising original plays. Focuses on critical theories associated with contemporary play writing. Explores and provides practice in various categories of drama. Utilizes the creative writing workshop as the primary method of critical engagement with and critique of original writing.

**ENGL 3440**
**Intermediate Poetry Writing**
**3**
* Prerequisite(s): [(ENGL 2250 or ENGL 225H) and ENGL 2600, each with a C- or higher] and University Advanced Standing

Provides intermediate instruction in practices and techniques for generating, writing, and revising original poetry. Focuses on contemporary poetry and critical theories associated with contemporary poetry. Utilizes the creative writing workshop as the primary method of critical engagement with and critique of original poetry. May include attendance at poetry readings, memorizations, and submission of original poetry to literary journals.

**ENGL 3450**
**Intermediate Creative Nonfiction Writing**
**3**
* Prerequisite(s): [(ENGL 2250 or ENGL 225H) and ENGL 2600, each with a C- or higher] and University Advanced Standing

Provides intermediate instruction in practices and techniques for generating, writing, and revising original creative nonfiction. Focuses on contemporary nonfiction and critical theories associated with contemporary nonfiction. Explores and provides practice in various categories of nonfiction. Utilizes the creative writing workshop as the primary method of critical engagement with and critique of original writing. Addresses the challenges of transforming experience into writing.

**ENGL 3460**
**Wilderness and Environmental Writing**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Introduces students to the literary conversation of appreciation and responsibility for our natural world and teaches them how to engage meaningfully in that conversation. Requires (1) extensive readings in literature of the natural world, including scientific, polemic, creative non-fiction, and fiction writing modes bearing on environmental stewardship and (2) a writing portfolio that includes polemic, creative non-fiction, fiction, and poetry. Includes discussion of assigned readings and workshopping of student manuscripts. Requires overnight wilderness field trips; students with disabilities will be accommodated on field trips.

**ENGL 3510**
**Early American Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2510 or ENGL 2520), both with a grade of C- or higher and University Advanced Standing

Examines selected authors and themes in American literature from its beginnings through the 1820s. Identifies texts within their cultural and historical contexts. Explores multiple genres, including autobiography, essay, poetry, drama, and fiction.

**ENGL 3520**
**Literature of the American Renaissance**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2510 or ENGL 2520), both with a grade of C- or higher and University Advanced Standing

Studies American literary works during the Romantic period, roughly 1830-1870. Includes study of authors such as Hawthorne, Melville, Poe, Emerson, Thoreau, Douglass, Jacobs, Stowe, Whitman, and Dickinson. Identifies the contribution of both canonical and lesser-known authors within cultural and historical contexts.

**ENGL 3525**
**American Literary Realism and Naturalism**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2510 or ENGL 2520), both with a grade of C- or higher and University Advanced Standing

Studies literature associated with the American realist and naturalist movements between the Civil War and the early twentieth century, by authors such as Mark Twain, Henry James, Kate Chopin, Theodore Dreiser, and Edith Wharton. Explores aesthetic and philosophical issues encountered by authors who attempt to depict social and natural environments realistically.

**ENGL 3530**
**Modern American Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2510 or ENGL 2520), both with a grade of C- or higher and University Advanced Standing

Studies modern American literature (c. 1900-1945) in relation to intellectual and historical developments. Emphasizes important works by major writers responding to radical changes in America brought on by shifting demographics, artistic experimentation, and world war.

**ENGL 3540**
**Contemporary American Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2510 or ENGL 2520), both with a grade of C- or higher and University Advanced Standing

Studies significant authors, themes, and topics in American literature (c. 1945 to present) in relation to historical and intellectual developments and contemporary literary theory. Explores multiple genres, including fiction, poetry, drama, and film.

**ENGL 357G**
**Native American Literature**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Surveys a wide range of Native American literature. Examines the cultures and identities of Native Americans through the study of literary texts including mythology and works by contemporary writers such as N. Scott Momaday, Leslie Marmon Silko, Louise Erdrich, and Sherman Alexie, among others.

**ENGL 3610**
**Medieval Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2610 or ENGL 2620), both with a grade of C- or higher and University Advanced Standing

Covers major authors, works, and themes from Anglo Saxon, Middle English, up to the Tudor period (750 to 1485 AD). Studies selected authors such as "Beowulf" poet, Julian of Norwich, Langland, Margery Kempe, Malory, Marie De France, the "Pearl" poet, and the Wakefield Master. Includes brief discussion of Chaucer. Analyzes relevant cultural, philosophical, and historical aspects of the period.

**ENGL 3620**
**Tudor British Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2610 or ENGL 2620), both with a grade of C- or higher and University Advanced Standing

Explores major authors, works, and themes from the Tudor period (1485-1603). Includes works by authors such as Surrey, Wyatt, Skelton, Moore, Marlowe, Sydney, Spenser, Queen Elizabeth I, Ralegh, Mary Herbert, Shakespeare, Drayton, Campion, Nashe, and others. Analyzes relevant cultural, philosophical, and historical aspects of the period.

**ENGL 3630**
**Stuart British Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2610 or ENGL 2620), both with a grade of C- or higher and University Advanced Standing

Explores major authors, works, and themes from the Stuart period (Jacobean, English Civil War, and Restoration eras). Studies selected authors such as Shakespeare, Jonson, Lanyer, Donne, Wroth, Herbert, Herrick, Vaughn, Marvell, Cavendish, Philips, Milton, Behn, and Dryden. Discusses relevant cultural, philosophical, and historical aspects of the period.

**ENGL 3640**
**Restoration and 18th Century British Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2610 or ENGL 2620), both with a grade of C- or higher and University Advanced Standing

Surveys major authors and works from the Augustan and Johnsonian eras of British literature, including literary, political, historical, religious, and social trends and ideas. Explores selected authors such as Defoe, Swift, Pope, Johnson, Thompson, Gray, Collins, Goldsmith, Montague, Burney, and others.

**ENGL 3650**
**Romantic British Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2610 or ENGL 2620), both with a grade of C- or higher and University Advanced Standing

Explores British poetry, fiction, and nonfiction of the Romantic era (approx. 1780-1830) by authors including Blake, Wordsworth, Coleridge, Byron, Keats, the Shelleys, and Austen. Examines historical and philosophical trends that shaped the era's literature and were shaped by it.

**ENGL 3655**
**Victorian British Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2610 or ENGL 2620), both with a grade of C- or higher, and University Advanced Standing

Explores British poetry, drama, fiction, and nonfiction of the Victorian age (approx. 1830-1900) by authors including Dickens, Tennyson, Eliot, the Brownings and Rossettis, Hardy, and Wilde. Examines historical and philosophical trends that shaped the era's literature and were shaped by it.

**ENGL 3660**
**Modern British Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2610 or ENGL 2620), both with a grade of C- or higher and University Advanced Standing

Explores modern British literature (c. 1900-1945) in relation to intellectual and historical developments. Emphasizes the literature of empire and of the world wars, modernist experimental writing, and reactions against modernism.

**ENGL 3670**
**Contemporary British Literature**
**3**
* Prerequisite(s): ENGL 2010 and (ENGL 2610 or ENGL 2620), both with a grade of C- or higher and University Advanced Standing

Explores contemporary British literature (1945-present) in relation to intellectual and historical developments. Emphasizes postmodern and postcolonial writing alongside traditional forms that, together, characterize recent British literature.

**ENGL 3710**
**Literature by Women**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Provides a substantive framework of important critical issues regarding literature by or about women. Applies feminist critical theory to fiction, poetry, personal essays, or drama written by women.

**ENGL 373R**
**Literature of Cultures and Places**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Studies literature written in English by authors from outside the United States and Britain or by authors in the United States and Britain defined by regional or cultural traditions (e.g. Southern US, Welsh, urban working-class). May be repeated twice with different designations.

**ENGL 374G**
**Literature of the Sacred**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Focuses on reading and interpreting primary texts of Hinduism, Buddhism, Judaism, Christianity, Islam, and others emphasizing resonances of these texts in later works of literature. Discusses texts from a literary standpoint within the genre of "religious writings."

**ENGL 376G** **HH**
**World Literature**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Studies literature from outside of Britain and the United States. Focuses on texts selected by region, culture, time period, or author (or closely related group of authors).

**ENGL 377G**
**Latina/o Literature in America**
**3**
* Prerequisite(s): University Advanced Standing

Studies Latina/o literature written in and about the United States and North America through close readings of novels, poetry, and other media from a variety of national, ethnic, and cultural traditions and perspectives including Mexico, the Caribbean, and the Brazuca/o experience. Examines issues such as identity, language, culture, race, ethnicity, and national borders, alongside questions of style, form, symbolism, and narrative. Integrates active class discussions, film screenings, student presentations, examinations, and papers. All texts are either written in English or taught in translation.

**ENGL 3780**
**Mormon Literature**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Surveys the foundations of Mormon literature as expressed through short fiction, novels, personal essays, drama, history and criticism.

**ENGL 3790**
**Contemporary LGBTQ Literature**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Surveys literary, historical, critical, and cultural texts that reflect the diversity inherent among sexually marginal communities in the United States. Includes, but is not limited to novels, short stories, drama, poetry, film, and visual art.

**ENGL 3820**
**History of Literary Criticism**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Explores strategies and theories influencing the reading and writing of literary texts from classical antiquity to the present.

**ENGL 3890**
**Contemporary Critical Approaches to Literature WE**
**3**
* Prerequisite(s): Completion of ENGL 2600 with a grade of C- or higher and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 3090

Provides in-depth study of one contemporary theoretical and critical approach to literature using primary texts. Explicates how interpretive techniques function within the discipline of English Studies. Required for English majors. Should be taken beginning of junior year.

**ENGL 401R**
**Topics in Rhetoric**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 3010

Examines advanced topics in rhetoric and writing. Studies writing's central role in education, communication, and culture. Emphasizes discourse communities and genres. Analyzes how writing constructs meaning in academic, professional, media, and personal texts. Situates writing as an instrument for community engagement and service learning. May be repeated for a maximum of 6 credits toward graduation.

**ENGL 4020**
**Multicultural Rhetorics**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 3010

Investigates the history and structure of rhetorical identities and arguments in multicultural, multi-ethnic, disability, and/or feminist discourses. Examines and critiques public discourses centered around race, class, gender, sexuality, dis/ability, and other issues. Uses specific rhetorical theories to examine various texts and popular media, such as advertisements, film, television, etc.

**ENGL 412R**
**Studies in Literary Genres**
**3**
* Prerequisite(s): [(ENGL 2250 or ENGL 225H) and ENGL 2600 each with a C- or higher] and University Advanced Standing

Examines various literary genres, with a different focus each semester. May be repeated with different topics for a maximum of 9 credits toward graduation.

**ENGL 414R (Cross-listed with: THEA 414R)**
**Special Topics in Cinema History**
**3**
* Prerequisite(s): ENGL 2150 and University Advanced Standing

Focuses study on a specific U.S. or International period or movement. Representative topics may include German Expressionism, Italian Neorealism, New Hollywood Cinema, and etc. May be repeated for a maximum of 9 credits toward graduation. Some films screened may carry an "R" rating.

**ENGL 416R (Cross-listed with: CINE 416R, THEA 416R)**
**Special Topics in Film Studies**
**3**
* Prerequisite(s): (ENGL 2150 or CINE 2150 or THEA 1023) and University Advanced Standing

Covers cinema directors, genre, theory, and social change on a rotating basis. Explains course focus, defines terminology involved, then studies evolution and/or specific texts or contexts, and considers theoretical discourse. May be repeated for a maximum of 9 credits toward graduation. Some films screened may carry an "R" rating. Course fee of $40 for support applies.

**ENGL 4210**
**Methods in Teaching Literacy I**
**3**
* Prerequisite(s): [ENGL 2600 and (ENGL 3010 or ENGL 3020 or ENGL 3040)] and University Advanced Standing

Explores issues related to teaching English in secondary schools. Focuses on using the Common Core State Standards (CCSS) to design engaging units in each of the core strands: Reading, Writing, Speaking and Listening, and Language. Focuses on curriculum design, including teaching methods and assessment. Entails class discussion, field observations, and creation of teaching materials.

**ENGL 4220**
**Methods in Teaching Literacy II**
**3**
* Prerequisite(s): ENGL 4210 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): EDSC 455G

Emphasizes the teaching of reading and literature in the secondary English classroom. Presents strategies for teaching skills and concepts outlined in the Utah Core State Standards (UCSS). Explores issues and research related to adolescent literacy through reading and discussion. Requires students to create teaching materials, including unit and lesson plans, and participate in teaching demonstrations. Preparatory to student teaching for English Secondary Education students.

**ENGL 4230**
**Methods in Teaching Literacy III Teaching the Conventions of Writing**
**3**
* Prerequisite(s): ENGL 4210 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): EDSC 455G

Emphasizes developing a writing program in the secondary English classroom, including assigning and assessing student writing. Presents strategies for teaching writing to secondary students, as outlined in the Common Core State Standards (CCSS), which have been adopted by the Utah Office of Education. Includes designing lessons for each of the modes specified in the CCSS: Argument, Informative/Explanatory, and Narrative writing. Integrates the six-trait model, with specific focus on teaching Conventions. Entails class discussion, micro-teaching, and creation of teaching materials.

**ENGL 4250**
**Adolescent Literature**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Explores attitudes towards adolescence as a distinctive psychological, social and moral state, using contemporary and time-honored works from various cultures. Pays particular attention to contemporary adolescent issues, history of young adult literature, significant trends in young adult literature, and the role of young adult literature in the literacy development process.

**ENGL 4340**
**Advanced Technical Communication**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and ENGL 2310 and University Advanced Standing

Introduces advanced theory to critically reflect upon workplace genres and values to situate technical communication into broader political and global contexts. Teaches user-centered document design, including initial proposals and research, drafting, collaboration, usability testing, and document management. Emphasizes designing documents for local and university clients.

**ENGL 436R**
**Topics in Technical Communication**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and ENGL 2310 and University Advanced Standing

Examines key issues and theories in technical communication. May be taken twice with different topics.

**ENGL 4420**
**Advanced Fiction Writing**
**3**
* Prerequisite(s): ENGL 3420 and University Advanced Standing

Provides advanced instruction in practices and techniques for generating, writing, and revising original short fiction. Focuses on contemporary fiction and critical theories associated with contemporary fiction. Investigates various approaches to fiction writing through a series of readings, writing exercises, and revision assignments. Utilizes the creative writing workshop as the primary method of critical engagement with original fiction writing.

**ENGL 4425**
**Advanced Fiction Writing II**
**3**
* Prerequisite(s): ENGL 4420 and University Advanced Standing

Applies a variety of advanced techniques for writing and especially revising fiction which includes readings in form, theory, and published works, with an emphasis on workshopping, revising, and preparing for publication, public readings, and graduate school.

**ENGL 4440**
**Advanced Poetry Writing**
**3**
* Prerequisite(s): ENGL 3440 and University Advanced Standing

Provides advanced instruction in practices and techniques for generating, writing, and revising original poetry. Focuses on contemporary poetry and critical theories associated with contemporary poetry. Investigates various approaches to writing poetry through a series of readings, writing exercises, and revision assignments. Utilizes the creative writing workshop as the primary method of critical engagement with original poetry writing.

**ENGL 4445**
**Advanced Poetry Writing II**
**3**
* Prerequisite(s): ENGL 4440 and University Advanced Standing

Puts into practice a variety of techniques for writing and revising original poetry. Includes poetry readings, memorizations, workshopping, and submission of original poetry to literary journals. Focuses on contemporary poetry and critical theories associated with contemporary poetry. Includes workshop methodology.

**ENGL 4450**
**Advanced Creative Nonfiction Writing**
**3**
* Prerequisite(s): ENGL 3450 and University Advanced Standing

Provides advanced instruction in practices and techniques for generating, writing, and revising original creative nonfiction. Focuses on contemporary nonfiction and critical theories associated with contemporary nonfiction. Investigates various approaches to writing nonfiction through a series of readings, writing exercises, and revision assignments. Utilizes the creative writing workshop as the primary method of critical engagement with original nonfiction writing.

**ENGL 4455**
**Advanced Creative Nonfiction Writing II**
**3**
* Prerequisite(s): ENGL 4450 and University Advanced Standing

Provides advanced instruction in revising, editing, and preparing Creative Nonfiction manuscripts for submissions in well-selected quality venues. Provides practice in finishing work previously shaped in ENGL 3450 and ENGL 4450. Addresses challenges of style, balance, compositional complexity, tradition, and experimentation.

**ENGL 4570**
**Studies in the American Novel**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Explores formal and thematic developments in the American novel. Includes historical, regional, cultural, and theoretical perspectives.

**ENGL 4620**
**Chaucer**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Studies selected works by Chaucer, including The Canterbury Tales and other poetry. Considers the cultural and historical context of the Middle Ages.

**ENGL 463R**
**Topics in Shakespeare**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Examines various topics related to Shakespeare's drama and poetry. Discusses relevant cultural and historical aspects of his times. May be repeated for a maximum of 6 credits for graduation with different topics.

**ENGL 4640**
**Milton**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Surveys John Milton's major prose and poetry, including an intensive study of "Paradise Lost," placed in context with the important social, political, and religious trends of his time.

**ENGL 471R**
**Eminent Authors**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Introduces important works of eminent authors. Emphasizes forms of literary expression and their place in the historical development of world literature. Examines relevant cultural and historical aspects of the authors' milieux. May be repeated twice with different topics.

**ENGL 473R**
**Topics in Gender Studies**
**3**
* Prerequisite(s): ENGL 2010, ENGL 2600, and University Advanced Standing

Focuses student reading, research, and discussion on specific areas of concentration within the field of gender studies. Analyzes how gender affects and is affected by culture, ideology, socio-economic factors, history, etc. May be repeated for up to 6 credits toward graduation.

**ENGL 474R**
**Topics in Folklore**
**3**
* Prerequisite(s): (ENGL 2210 or instructor/ advisor approval) and University Advanced Standing

Studies one folk genre, one folk group, or one theme which crosses genres and/or groups. Students will collect folklore related to topic under discussion. Uses discussion, readings, folk events, and students' writings. May be repeated twice with different topics.

**ENGL 476G**
**Multi-ethnic Literature in America**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Surveys multi-ethnic literature, reflecting the rich diversity inherent in the American experience. Includes but is not limited to works by Native American, Hispanic American, Asian American, and African American authors.

**ENGL 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Departmental approval, senior status, and University Advanced Standing

For senior English majors and minors. Internships are intended to offer students opportunities to work with instructors and other professionals on task related to the field of English. Students who receive credit for an internship must establish learning objectives with their Faculty Sponsor at the beginning of their internship and reflect on their learning through academic work (i.e., papers, journal, etc.). Students are required to submit an evaluation of their experience at the end of the semester. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**ENGL 486R**
**Topics in Literature**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Studies topics in literature such as ethics, the environment, war, civil rights, families, marriage, death, politics, adolescence, and immigrant narratives.

**ENGL 488H**
**English Honors Seminar**
**3**
* Prerequisite(s): (ENGL 3090 and ENGL 3890) and University Advanced Standing

Emphasizes rigorous analysis and synthesis of topics in British and American literature, rhetoric, and writing, with specific content varying by semester. Uses a seminar approach to enable significant participation by students through discussion, presentations, and written analyses.

**ENGL 490R**
**Directed Readings**
**1 to 3**
* Prerequisite(s): Department Chair, Instructor Approval, and University Advanced Standing

Reading and writing assignments designed in consultation with a faculty member to meet special needs or interests not available through regular course work. May be repeated two times for a total of up to 9 credits.

**ENGL 4950**
**Senior Seminar**
**3**
* Prerequisite(s): ENGL 3000, ENGL 3090, and ENGL 3890, all with a grade of C- or higher and University Advanced Standing. Senior Standing recommended.

Explores the value and relevance of an English degree. Professionalizes students by assisting them with career or graduate school preparation. Offers students the opportunity to reflect on their major and to optimize writing and communication skills. Includes revision of an existing paper as a scholarly writing sample and creation of a professional portfolio to display knowledge and abilities. Culminates with submission of a reflective portfolio to the department.

**ENGL 498H**
**Honors Thesis Preparation**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 488H

Serves as the first half of the thesis experience for Departmental Honors in English. Reviews and improves students' research methodologies. Requires that students initiate collaboration with one or more instructors in a directed research and writing project. Explores and develops thesis topic in consultation with faculty. Builds on skills and knowledge gained in earlier courses, including research skills in primary and secondary sources, critical thinking, and literary analysis.

**ENGL 499H**
**Honors Thesis**
**3**
* Prerequisite(s): ENGL 498H and University Advanced Standing

Serves as the second half of the thesis experience for English Honors. Operates as an independent study. Continues the research begun in ENGL 498H. Requires students to write a high-quality, publishable/presentable senior thesis. Requires defense of the thesis and its method before a committee of three faculty.

**ENGL 5340**
**Technical Communication Theory and Practice**
**3**
* Prerequisite(s): Acceptance into a Graduate Program or Instructor Approval

Emphasizes the application of technical writing theory through composing a variety of documents commonly used by professionals in technical fields, which may include life sciences, engineering, and pharmacology. Builds off previous work in technical writing classes and/or industry experience to foster a rhetorical foundation for ethical and legal decision making in bureaucratic and global contexts. Stresses critical analysis of successful documents and their place within networks of relevant stakeholders, compliance expectations, and historical restraints. Places further emphasis on managing complex documents and satisfying the needs of diverse audiences. Topics may include: regulatory affairs, environmental hazards, and protocol specification.

# Engineering (ENGR)

**ENGR 1000**
**Introduction to Engineering WE**
**3**

Introduces engineering-problem-solving techniques, design processes, modelling of simple engineering systems using CAD, and systems analysis in Excel. Emphasizes engineering design procedures by incorporating group projects and presentations. Course Lab fee of $11 for computers applies. Lab access fee of $45 for computers applies.

**ENGR 1020**
**Survey of Engineering**
**1**

Introduces the various areas of engineering to pre-engineering majors and others interested in learning more about the contributions engineers make to our modern society. Includes a brief history of engineering and discussions about what engineers really do. Discusses professional ethics, responsibilities, and career opportunities. Includes lectures, guest speakers, and in-class exercises. Lab access fee of $45 applies.

**ENGR 1030**
**Engineering Programming**
**3**
* Prerequisite(s) or Corequisite(s): MATH 1210

Involves modelling and analysis of electro-mechanical systems using projects. Applies scientific principles to solve and model engineering problems. Involves developing and writing programs to gather data, guide, and control electro-mechanical devices to achieve predefined objectives. Course fee of $11 for supplies/materials applies. Lab access fee of $45 applies.

**ENGR 2010**
**Engineering Statics**
**3**
* Prerequisite(s): PHYS 2210

Teaches principles of engineering mechanics as applied to bodies at rest. Discusses the concepts of position and force vectors, free body diagrams, equilibrium, center of gravity, centroids, distributed loading, friction, area and mass moments of inertia. Applies principles learned in the analysis of trusses, frames and machines. Lab access fee of $45 for computers applies. Canvas Course Mats $78/McGraw applies.

**ENGR 2030**
**Engineering Dynamics**
**3**
* Prerequisite(s): ENGR 2010, MATH 1220, and PHYS 2210

Teaches principles of engineering mechanics as applied to bodies in motion. Studies kinematics and kinetics of particles and rigid bodies. Develops the concepts of force and acceleration, work, energy, impulse, momentum, impact, and vibration. Utilizes theory and methodology developed in the solution of practical engineering problems. Lab access fee of $45 for computers applies. Canvas Course Mats of $78/McGraw applies.

**ENGR 2140**
**Mechanics of Materials**
**3**
* Prerequisite(s): ENGR 2010 and PHYS 2210

Studies behavior of materials under axial, torsional, flexural, transverse shear and combined loading conditions. Analyzes nature of stress and strain for ductile and brittle materials, stress and strain diagrams, stress concentration, and failure of materials. Includes analysis of repeated and dynamic loading, and basic design techniques related to above topics. Lab access fee of $45 for computers applies.

**ENGR 2160**
**Introduction to Materials Science and Engineering**
**3**
* Prerequisite(s): CHEM 1210

Introduces students to properties of materials from macro and micro point of view. Includes failure analysis of materials, altering properties of materials, and fracture mechanics. Introduces properties of solid materials and their behavior as applied to engineering. Lab access fee of $45 applies.

**ENGR 2300**
**Engineering Thermodynamics**
**3**
* Prerequisite(s): MATH 1220, PHYS 2210

Covers static pressure, phase diagrams, equations of state, and mass balance. Studies laws of thermodynamics and their application in engineering problem solving. Includes analysis of open and closed systems, steady state, and unsteady flow problems. Studies heat engine, refrigeration, and other important thermodynamic cycles. Discusses the concept of Entropy and Entropy balance. Lab access fee of $45 applies.

**ENGR 2450**
**Computational Methods for Engineering Analysis**
**3**
* Prerequisite(s) or Corequisite(s): MATH 2250

Discusses computational and symbolic methods for the solution of complex engineering problems. Discusses computer representation of numbers and algorithm error analysis. Covers the solution of algebraic and differential equations. Includes the use of modern software tools. Canvas Course Mats $78/McGraw applies. Lab access fee of $45 for computers applies.

**ENGR 295R**
**Special Topics**
**1 to 3**
* Prerequisite(s): Permission of Department Chair

Presents various engineering topics. Examines current technology, techniques, processes and equipment. Includes oral and written reports. May be repeated for a maximum of 3 credits toward graduation.

# Environmental Studies (ENST)

**ENST 3000**
**Introduction to Environmental Studies**
**3**
* Prerequisite(s): University Advanced Standing

Explores the complex relationships of culture, technology, and nature within an interdisciplinary framework of the natural sciences, social sciences, business, and humanities. Addresses the integration of humanity and nature in the age of globalization.

**ENST 3520 (Cross-listed with: SOC 3520)**
**Environmental Sociology**
**3**
* Prerequisite(s): SOC 1010 and ENGL 2010 with a C+ grade or higher and University Advanced Standing

Explores in detail several different approaches to understanding the social causes of and solutions to environmental degradation. Discusses the development of a wide variety of theory-based critiques of various social institutions (e.g., economic, political, religious) and how these institutions' values can create and perpetuate unsustainable practices.

# Entrepreneurship (ENTR)

**ENTR 2500** **SS**
**Creativity and Entrepreneurial Thinking**
**3**

Introduces the concepts of innovation and entrepreneurial creativity. Draws upon the inspired thinking and entrepreneurial pursuits of leaders in a variety of disciplines in order to understand the process of innovation and appreciate the role of creativity in making innovation possible. Includes topics such as the customer/problem/solution framework, design thinking, prototyping, intellectual property, creative idea development, lead user research methodology, peer feedback, new venture financing, and the lean start-up.

**ENTR 3170**
**Entrepreneurship**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Provides an overview of the practice of entrepreneurship and focuses on the role of the entrepreneur in identifying, evaluating and developing opportunities. Considers the application of knowledge of the technical, market, financial and human aspects of a business as they relate to the start-up and development of business opportunities. Lab access fee of $25 for computers applies.

**ENTR 3180**
**Developing Small Business**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Provides a practical and theoretical foundation for managing SMEs (small and medium enterprises). Emphasizes identifying, evaluating and developing opportunities for growth. Covers the basic elements of the business focusing on best practices in the technical, market, financial, and human resource aspects of existing small business as well as the interaction between these elements. Covers legal aspects of operating a business.

**ENTR 3190**
**Early-stage Financing**
**3**
* Prerequisite(s): University Advanced Standing

Provides non-business students an overview of financial modeling for entrepreneurship and small business, as well as the sources and processes involved in financing new ventures. Course teaches financial management, proforma financial statements, cash flow, bootstrapping, and debt and equity financing in an entrepreneurial environment.

**ENTR 3220**
**Entrepreneurship Law**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

For entrepreneurship students and others desiring a to start a business. Presents current U.S. legal framework as they concern start-ups and new businesses. Topics include the American legal system, constitutional law, statutory law, common law, and administrative law and alternatives to courts. Discusses crimes, torts, negligence, contracts, negotiable instruments, and contractual relationships.

**ENTR 4200**
**Innovative Opportunity Development**
**3**
* Prerequisite(s): ENTR 3170 and University Advanced Standing

Focuses on the development of both (a) the key value proposition of a product/service offering, and (b) the business entity that provides that offering. Covers the use of client-centered development and design thinking to create, modify and validate business solutions. Emphasizes client feedback from concept through prototype development. Lab access fee of $25 for computers applies.

**ENTR 4210**
**Career Development for Entrepreneurs**
**3**
* Prerequisite(s): ENTR 3170 and University Advanced Standing

Considers the personal and interpersonal development of entrepreneurs and other business professionals. Addresses issues and provides specific guidance in areas such as business and personal financial strategies, business and family interpersonal relationships, networking, human resource management, and professional self-image.

**ENTR 4300**
**The Art of the Pitch**
**3**
* Prerequisite(s): ENTR 2500 or ENTR 3170 and University Advanced Standing

Teaches entrepreneurial strategic communications skills to help the entrepreneur prepare for and present business ideas to prospective investors, partners, employees and customers. Focuses on skill development in written, visual, verbal and vocal communications to pitch business ideas. Develops confidence and the ability to handle questions regarding presentations. May be delivered hybrid. Lab access fee of $25 for computers applies.

**ENTR 4400**
**New Venture Financing**
**3**
* Prerequisite(s): FIN 3100 and Matriculation into the Woodbury School of Business and University Advanced Standing.

Covers advanced concepts and skills in entrepreneurship/small business management. Emphasizes how new and emerging companies are financed. Applies functional tools to case situations. Lab access fee of $25 for computers applies.

**ENTR 4450**
**Enterprise Formation**
**3**
* Prerequisite(s): (ENTR 4200 or ENTR 3170) and Matriculation into the Woodbury School of Business and University Advanced Standing.

Provides an integrated, engaged learning opportunity in entrepreneurship through the development of a business opportunity. Focuses on creating and managing the formation of a business enterprise from the formation of a legal entity to launching a product of service and creating a financial model. Emphasizes documenting the process in a business model and/or a complete business plan.

**ENTR 4455**
**New Venture Consulting**
**3**
* Prerequisite(s): ENTR 3170, matriculation into the Woodbury School of Business and University Advanced Standing

Integrates the identification, evaluation, and/or development of the small- and medium-sized business opportunities of community-based entrepreneurs. Makes use of an engaged learning opportunity for business students interested in learning how consultants work by consulting with and assisting entrepreneurs. Includes projects that cover and examine all functional areas of business and the interaction between them. Covers consulting processes and strategies as well as provide tools and techniques for developing business models and assessing opportunities.

**ENTR 4500**
**Venture Capitalist Skills**
**3**
* Prerequisite(s): ENTR 3190 with B- or better and University Advanced Standing

Develops an in-depth knowledge about the capital raising process. Applies principles of valuation and selection routines for choosing portfolio firms. Assesses candidate startups with quantitative techniques for evaluating firm performance. Teaches analysis of and practices negotiation with other firms on the major aspects of term sheets. Prepares students to create net-positive deals out of competing term sheets that have been submitted to the startup firm.

**ENTR 493R**
**Entrepreneurship Lecture Series**
**1**
* Prerequisite(s): University Advanced Standing

Presents lectures by guest speakers on current entrepreneurship issues and topics. Speakers and topics vary each semester. May apply a maximum of 3 credits toward graduation.

# Environmental Management (ENVT)

**ENVT 1110** **PP**
**Introduction to Environmental Management**
**3**

Surveys environmental issues and the impact of people on the environment. Covers water, air, and soil pollution. Discusses pollution prevention and remediation methods. For majors and any who have an interest in environmental issues.

**ENVT 1200**
**Environmental Worker Safety**
**3**

Discusses safety laws, training requirements, and the use of personal protective equipment. Covers management of a safety program and development of a safety culture.

**ENVT 1210**
**Introduction to Water Reclamation**
**3**

Covers the basic processes used to treat wastewater including primary treatment, biological treatment, and chemical treatment processes. Offers excellent preparation for the state license exam.

**ENVT 1270**
**Environmental Microbiology**
**3**
* Prerequisite(s): MICR 2060 recommended

For water managers, public health workers, and environmental managers. Discusses the role microorganisms in water treatment, wastewater treatment, agriculture, environmental change, and others.

**ENVT 1300**
**Environmental Lab and Sampling**
**3**

Studies basic laboratory techniques used by labs working on environmental projects. Covers safety, pH, dissolved oxygen, BOD, turbidity, organics, and others. Includes opportunities for undergraduate research. Course Lab fee of $38 for supplies/materials/lab applies.

**ENVT 1360**
**Introduction to Water Treatment**
**3**

Covers coagulation, sedimentation, filtration, water sources, sampling, disinfection, and regulations. Introduces the equipment used to treat water. Discusses the prevention of disease through effective treatment.

**ENVT 1510**
**Hazardous Materials Emergency Response**
**3**

Meets the requirements for the OSHA 40 hour training. Includes personal protection, identifying hazardous materials, spill control, and incident management. Completers may obtain OSHA certification for handling hazardous materials. Course fee of $28 for materials applies.

**ENVT 2560**
**Environmental Health**
**3**
* Prerequisite(s): BIOL 1010 and CHEM 1110 recommended

Presents how environmental protection and proper sanitation can protect the public. Covers control of infectious and noninfectious diseases, safe water supplies, housing safety, radiation hazards, and air pollution.

**ENVT 2710**
**Environmental Careers**
**1**

For all students interested in environmental careers. Explores the career opportunities in environmental areas. Covers resumes, letters of inquiry, networking, and other methods of job seeking.

**ENVT 2730**
**Introduction to Soils**
**4**
* Prerequisite(s): ENGL 1010 or ENGH 1005

An introductory course for majors and non-majors. Covers basic topics such as soil classification, soil-water relations, fertility, soil strength, and soil conservation. Offers important background information for those involved in pollution prevention and remediation, environmental monitoring, and home gardening.

**ENVT 3010**
**Environmental Toxicology**
**3**
* Prerequisite(s): BIOL 1010 and CHEM 1110 recommended

For environmental managers and safety managers. Discusses safe levels of exposure, safe industrial practices and regulations. Reviews standards for toxic substances. Increases awareness of toxins commonly found on job sites.

**ENVT 3280**
**Environmental Law**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 (ENGL 2010 recommended), and University Advanced Standing.

Covers the Clean Water Act, the Safe Drinking Water Act, and the Clean Air Act. Reviews the Toxic Substances Control Act, the Resource Conservation and Recovery Act, the Superfund law, DOT regulations, and OSHA regulations.

**ENVT 3290**
**Environmental Permits and Reports**
**3**
* Prerequisite(s): ENGL 1010 recommended

For students interested in becoming environmental managers. Covers the permits and reports that are required by the EPA, OSHA, state and local agencies that relate to air, water, and hazardous materials. Includes the preparation of sample permit applications and monthly operational reports.

**ENVT 3320**
**Hydraulics of Water**
**3**
* Prerequisite(s): MAT 1010 and University Advanced Standing

Prepares students to analyze the flow of water. Includes the continuity equation, Hazen-Williams formula, and the Bernoulli Theorem. Completers will be better able to interact with engineers and operate water equipment in a professional manner.

**ENVT 3330**
**Water Resources Management**
**3**
* Prerequisite(s): University Advanced Standing

Examines the broad issues that affect water quality and supply. Covers watershed management, limnology, stormwater management, and wetlands. Discusses the biological and physical processes that occur and the legal constraints that affect management decisions.

**ENVT 3530**
**Environmental Management Systems**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 (ENGL 2010 recommended), and University Advanced Standing

For those interested in the interaction between industry and the environment. Covers the systems and organization necessary to effectively manage environmental issues. Discusses the ISO 14000 standard and its effect upon management practices.

**ENVT 3550**
**Site Investigation**
**3**
* Prerequisite(s): University Advanced Standing; CHEM 1110 recommended

Covers the investigation and preliminary cleanup of a contaminated site. Includes planning, training, site characterization, sampling, and site control. Completers should have a basic understanding of the process used to remediate an environmentally damaged site.

**ENVT 3600**
**Appropriate Technology and Sustainable Development for the Developing World**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Reviews the origins of poverty and the current conditions of people in developing countries. Offers development solutions being pursued around the world. Empowers students to play an active role in international poverty reduction by introducing international development and its challenges. Teaches students how to determine appropriate technologies based on design, physical, and social considerations.

**ENVT 3630**
**Introduction to Geographic Information Systems**
**4**
* Prerequisite(s): University Advanced Standing

Introduces the operation of Geographic Information Systems (GIS). Focuses on GIS software and basic theory of geographic information science. Offers valuable preparation for careers in geography, planning, surveying, marketing, environmental technology, biology, engineering, and other related fields. Lab access fee of $30 for computers applies

**ENVT 3700**
**Current Topics in Environmental Management**
**3**
* Prerequisite(s): University Advanced Standing; ENVT 1110 recommended

Studies local environmental issues, new technologies, and the challenges faced by environmental managers. Issues discussed will vary with the semester. Prepares students for a thoughtful discussion of environmental issues.

**ENVT 3750**
**Land Use Planning**
**3**
* Prerequisite(s): University Advanced Standing; ENVT 3280 recommended

Covers key issues in land use planning and how they affect the environment. Includes multiple use concepts, focused uses, zoning, mapping, and the political processes used in planning. Discusses the importance of strategic planning and public relations.

**ENVT 3770**
**Natural Resources Management**
**3**
* Prerequisite(s): University Advanced Standing; BIOL 1010 recommended

For students in the Environmental Management program and others interested in natural resource issues. Introduces the management and conservation of natural resources. Discusses forestry, range management, wildlife management, and outdoor recreation.

**ENVT 3790**
**Hydrology I WE**
**4**
* Prerequisite(s): (MATH 1050 or MATH 1055), GEO 1010 and GEO 1015, and University Advanced Standing

Teaches how to solve textbook problems by developing skills in mathematics and understanding of hydrology. Uses hydrology to solve the real problems of real people. Requires that each student carry out a service learning project in the areas of water development, water conservation or water quality. Course fee of $21 applies.

**ENVT 3800 (Cross-listed with: CHEM 3800, PHYS 3800)**
**Energy Use on Earth**
**3**
* Prerequisite(s): (PHYS 1010 or PHSC 1000 or CHEM 1010 or GEO 1010 or GEO 2040 or METO 1010) and (MATH 1050 or MATH 1055) and University Advanced Standing

Covers the science of energy production and consumption. Quantitatively analyzes various methods of energy production, distribution, and end use in all sectors of our society, including transportation, residential living, and industry. Examines the impacts of our energy consumption on the environment and prospects for alternative energy sources. Intended for science majors interested in energy use in society or in an energy related career, and for students in other majors who feel that a technical understanding of energy use will help them to understand and mitigate its impact in our society.

**ENVT 3850**
**Environmental Policy**
**3**
* Prerequisite(s): ENVT 1110 and ENVT 3280 (recommended)

For upper-division students with an interest in environmental policy. Discusses the process by which policies are made and the factors that influence policy formation. Includes political factors, economics, international issues, public awareness and others.

**ENVT 4790**
**Hydrology II**
**4**
* Prerequisite(s): ENVT 3790 and University Advanced Standing

Continuation of ENVT 3790 with an emphasis on contaminant hydrology and computer modeling. Requires students to prepare a case study in the area of contaminant hydrology. Requires that each student carry out a service learning project in the areas of water development, water conservation or water quality. Course fee of $21 applies.

**ENVT 482R (Cross-listed with: GEO 482R)**
**Geologic Environmental Internship**
**1 to 3**
* Prerequisite(s): GEO 1010 or ENVT 1110; 12 credit hours of any GEO, GEOG, or ENVT courses; declared major in any Earth Science program and University Advanced Standing

Engages students in supervised geologic or environmental work in a professional setting. Requires approval by the Chair of the Department of Earth Science. Includes maintaining a journal of student experiences and preparing a paper summarizing their experience. A maximum of 3 credit hours may be counted toward graduation. May be graded Credit/No Credit.

**ENVT 495R**
**Special Projects in Environmental Management**
**1 to 3**
* Prerequisite(s): Instructor Permission and University Advanced Standing

Allows students to pursue undergraduate research projects. Includes instructor directed practical research. Students will prepare a report of their findings. May be repeated for a maximum of 6 credits toward graduation.

# Emerg Serv Aircraft Resc FF (ESAF)

**ESAF 2100**
**Airport Firefighter**
**3**

Explores the theories and fundamentals associated with airport rescue fire fighting. Addresses safety, operations and agents associated with aircraft rescue and firefighting procedures. Provides an overview of communications, apparatus, tools and equipment specific to the aerospace emergency service delivery.

**ESAF 2110**
**Aircraft Related Mass Casualty Incidents**
**3**

Involves the planning, response, mitigation and management of a mass casualty incident resulting from a crashed aircraft. Includes issues relating to medical treatment, triage and transportation. Examines how the command structure functions as well as how operations personnel work on the scene of mass casualty incident.

**ESAF 2120**
**Aircraft Mishaps**
**3**

Teaches how to locate and use past aircraft accident and mishap data from various government agencies in order to develop relevant lesson plans and training courses for emergency responders. Examines how to research and interpret aircraft mishap data to strengthen emergency service agencies involved in aircraft rescue firefighting. Includes developing or reviewing relevant guidelines, protocols, procedures, and training evolutions based on current mishaps and findings.

**ESAF 2140**
**Airport Operations for the Emergency Responder**
**3**

Provides an understanding of ground operations, communications, layout, movements and functions in order to operate effectively within the boundaries of an airport. Discusses the complex, unfamiliar setting responders face associated with daily operations of an airport.

# Emergency Services Emerg Care (ESEC)

**ESEC 1013**
**Emergency Medical Response**
**3**

Prepares students for certification as an Emergency Medical Responder through the Utah Bureau of EMS. Focuses on assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries prior to the arrival of professional emergency care providers. Includes introduction to emergency medical services systems, roles and responsibilities of Emergency Medical Responders, anatomy and physiology, medical emergencies, trauma, and special considerations for working in the pre-hospital setting. Course lab fee of $84 applies.

**ESEC 1140**
**Emergency Medical Technician Basic**
**9**

Provides fundamental knowledge of the EMS system to include safety and well-being of the EMT. Includes medical, legal and ethical issues related to emergency care. Teaches entry level cognitive and kinesthetic skills including; medical and trauma assessment, basic pharmacology and EMS operations. Prepares students for certification as an Emergency Medical Technician-Basic through the Utah Bureau of EMS. Course lab fee of $143 applies.

**ESEC 114A**
**Emergency Medical Technician-Part I**
**3**
* Corequisite(s): ESEC 114B and ESEC 114C

Applies fundamental knowledge of the EMS system, safety and well-being of the EMT, medical and legal and ethical issues to the provision of emergency care. Prepares students for certification as an Emergency Medical Technician-Basic through the Utah Bureau of EMS. First of three courses required for EMT-Basic certification. May be delivered online.

**ESEC 114B**
**Emergency Medical Technician-Part II**
**4**
* Corequisite(s): ESEC 114A and ESEC 114C

Provides background information and knowledge about EMT kinesthetic skills, including medical assessments, trauma assessment, pharmacology, special patient populations, and EMS operations.

**ESEC 114C**
**Emergency Medical Technician-Part III**
**2**
* Corequisite(s): ESEC 114A and ESEC 114B

Demonstrates mastery of kinesthetic skills, including medical assessments, trauma assessment, pharmacology, special patient populations, and EMS operations. Course lab fee of $71 applies. Course fee of $143 for FISDAP study tools applies.

**ESEC 3060**
**Emergency Medical Technician-Advanced**
**9**
* Prerequisite(s): EMT Level Certification and University Advanced Standing

Prepares students for certification as an Emergency Medical Technician-Advanced through the Utah Bureau of EMS. Includes Life span development, advanced airway management, intravenous access, medication administration, cardiac rhythm interpretation and other advanced medical skills. Course lab fee of $126 for supplies applies. Course fee of $62 for certification materials applies.

**ESEC 3210**
**Paramedic I-Operations**
**3**
* Prerequisite(s): Matriculated into Paramedic Program and University Advanced Standing

Reinforces concepts and clinical skills students previously learned at the EMT level. Introduces advanced concepts in EMS Systems, illness and injury prevention, medical-legal issues, anatomy, physiology, pathophysiology, scene leadership and incident management for the paramedic. Course fee of $418 applies.

**ESEC 3220**
**Paramedic II-Cardiac and Respiratory Patient Care**
**3**
* Prerequisite(s): Matriculated into the paramedic program and University Advanced Standing
* Corequisite(s): ESEC 3225
* Prerequisite(s) or Corequisite(s): ESEC 3210

Reinforces concepts and clinical skills students previously learned at the EMT level. Introduces advanced concepts in Cardiology, Airway Management, Respiratory Distress and Resuscitation. Identifies patient assessment and management within the paramedic scope of care. Course fee of $7 applies.

**ESEC 3225**
**Paramedic II Lab-Cardiac and Respiratory Emergencies**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): ESEC 3220

Reinforces concepts and clinical skills discussed in ESEC 3220. Emphasizes patient assessment, airway management, cardiac care, pathophysiology, pharmacology, critical decision-making skills and appropriate interventions while caring for cardiac, respiratory, or resuscitation emergencies. Assessment based management and evidenced based practices will be applied. Course fee of $123 applies.

**ESEC 3230**
**Paramedic III-Trauma Patient Care**
**3**
* Prerequisite(s): Matriculated into the paramedic program and University Advanced Standing
* Corequisite(s): ESEC 3235
* Prerequisite(s) or Corequisite(s): ESEC 3210

Reinforces and expands upon the materials and clinical skills learned as an EMT. Integrates prior learning with enhanced advanced life support concepts and skills. Emphasizes patient assessment and recognition of significant findings, differential diagnoses and treatment strategies for trauma patients. Course fee of $46 applies.

**ESEC 3235**
**Paramedic III Lab-Trauma Emergencies**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): ESEC 3230

Reinforces concepts and clinical skills discussed ESEC 3230. Emphasizes patient assessment, airway management, pathophysiology, pharmacology, critical decision-making skills and appropriate interventions during traumatic emergencies. Assessment based management and evidenced based practices will be applied. Course fee of $85 applies.

**ESEC 3240**
**Paramedic IV-Medical and Geriatric Patient Care**
**3**
* Prerequisite(s): Matriculated into the paramedic program and University Advanced Standing
* Corequisite(s): ESEC 3245
* Prerequisite(s) or Corequisite(s): ESEC 3210

Reinforces and expands upon the materials and clinical skills learned as an EMT. Integrates prior learning with enhanced advanced life support concepts and skills. Emphasizes patient assessment and recognition of significant findings, pre-hospital diagnosis and differential diagnosis, and treatment strategies for medical and geriatric patients. Course fee of $54 applies.

**ESEC 3245**
**Paramedic IV Lab-Medical Emergencies**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): ESEC 3240

Reinforces concepts and clinical skills discussed in the ESEC 3240. Emphasizes patient assessment, airway management, pathophysiology, pharmacology, critical decision-making skills and appropriate interventions while caring for medically emergent patients. Assessment based management and evidenced based practices will be applied. Course lab fee of $11 applies.

**ESEC 3250**
**Paramedic V-Obstetric and Pediatric Patient Care**
**3**
* Prerequisite(s): Matriculated into the paramedic program and University Advanced Standing
* Corequisite(s): ESEC 3255
* Prerequisite(s) or Corequisite(s): ESEC 3210

Reinforces and expands upon the materials and clinical skills learned as an EMT. Integrates prior learning with enhanced advanced life support concepts and skills. Emphasizes patient assessment and recognition of significant findings, pre-hospital diagnosis and differential diagnosis, and treatment strategies for obstetric and pediatric patients. Course fee of $216 applies.

**ESEC 3255**
**Paramedic V Lab-Obstetric and Pediatric Emergencies**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): ESEC 3250

Reinforce concepts and clinical skills discussed in the ESEC 3250. Emphasizes patient assessment, airway management, pathophysiology, pharmacology, critical decision-making skills and appropriate interventions while caring for patients with obstetrics and pediatric emergencies. Assessment based management and evidenced based practices will be applied. Course fee of $45 applies.

**ESEC 4150**
**Critical Care Emergency Medical Transport Program**
**6**
* Prerequisite(s): Department Approval and University Advanced Standing

Brings paramedics and nurses together in an effort to bridge the gap between pre-hospital and hospital care. Prepares specialized care providers to have an understanding of both aspects of patient care, and to use that understanding to provide a higher level of care to critical patients during transport. Designed to prepare paramedics and nurses to function as members of a critical care transport team. Offers an understanding of the special needs of critical patients during transport, become familiar with the purpose and mechanisms of hospital procedures and equipment, and develop the skills to maintain the stability of hospital equipment and procedures during transport.

**ESEC 4210**
**Paramedic VI-Research**
**2**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESEC 3240, ESEC 3245

Provides opportunity to apply previously learned knowledge and skills in on-line scenario activities, research current EMS trends, as well as recognition assignments for clinical site preceptors.

**ESEC 4220**
**Paramedic VII-Clinical Internship Hospital and Field Phase I and II**
**4**
* Prerequisite(s): ESEC 3250, ESEC 3255 and University Advanced Standing

Provides the paramedic student with an opportunity to apply previously learned knowledge and skills while in a supervised clinical setting. Rotations include: Emergency Departments, Medical/Surgical Intensive Care Units, Labor and Delivery, Psychiatric, and Prehospital experiences with field-based internships. Course fee of $60 applies.

**ESEC 4230**
**Paramedic VIII-Practical Preparation and Testing**
**3**
* Prerequisite(s): ESEC 3210, ESEC 3220, ESEC 3225, ESEC 3230, ESEC 3235, ESEC 3240, ESEC 3245, ESEC 3250, ESEC 3255, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESEC 4210, ESEC 4220

Provides practical and small group lecture activities using current assessment and treatment techniques for cardiac, multiple system trauma, medical, and pediatric victims. Reinforces patient priority assessment and management concepts needed for successful patient outcomes. National Registry psychomotor preparation and testing included. Course fee of $101 applies.

**ESEC 4240**
**Paramedic Capstone**
**3**
* Prerequisite(s): ESEC 3210, ESEC 3220, ESEC 3225, ESEC 3230, ESEC 3235, ESEC 3240, ESEC 3245, ESEC 3250, ESEC 3255, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESEC 4210, ESEC 4220, ESEC 4230

Provides opportunity to practice as a paramedic providing pre-hospital care for emergent and non-emergent patients. Integrates knowledge, behavior and skills from previous courses, labs and internships. Prepares students for national certification exam. Course fee of $19 applies.

# Emergency Services (ES)

**ES 1150** **SS**
**Community Emergency Preparedness**
**3**

Examines emergency and crisis preparedness for the individual, family, and community as practiced at the state, national and international levels. Explores prevention and disaster recovery strategies against all hazards threats to home, neighborhood and community whether natural or human caused. May be delivered online.

**ES 1160**
**Responders Role in Emergencies and Disasters**
**3**
* Prerequisite(s) or Corequisite(s): (ENGL 1010 or ENGH 1005) or department permission

Prepares emergency services students to respond effectively in both day-to-day emergency circumstances as well as extreme disasters. Examines the theory and skills to effectively handle emergency operations and deal with people in the context of emergencies. This course will be offered as a hybrid or online course.

**ES 1170**
**Citizen Role in Emergencies and Disasters**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 recommended

Designed for students of emergency management and volunteer private agencies. Discusses disaster preparedness, planning, and mitigation. Extends the discussion of the public role in emergencies and disasters to disaster response and recovery. Describes the variety of actions taken by individuals, private and voluntary organizations, first responders, and government agencies in response to a disaster and to assist in recovery.

**ES 2130**
**Terrorism and the Emergency Services**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Deals with the threats associated with terrorism as they relate to emergency service response. Examines past acts of terror along with present and future threats and their connection to emergency services planning and response. Identifies various aspects of security and control in correlation to the emergency response operations.

**ES 2210**
**Community Mitigation Response and Recovery**
**3**
* Prerequisite(s): ENGL1010 recommended

Provides an introduction to emergency management for community members, emergency service volunteers, and future disaster relief workers. Prepares them with the knowledge and the skills to allow them to work in emergency services in government or non-profit agencies. Introduces emergency management principles, doctrines and authorities, emergency management functions and capabilities, and the integrated emergency management system. Addresses the coordination of various systems, networks, and agreements among various governmental and other organizations under the National Incident Management System (NIMS).

**ES 2220**
**Resiliency and Vulnerability in Crises**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 recommended

Expands the knowledge of disasters so that students of emergency management, volunteers, and community members understand the nature of multiple hazards, both man-made and natural, and are aware of their impact on vulnerable populations. Presents risk management tools to assist in mitigating, planning and preparing for disasters.

**ES 2230**
**Non-profit Organizations and Volunteerism**
**3**
* Prerequisite(s): ENGL1010 recommended

Improves participant abilities to deal with a broad range of issues in the management of volunteers. Covers publicity and recruitment, skill development and maintenance, and motivation strategies to promote continued involvement and quality performance. Addresses the planning and operations of an effective donations management system, and explores the coordination of state and local government and representatives of Voluntary Organizations Active in Disaster (VOAD) when working with undesignated and spontaneous volunteers during a disaster.

**ES 290R**
**Special Topics in Emergency Services**
**1 to 3**

Provides students the opportunity to study special topics in emergency services. Requires students to identify emergency service topics and evaluate their application to emergency services. Calls for the creation of a research paper, presentation, academic report, or a significant project. May be repeated for a maximum of 6 credits toward graduation.

# Emergency Services FireFighter (ESFF)

**ESFF 1000**
**Introduction to Emergency Services and Ability Testing**
**4**

Explores career opportunities and job requirements of fire and rescue emergency services. Discusses the various duties within emergency services, including structural fire fighting, wildland fire fighting, technical rescue, hazardous materials control, fire protection, fire investigations, and incident command. Explains the employment testing and selection processes of federal, state, municipal, and industrial emergency service organizations. Develops basic emergency skills in hazard recognition, response organization, and fire extinguisher use. Course fee of $30 for computers applies.

**ESFF 100A**
**Introduction to Emergency Services**
**3**

Explores career opportunities and job requirements of fire and rescue emergencies. Discusses the various duties within emergency services, including structural fire fighting, wildland firefighting, technical rescue, hazardous materials control, fire protection, fire investigations, and incident command. Explains the employment testing and selection processes of federal, state, municipal, and industrial emergency service organizations. Develops basic emergency skills in hazard recognition, response organization and fire extinguisher use.

**ESFF 100B**
**Firefighter Physical Ability Testing**
**1**

Provides aspiring firefighters with information needed to pass various physical ability tests. Explores the background and development of tests, including the role the Candidate Physical Ability Test plays in the Wellness Fitness Initiative. Outlines principles of designing and implementing an effective training program.

**ESFF 1010**
**Firefighting Fundamentals I**
**3**
* Corequisite(s): ESFF 1210

Discusses the history and background of the fire service. Teaches terms, definitions, and concepts of NFPA 1001 Professional Qualifications for Firefighters Level I. Includes fire behavior, ventilation rescue, forcible entry, ladders, ropes and knots, self-contained breathing apparatus, firestreams, fire hose, salvage, overhaul, fire suppression techniques, communications, fire sprinklers, and fire inspection. Course fee of $20 for state services & testing applies.

**ESFF 1120**
**Principles of Fire and Emergency Services Safety and Survival**
**3**

Introduces the basic principles and history related to the national firefighter life safety initiatives. Focuses on the need for cultural and behavior change throughout the emergency services.

**ESFF 1210**
**Firefighting Skills I**
**4**
* Corequisite(s): ESFF 1010

Teaches basic manipulative skills according to NFPA 1001 Firefighter Professional Standards, Level 1. Includes using forcible entry tools, using self-contained breathing apparatus, tying knots and using ropes, handling salvage covers, utilizing hose nozzles and appliances, manipulating ladders, ventilation practices, search for and removal of victims, sprinkler operations, initiating emergency response, and safety procedures. Students are required to furnish their own approved firefighter safety clothing as follows: gloves, boots, helmet, and hood. Course fee of $95 for specialized clothing and materials applies.

**ESFF 1220**
**Firefighting Fundamentals and Skills II**
**3**
* Prerequisite(s): ESFF 1010 or Departmental approval

Teaches intermediate skills as described in NFPA 1001 Level II. Builds upon the basic skills taught in ESFF 1010 and introduces new skills and knowledge in water supplies, portable extinguisher practices, inspection techniques, and rescue operations. Course fee of $100 for specialized clothing and materials applies.

**ESFF 1340**
**Hazardous Materials First Responder**
**3**
* Prerequisite(s) or Corequisite(s): ESFF 1000 or department approval

For first year Fire Science students. Addresses the Hazardous Materials First Responder requirements of NFPA 472 and 29 CFR 1910.120. Includes definitions and classes of hazardous materials; physiological and toxicological considerations; DOT, UN and NFPA 704 labeling and placarding systems; container types and container identification. Completers should be able to conduct an incident size-up using the North American Emergency Response Guide, use personal protective equipment and conduct a decontamination procedure. Completers should be prepared to certify at both the Hazardous Materials Awareness and Operations levels. Course fee of $119 for materials, state services & testing applies.

**ESFF 1360**
**Recruit Candidate Academy Internship**
**3**
* Prerequisite(s): ESFF 1330, ESFF 1340, instructor's recommendation, and internship coordinator's approval.

For students who have completed the Recruit Candidate Academy courses and desire an opportunity to apply the knowledge, skills, and abilities learned in a realistic environment. Student interns will experience the fire service as a fully integrated member of a fire company in a career fire department. Additionally, the internship will emphasize the student's work ethic, attitude, and ability to adapt to highly stressful and sometimes dangerous situations. May be graded credit/no credit. Course lab fee of $200 for specialized clothing and materials applies.

**ESFF 1370**
**Fundamentals of Apparatus Operation**
**3**

Provides basic information on driving and operating a variety of fire apparatus by meeting the knowledge requirements as listed in NFPA 1000 Professional Qualifications for Fire Apparatus Driver Operator. Includes fire pump operation, emergency driving techniques, regulations and laws, fire ground operations, apparatus maintenance and testing procedures.

**ESFF 1380**
**Fire Apparatus Skill**
**3**
* Prerequisite(s): ESFF 1220 or ESFF 1330

Teaches manipulative skills as described in Firefighter Professional Qualification Standard NFPA 1002. Includes fire apparatus operation, defensive driving, emergency driving techniques, and equipment care and maintenance. Emphasizes hands-on lab activities. Course fee of $55 for transportation, state services & testing applies.

**ESFF 2100**
**Introduction to Emergency Services Leadership**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Explores the aspiring and current emergency services learner's desire to serve and relates it to the theoretical constructs and characteristics of servant leadership. Discusses the roles and responsibilities of leadership/followership, internal and external, associated with the emergency services. Develops basic leadership/followership traits, based upon the theory of servant leadership.

**ESFF 2410**
**Hazardous Materials Technician Fundamentals**
**3**
* Prerequisite(s): ESFF 1340

Teaches the knowledge requirements of NFPA 471, 472, and CFR 1910.120 regulation for a Hazardous Materials Technician. Includes emergency response plans, classification of materials, ICS roles, personnel protective equipment needs, masks, containment and confinement concepts, decon requirements, termination concepts, toxicological and chemical terms and definitions.

**ESFF 2420**
**Hazardous Materials Technician Skills**
**2**
* Prerequisite(s): ESFF 2410

Presents the manipulative skill requirements of NFPA 471, 472, and CFR 1910.120 regulation for a Hazardous Materials Technician. Teaches handling simulated incidents, classifying materials, performing in ICS roles, using personnel protective equipment, containment and confinement operations, setting up and operating decon, diking, plugging, and patching operations. Course fee of $55 for specialized clothing, state services & testing applies.

**ESFF 2430**
**Hazardous Materials Chemistry**
**3**

Presents in-depth chemical information for hazardous materials responders. Teaches basic knowledge of how to evaluate potential hazards and behaviors of hazardous materials. Provides the underlying reasons for chemical reactions of hazardous materials. Includes decision-making abilities, safe operations, and handling. Course fee of $40 for specialized clothing, materials applies.

**ESFF 250A**
**Firefighter Recruit Candidate Academy I**
**8**
* Prerequisite(s): Matriculated into the Recruit Candidate Academy or Department approval

Addresses the first part of the cognitive and psychomotor requirements of Firefighter I and Firefighter II certification. Includes basic firefighting topics and related skills, including fire behavior, building construction, personal protective equipment, tools, appliances, firefighter safety, forcible entry, and apparatus. Prepares students to certify at the Fire Fighter I and Fire Fighter II levels.

**ESFF 250B**
**Firefighter Recruit Candidate Academy II**
**8**
* Prerequisite(s): Matriculated into the Recruit Candidate Academy or Department approval

Addresses the second part of the cognitive and psychomotor requirements of Firefighter I, Firefighter II, and Hazardous Materials Awareness and Operations certification. Includes basic firefighting topics and related skills. Addresses the Hazardous Materials First Responder requirements of NFPA 472 and 29 CFR 1910.120. Includes definitions, classes of hazardous materials, physiological and toxicological considerations, and labeling and placarding systems. Prepares students to certify at the Fire Fighter I, Fire Fighter II, and Hazardous Materials Awareness and Operations levels.

**ESFF 2700**
**Technical Rescue Principles**
**3**

For those with limited fire and emergency services training. Addresses the prerequisite knowledge and skills for technical rescue job performance. Applies the Incident Command System to the management of technical rescue operations, resources and hazards. Includes search and rescue techniques, victim care and extrication, and the use of ropes and rigging. Course fee of $70 for equipment, materials applies.

**ESFF 2710**
**Environmental Rescue**
**3**
* Prerequisite(s): ESFF 1220

Includes analysis and simulation of problems such as wilderness search and rescue, still and swift water rescue, avalanche and mountain rescue. Discusses disaster planning and management as well as rescues from the work place and industrial settings. Course fee of $70 for specialized clothing, materials, and transportation applies.

**ESFF 2730**
**Rope Rescue**
**3**
* Prerequisite(s): ESFF 1330 and ESFF 1340; or departmental approval

Designed to meet the rope rescue job performance requirements of NFPA 1006, Standard for Rescue Technician Professional Qualifications. Addresses various types and configurations of rope rescue systems. Includes compound mechanical advantage systems, rescuer suspension systems, high-angle and vertical victim rescue systems, construction and operation of highline systems, and ascent/decent procedures. Course fee of $70 for equipment, materials applies.

**ESFF 281R**
**Emergency Services Internship**
**1 to 8**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experience, or instructor approval.

Designed for Emergency Services majors. Provides paid, on-the-job work experience. Work experience and the correlated class are coordinated by the Coordinator and director who must approve enrollment. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and oral presentations. Gives experience in writing and completing individualized work objectives that improve present work performance. May be repeated for a maximum of 8 credits towards graduation. May be graded credit/no credit.

# Emergency Services FireOfficer (ESFO)

**ESFO 1100**
**Fire Behavior and Combustion**
**3**

Explores the theories and fundamentals of how and why fires start, spread and how they are controlled. Addresses the fire problem in America, background of research, and how to approach the study of fire. Provides an overview of various flames, smoldering, and spontaneous combustion.

**ESFO 1110**
**Fire Prevention**
**3**

Provides fundamental information regarding the history and philosophy of fire prevention. Introduces the organization and operation of a fire prevention bureau. Covers the use of fire codes, identification and correction of fire hazards. Discusses the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

**ESFO 1350**
**Fire Protection Hydraulics and Water Supply**
**3**

Introduces basic mathematical operations, including fractions, decimals, percentages, measurements, statistics, graphs, formulas and equations. Completers should be able to apply mathematical skills in solving basic fire service hydraulic and water supply problems.

**ESFO 2020**
**Incident Command**
**3**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Presents the basic principles of managing an emergency scene through the utilization of an incident command system for simple single unit, to complex multi unit response. Requires use of personnel, equipment, and additional resources to manage an incident by completing a size-up, analyze, develop and implement an action plan, maintain on scene accountability of personnel and resources by following IMS principles. Meets the incident command requirements for Fire Officer I, Fire Officer II, NFPA 1021, Presidential Directive #5, and NIMS compliance.

**ESFO 2030**
**Fire Inspector I**
**3**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

For Fire Science and Building Inspection Technology students. Addresses the principles of fire inspection and application of the International Fire Code. Topics include identification of fire hazards, fire prevention measures, inspection techniques, and pre-fire planning. Includes classroom discussion and actual inspections of both under-construction and occupied buildings. Successful completers should be prepared to attain Fire Inspector I certification. Course fee of $80 for state services & testing, materials applies.

**ESFO 2050**
**Fire Protection and Detection Systems**
**3**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Teaches students to become familiar with the various types of fire protection and detection systems. Explains how each type of system functions, where such systems are required by code and how the various systems are serviced and maintained. Course fee of $17 for materials applies.

**ESFO 2080**
**Building Construction for the Fire Services**
**3**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

For second year Fire Science students. Explores components of building construction that relate to fire and life safety. Explains construction and design factors to be considered during fire inspections, pre-fire planning and fire fighting operations. Emphasis is placed on firefighter safety.

**ESFO 2100**
**Fire Officer I Supervision and Leadership**
**3**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

For second year Fire Science students and experienced firefighters. Addresses the NFPA requirements for Fire Officer I. Discusses human resource management, community and government relations, application of fire department policies, fire investigation procedures, emergency service delivery and safety considerations. Completers should be prepared to certify as Fire Officer I. Course fee of $40 for state services & testing applies.

**ESFO 2110**
**Fire Instructor I and II**
**3**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Teaches the NFPA 1041 requirements for Instructor I and II. Includes job factors that influence teaching, developing behavior objectives and lesson plans, organizing the learning environment, methods of instruction, training aids, and principles of testing and evaluations. Lab activities include classroom presentations, preparing audiovisuals, and developing objectives. Course fee of $83 for state services & testing, materials applies.

**ESFO 211A**
**Fire Service Instructor I**
**1**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

For second year Fire Science students. Addresses the knowledge and skills required to deliver a training lesson from a prepared outline and instructor's guide. Includes psychology of learning, instructional techniques, instructional media, evaluation techniques, and legal considerations. Completers should be prepared to instruct a fire service audience and certify as Fire Service Instructor I. Course fee of $43 for state services & testing, materials applies.

**ESFO 211B**
**Fire Service Instructor II**
**2**
* Prerequisite(s): ESFO 211A or Departmental Permission

For those who have already completed ESFO 211A or attained Fire Service Instructor I certification. Explores job factors that influence teaching, developing behavior objectives and lesson plans, organizing the learning environment, methods of instruction, training aids, and principles of testing and evaluations. Completers should be able to prepare and conduct classroom presentations, prepare audiovisual materials and equipment, and be prepared to certify as Fire Service Instructor II. Course fee of $40 for state services & testing applies.

**ESFO 2200**
**Fire Officer II**
**3**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Addresses the administrative skills and abilities required for Fire Officer II certification. Includes occupational health and safety concepts, injury prevention, risk management, application of departmental policies and procedures, preparation of budget requests, preparation of news releases, and preparation and maintenance of departmental records and reports.

**ESFO 2310**
**Fire Investigator I**
**3**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences

Presents basic requirements for fire investigators as found in NFPA 1033. Includes scene examination, documenting the scene, evidence collection and preservation, interviewing techniques, post incident investigation and presenting investigation findings.

**ESFO 2320**
**Fire Investigator II**
**3**
* Prerequisite(s): ESFO 2310 or Departmental Approval

Presents advanced skills for fire investigators. Explores all aspects of the investigative process, scene documentation, advance collection tools and evidence preservation, advanced investigative techniques, case preparation, presenting findings in a legal/court proceeding.

**ESFO 2330**
**Public Fire Education I**
**2**
* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Teaches professional qualifications of NFPA 1035. Identifies fire risks and problems in a community. Teaches selecting, designing, and implementing fire prevention and education programs.

**ESFO 2400**
**Fire Officer Work Experience**
**3**
* Prerequisite(s): ESFO 2020 and ESFO 2200

Provides an opportunity for students to complete the Fire Officer II work place performance requirements of NFPA 1021, Standard for Fire Officer Professional Qualifications. Under the supervision of an experienced fire officer, requires meeting performance objectives in areas of human resource management, community relations, governmental relations, inspection procedures, investigation procedures, emergency service operations, emergency services planning and personnel safety procedures, through a non-paid work experience.

# English as a Second Lang (ESL)

**ESL 0100**
**Basic English Language Immersion**
**12**
* Prerequisite(s): Department Approval

For beginning ESL students, with little or no previous English experience. Integrates essential language tools and skills-reading, writing, listening, speaking, and vocabulary-needed to perform basic communicative tasks. Emphasizes building a learning community within the classroom. Includes lecture, discussion, collaborative class work, and outside experience with native English speakers.

**ESL 0810**
**Beginning Listening/Speaking Level I**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English with little or no previous English learning experience. Explores use of simple statements, questions, and commands. Develops vocabulary on concrete topics. Provides listening opportunities in a variety of contexts. Introduces concepts of pronunciation, intonation, and stress. Includes weekly use of the ELL Language Lab where beginning listening skills are emphasized. Focuses on communicative interaction with classmates and authentic conversation practice with native English speakers.

**ESL 0820**
**Beginning Reading and Writing Level I**
**5**
* Prerequisite(s): Department Approval

For beginning ESL students, with little or no previous English experience. Teaches basic competence and fluency in reading and writing. Focuses on reading fluently with meaningful comprehension and natural vocabulary acquisition. Covers writing sentences and short paragraphs on familiar topics. Includes weekly use of the ELL computer lab to practice reading and writing skills.

**ESL 0821**
**Beginning Reading Level I**
**4**

For students whose native language is other than English. Focuses on reading skills, specifically essential phonetic skills needed to decode English words and sounds. Studies comprehension of main ideas of short academic texts, examines plots from simple novels, and develops acquisition of basic interpersonal vocabulary though context cues and English dictionary usage. Encourages reading for pleasure and for information.

**ESL 0825**
**Beginning Vocabulary Level I**
**4**
* Prerequisite(s): Department Approval

For beginning ESL students, with little or no previous English experience. Teaches a 1000-word vocabulary necessary for English survival. Explores vocabulary in context around relevant themes, focusing on communicative practice.

**ESL 0830**
**Beginning Writing Level I**
**5**

For students whose native language is other than English. Introduces English writing conventions including idea development, organization, grammar usage, and editing. Explains construction of simple and compound sentences into short paragraphs. Includes weekly use of the ELL computer classroom where beginning writing skills are emphasized and practiced.

**ESL 0840**
**Beginning Grammar Level I**
**5**
* Prerequisite(s): Departmental Approval

For students whose native language is other than English with little or no English experience. Focuses on helping students recognize beginning grammar structures and correctly incorporate them into their speech and writing. Introduces correct word order, simple verb tenses, irregular and helping verbs, question formation, adverbs of frequency, pronouns and articles.

**ESL 0910**
**High-Beginning Listening/Speaking Level II**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English with some previous English learning experience. Explores use of simple statements, questions, and commands. Develops vocabulary on concrete topics. Provides listening opportunities in a variety of contexts. Introduces concepts of pronunciation, intonation, and stress. Includes weekly use of the ELL Language Lab where beginning listening skills are emphasized. Focuses on communicative interaction with classmates and authentic conversation practice with native English speakers.

**ESL 0911**
**High-Beginning Pronunciation Level II**
**1**
* Prerequisite(s): Departmental Approval

For high-beginning ESL speakers with some previous English experience. Introduces phonetic alphabet for corresponding English alphabet sounds. Focuses on pronunciation of individual sounds along with how to produce naturally sounding syllables, words, and sentences through intonation, stress and linking.

**ESL 0920**
**High-Beginning Reading Level II**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies comprehension of main ideas and details of short academic texts, examines literary themes and plots from simple novels, and develops basic interpersonal vocabulary as well as some academic vocabulary though context cues and English dictionary usage. Encourages reading for pleasure and for information. Introduces students to academic and job-related reading skills.

**ESL 0930**
**High-Beginning Writing Level II**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Introduces English writing conventions including pre-writing, idea development, organization, genre style, word choice, applied grammar usage, editing, and technical accuracy. Explains construction of simple and complex sentences into well-formed paragraphs. Includes weekly use of the ELL Computer Classroom where beginning writing skills are emphasized and practiced.

**ESL 0940**
**High-Beginning Grammar Level II**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Focuses on helping students recognize high-beginning grammar structures and correctly incorporate them into their speech and writing. Focuses on verb tenses, irregular and helping verbs, question formation, adverbs of frequency, pronouns, and articles.

**ESL 1210**
**Low-Intermediate Listening/Speaking Level III**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Expands use of simple statements, questions, and commands on familiar topics to academic conversations and lectures. Develops vocabulary on concrete and abstract topics. Studies low-intermediate concepts of pronunciation, intonation, stress, and reductions. Includes weekly use of the ELL Language Lab where low-intermediate listening skills are emphasized and practiced.

**ESL 1211**
**Low-Intermediate Pronunciation Level III**
**1**
* Prerequisite(s): Departmental Approval

For low-intermediate ESL speakers with previous English experience. Introduces International Phonetic Alphabet symbols that correspond to American English alphabet sounds. Focuses on pronunciation of individual sounds along with how to pronounce naturally sounding syllables, words, and sentences through intonation, stress, and linking.

**ESL 1220**
**Low-Intermediate Reading Level III**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies comprehension of main ideas and supporting details of low-intermediate texts and acquisition of vocabulary through context and utilizing American English dictionaries. Focuses on interpreting literary themes and analyzing academic and literary texts. Encourages reading for pleasure and for information.

**ESL 1230**
**Low-Intermediate Writing Level III**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies low-intermediate English writing conventions including pre-writing, idea development, organization, word choice, and editing for organization and grammatical accuracy. Focuses on short academic writing tasks that culminate into a multi-paragraph essay. Includes weekly use of the ELL Computer Classroom where low-intermediate writing skills are emphasized and practiced.

**ESL 1240**
**Low-Intermediate Grammar Level III**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies low-intermediate English grammar usage in written and verbal speech. Focuses on verb tenses, phrasal verbs, modals, question formation, pronouns, and sentence connectives.

**ESL 1260**
**Intermediate Listening/Speaking Level IV**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Expands use of statements, questions, and commands on familiar topics to academic conversations and lectures. Develops vocabulary on concrete and abstract topics. Studies low to high intermediate concepts of pronunciation, intonation, stress, and reductions. Includes weekly use of the UVU Language Lab where intermediate listening skills are emphasized and practiced.

**ESL 1261**
**Intermediate Pronunciation IV**
**1**
* Prerequisite(s): Departmental Approval

For intermediate ESL speakers with previous English experience. Introduces International Phonetic Alphabet symbols that correspond to American English phonemes. Focuses on pronunciation of individual sounds along with how to pronounce naturally sounding syllables, words, and sentences through intonation, stress, and linking.

**ESL 1270**
**Intermediate Reading Level IV**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies comprehension of main ideas and supporting details, acquisition of intermediate vocabulary through context and utilizing American English dictionaries, interpreting literary themes, and critically analyzing academic and literary texts. Encourages reading for pleasure and for information.

**ESL 1280**
**Intermediate Writing Level IV**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies intermediate English writing conventions such as pre-writing, idea development, organization, word choice, and editing work for grammatical accuracy. Focuses on writing well written paragraphs that evolve into essays. Includes weekly use of the ELL computer lab where intermediate writing skills are emphasized and practiced.

**ESL 1290**
**Intermediate Grammar Level IV**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies intermediate English grammar usage in written and verbal speech. Focuses on parts of speech, verb tenses, nouns, comparisons, modals, adjectives, adjective clauses, infinitives, and the passive construction.

**ESL 1310**
**High-Intermediate Listening/Speaking Level V**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Explores listening strategies for academic news programs and academic lectures. Emphasizes active participation in academic and social conversations. Develops ability to give academic presentations. Studies high-intermediate concepts of pronunciation, intonation, stress, and reductions. Includes weekly use of the UVU Language Lab where high-intermediate listening skills are emphasized and practiced.

**ESL 1311**
**High-Intermediate Pronunciation Level V**
**1**
* Prerequisite(s): Departmental Approval

For high-intermediate ESL speakers with previous English experience. Introduces and reviews phonetic alphabet for corresponding English alphabet sounds. Focuses on pronunciation of individual sounds along with how to produce naturally sounding syllables, words, and sentences through intonation, stress, linking, and reductions.

**ESL 1320**
**High-Intermediate Reading Level V**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies comprehension of main ideas and supporting details of academic texts, making inferences and expanding vocabulary through context and English dictionary usage. Encourages students to read for pleasure and increase fluency through extensive reading outside of class. Develops critical reading and thinking skills.

**ESL 1330**
**High-Intermediate Writing Level V**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies high-intermediate English writing conventions including pre-writing techniques and idea development, organization of written papers according to genre expectations, and editing and revising work for grammatical accuracy. Focuses on writing 5+ paragraph essays, and letters or articles from 2-5 pages in length. Includes weekly use of the ELL computer lab where high-intermediate writing skills are emphasized and practiced.

**ESL 1340**
**High-Intermediate Grammar Level V**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies high-intermediate English grammar usage in written and verbal speech. Focuses on higher level verb tenses and their related structures, use of nouns and adjective clauses, passive voice and definite/indefinite articles. Expands use of modal auxiliaries, conditionals, and verb complementation using gerunds and infinitives.

**ESL 2111**
**Advanced Pronunciation**
**1**
* Prerequisite(s): Departmental Approval

For advanced ESL speakers with previous English experience. Reviews International Phonetic Alphabet for corresponding English alphabet sounds. Focuses on pronunciation of individual sounds along with how to produce naturally sounding syllables, words, and sentences through intonation, stress, rhythm, linking and reductions.

**ESL 211G**
**Advanced Listening Speaking**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Explores American culture through an in-depth critical analysis of American fundamental values and beliefs while eliciting critical reflection upon the learners' own native cultures. Provides a variety of speaking opportunities from informal discussions to public speaking. Emphasizes listening in advanced academic situations such as lecture note-taking and summarizing audio news excerpts. Develops academic vocabulary, increases fluency, reduces grammatical errors, and incorporates advanced features of pronunciation, stress, intonation and linking in oral communication. Includes weekly use of the UVU Language Lab.

**ESL 2120**
**Advanced Reading Vocabulary**
**4**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Emphasizes comprehension and identification of stated main ideas and supporting details, inferences, skimming, scanning, recognizing patterns of organization and author's purpose, interpreting literature, and using advanced level vocabulary. Includes lectures, group discussions, lab activities, and multimedia. Satisfies AA/AS Humanities requirements.

**ESL 2130**
**Advanced Composition**
**5**
* Prerequisite(s): Department Approval

For international students whose native language is other than English. Using the English language, emphasizes developmental activities in essay organization, outlining, essay writing, editing and punctuation, and research paper writing. Includes lectures, small and large group activities, peer editing, and lab activities. Satisfies AAS Humanities requirements. Satisfies AAS Humanities requirements.

**ESL 2140**
**Advanced Grammar**
**5**
* Prerequisite(s): Department Approval

For students whose native language is other than English. Studies advanced English usage, correct speech and writing forms and patterns related to tense, time, parts of speech, modifiers, clauses, phrases, conditionals, active/passive voice, and modals. Emphasizes grammatical fluency in English speech and writing. Satisfies AAS Humanities requirements.

**ESL 2150**
**Academic Skills--TOEFL**
**5**
* Prerequisite(s): ESL 1310, ESL 1320, ESL 1330, ESL 1340 and ESL Compass Test with a score of 81

Focuses on the integration of all four language skills. Prepares students to pass the TOEFL test. Provides ample opportunities to practice integrated speaking, reading, writing and listening tasks commonly encountered in academic settings.

**ESL 2160**
**Aviation English--Advanced Listening and Speaking**
**3**
* Prerequisite(s): Departmental Approval

Prepares non-native English speakers to achieve operational English language proficiency in radiotelephony communication within the field of Aviation Science. Focuses primarily on pilot-controller communication in the English language. Provides opportunities to improve speaking, pronunciation, and overall English fluency in both routine and non-routine procedures using standard aviation phraseology and plain language. Provides opportunities to improve listening and comprehension skills through authentic pilot-controller radio recordings and dialogues. Builds vocabulary in both standard phraseology and non-routine domains. Addresses communication skills in the language skill areas of pronunciation, grammatical structures, vocabulary, fluency, and comprehension.

# Emergency Services Emerg Mgmt (ESMG)

**ESMG 310G**
**Introduction to Homeland Security**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Introduces student to global and intercultural issues regarding homeland security at the national, regional, state and local levels. Discusses the history of homeland security, including its political history, and evolution, particularly as it relates to terrorism. Addresses demands state and local authorities must meet when dealing with national programs and requirements which affect funding and operations on the state and local level during natural or man-made disasters and emergencies.

**ESMG 3150**
**Principles of Management for the Emergency Services**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Examines critical skills used in the management of emergency services operations. Proposes possible applications of the skills using real-life examples. Emphasizes the development process and analytical skills necessary to assess problems in the workplace and select appropriate solutions.

**ESMG 3200**
**Health and Safety Program Management**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Teaches development, management, and evaluation of departmental safety programs. Includes compilation of accident and injury data from local jurisdictions. Develops programs that target safety concerns identified from research. Students will develop a plan to track effectiveness of safety programs to reduce personal injuries and property damage resulting from accidents within their department.

**ESMG 3250**
**Managing Emergency Medical Services**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Teaches action planning procedures for emergency incidents requiring multiple agency operations. Includes determining resources, assigning and placement of resources to mitigate incidents requiring multi-agency responses. Studies coordination of changing roles and responsibilities of fire service based EMS providers with the requirements set forth by local ordinances, state statutes, and federal laws. Presents personnel, resource management, and quality improvement techniques.

**ESMG 3300**
**Master Planning for Public Emergency Services**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Prepares students for developing long-range plans, given current organization status and local resources, emphasizing the attainment of both organizational, and community needs. Teaches planning for growth and for major disasters. Integrates resources and budgets while mitigating the impacts on a community. Develops and evaluates projected training requirements.

**ESMG 3350**
**Analytical Research Approaches to Public Emergency Services**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Explores basic research designs, the use of selective analytical tools, and common issues faced by public emergency services managers. Examines tools and techniques using research methods to facilitate the decision making process in public emergency services organizations.

**ESMG 3400**
**Critical Infrastructure Protection**
**3**
* Prerequisite(s): ESMG 310G and University Advanced Standing

Introduces critical infrastructure and key resources (CI/KR) and explores the interdependencies between government and private industry in sustaining and protecting critical infrastructure. Provides an overview of the elements and processes to develop and sustain successful critical infrastructure partnerships and to protect critical infrastructure and key resources.

**ESMG 3600**
**Psychology of Emergency Services**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Examines the general psychological aspects of police, fire, and emergency medical services responders including dimensions of personality, family, organizational, cultural and diversity issues. Examines models of emergency and crisis decision making. Analyzes stress, anxiety, and trauma theories and clinical issues and examines current interventions being used for related disorders and building resilience.

**ESMG 3710**
**Comparative Approaches to Homeland Security**
**3**
* Prerequisite(s): University Advanced Standing

Discusses shared terrorism threats as well as policies and strategies employed by a range of democratic countries to cope with terrorism and other homeland security-related threats. Examines issue areas such as bio-threats, health system preparedness, airport security and anti-radicalization policies across a number of countries. Reviews the practices of other countries and translates those practices into policies applicable in the United States. Prepares students to engage with their international partners at the local, state, or federal levels as Homeland Security becomes an increasingly global undertaking requiring greater international outreach.

**ESMG 4000**
**Advanced Emergency Services Leadership**
**4**
* Prerequisite(s): University Advanced Standing

Explores advanced leadership topics as they relate to the first responder. Discusses leadership theories used in both emergency and non-emergency environments and develops skills necessary to lead small and large organizations under the unique atmosphere of time, pressure, and consequence. Provides an understanding of the role an emergency services leader plays in a paramilitary environment.

**ESMG 4150**
**Humanitarian Services and Disaster Relief**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Examines both theoretical and applied aspects of complex humanitarian emergencies and reviews disasters in the context of humanitarian relief. Explores the needs of displaced persons and the systems and practices currently in place to meet these needs. Reviews the principles of preparedness, resilience, and sustainability in terms of short-term response to disasters and long-term community recovery.

**ESMG 4200**
**Disaster Response and the Public**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G or department approval

Prepares emergency services students to respond effectively to public information needs in both day-to-day emergency circumstances as well as in more extreme disaster conditions. Explores the theory and develops skills to effectively respond in crisis situations. Presents case studies in crisis response that demonstrate how information can help the public prepare, respond, and recover from disasters. This course will be offered as a hybrid or online course.

**ESMG 425G**
**Crisis and Disaster Management**
**3**
* Prerequisite(s): ENGL 1010, ENGH 1005, ESMG 310G, or departmental permission. University Advanced Standing

Deals with the operations side of humanitarian action. Establishes principles that can be used in local, national, and international relief efforts. Applies best practices from emergency management to the field of humanitarian services and disaster relief. Meets the global and international requirements to foster greater understanding of, interaction with, and appreciation for, cultures that reflect the diversity present within the local and campus communities, up to the larger state and global context.

**ESMG 4300**
**Disaster Recovery and Mitigation**
**3**
* Prerequisite(s): University Advanced Standing.

Focuses on how planning and policy processes and interventions can help reduce disaster vulnerabilities and increase resilience through effective recovery and mitigation strategies. Explores how demographic changes, human settlement patterns, land-use decisions, and political and social policy dynamics have increased vulnerability to natural and man-made disasters.

**ESMG 4400**
**Legal Considerations for the Emergency Services**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Examines regulatory, political, and social aspects of government's role in emergency services agencies, including regulatory issues, emergency services operations, employment, personnel issues, roles, legislative issues, and political influence.

**ESMG 445G**
**Human Factors in Emergency Management**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 2010

Introduces students to an emergency response approach to understanding hazards and disasters grounded in social vulnerability analysis. Examines historical, geographical, social, and cultural factors and conditions that put people differentially at risk before, during, and after disasters. Utilizes a multi-disciplinary approach. Focuses on global, national, regional, and local patterns of development. Explores how vulnerable social groups are affected by and cope with hazardous conditions and events, and strategies for community-based mitigation engaging those most at risk.

**ESMG 4500**
**Customer Service and Marketing for the Emergency Services**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Explores the principles and importance of customer oriented service delivery within the emergency services. Looks at current practices and delves into emerging needs and solutions for marketing and public relations. Includes research and critical thinking strategies for local, national, and global perspectives on customer service.

**ESMG 4550**
**Principles of Disaster and Emergency Management**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Introduces the student to the need for and creation of comprehensive emergency planning operations. Explores risk assessment techniques and critical analysis strategies for communities and governmental agencies. Teaches the components of a comprehensive emergency plan and presents the National Incident Management System (NIMS), mandated by presidential directive.

**ESMG 4600**
**Public Administration for the Emergency Services**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

For Public Emergency Services Management students. Examines the relationship between the emergency management function in government and the professional field of public administration. Topics include public policy making, implementation and analysis, disaster analysis, problem solving and solution formulation.

**ESMG 4650**
**Emergency Services Capstone WE**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Examines cutting-edge issues under the guidance of top professionals. Includes interviews with local and state officials to identify potential critical issues. Discusses personal leadership philosophy and strategies for decision making. Writing enriched course, which facilitates relevant communication in the discipline.

**ESMG 481R**
**Emergency Services Internship**
**1 to 8**
* Prerequisite(s): ENGL 2010, (ESFF 1000 or sufficient emergency services experience), and University Advanced Standing

For upper-division students working toward a Bachelor of Science Degree in Emergency Services Management. Provides a transition from school to work where learned theory is applied to actual practice through meaningful on-the-job experience. May be repeated for a maximum of 16 credits toward graduation. May be graded credit/no credit.

**ESMG 489R**
**Special Topics in Emergency Management**
**1 to 6**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ESMG 310G

Provides students the opportunity to study special leadership topics in Emergency Management. Requires students to identify standard leadership topics and evaluate their application to Emergency Services. Calls for the creation of a significant research paper that is characteristic of the Emergency Leadership discipline and worthy of communication to a broader audience. May be repeated for a maximum of 9 credits toward graduation.

**ESMG 491R**
**Topics in Cardiology and Medical Trends**
**1 to 3**
* Prerequisite(s): ENGL 2010, (ESFF 1000 or departmental approval), and University Advanced Standing

Surveys a specific topic in cardiology and medical trends related to Emergency Medicine. Topic varies each semester. May be repeated for a maximum of 6 credits toward graduation.

**ESMG 492R**
**Topics in Trauma and Pharmacology**
**1 to 3**
* Prerequisite(s): ENGL 2010, (ESFF 1000 or departmental approval), and University Advanced Standing

Surveys a specific topic in trauma and pharmacological trends. Topic varies each semester. May be repeated for a maximum of 6 credits toward graduation.

**ESMG 493R**
**Topics in Medical Litigation**
**1 to 4**
* Prerequisite(s): ENGL 2010, (ESFF 1000 or departmental approval), and University Advanced Standing

Surveys a specific topic in medical litigation. Topic varies each semester. May be repeated for a maximum of 4 credits toward graduation.

**ESMG 6100**
**Psychology and the Emergency Services Responder**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Examines the psychological impact the emergency services profession has on the responder. Explains the effects of emergency response and bureaucracy on the psyche of the responder. Identifies the need for post-traumatic growth.

**ESMG 6110**
**Disasters/Vulnerability/and Impacts**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Evaluates the impact of natural and manmade disasters locally, nationally, and internationally. Analyzes historical disaster case studies in order to examine the aggregate costs of disasters.

**ESMG 6120**
**Emergency Planning and Response**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Examines the need for emergency planning and response criteria associated with emergency services delivery. Teaches how to generate a community wide emergency planning and response matrix. Identifies systems thinking within an emergency framework.

**ESMG 6130**
**Social Vulnerability in Emergencies**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Appraises social vulnerabilities within a community. Evaluates the sociological aspects of emergency response. Compares sociological and economic factors to resiliency.

**ESMG 6140**
**Homeland Security Fundamentals**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Service program

Explains the history, formation, and growth of the Department of Homeland Security (DHS) since September 11, 2001. Estimates impact homeland security has on local emergency service agencies. Appraises the current state of national and international homeland security operations. Evaluates the existing DHS structure and its ability to meet the organization's strategic mission.

# Emergency Services WildInd FF (ESWF)

**ESWF 1310**
**S131 Wildland Firefighter Type I**
**.5**
* Prerequisite(s): Departmental approval

Meets the training needs of a Type 1 Wildland Firefighter (FFT1). Presents several tactical decision scenarios designed to facilitate learning the objectives and class discussion. Introduces the student to the Fireline Handbook and provides an overview of its application.

**ESWF 1330**
**Look Up Look Down Look Around**
**.5**
* Prerequisite(s): Meet NWCG pre-qualifications or departmental approval

Examines the wildland fire environment and the indicators firefighters should observe on the fire line in order to anticipate fire behavior.

**ESWF 1400**
**Wildland Firefighting Fundamentals**
**4**

Designed to meet the Wildland Firefighter I knowledge and skill requirements of NFPA 1051, Wildland Fire Fighter Professional Qualifications. Teaches students to recognize the "Situations That Shout Watchout," apply the appropriate Standard Fire Orders and how to deploy a fire shelter. Includes orientation to the Incident Command System. Teaches basic fireline construction, fire weather, and fire behavior. Each subject covered in this course meets and/or exceeds NWCG standards for the following classes: S-130, S-190, I-100, and L-180. Course fee of $118 for materials, specialized clothing, equipment, and state services & testing applies.

**ESWF 1410**
**Wildland Firefighter Internship I**
**5**
* Prerequisite(s): ESWF 1400 or departmental approval

Provides experience in fighting fires at wildfire and urban interface incidents. Studies wildland fire behavior, fire weather, and fire mitigation. Teaches size-up, chain of command, communications, strategy, and tactics. Includes developing water sources, learning engine tactics, understanding procedures for aircraft, firing and felling operations. Completers should develop skills beyond the entry level firefighter. May be graded credit/no credit. Course fee of $86 for specialized clothing, materials, and equipment applies.

**ESWF 1420**
**Wildland Firefighter Internship II**
**5**
* Prerequisite(s): ESWF 1410

Provides students with the training and experience that will assist them in gaining a job in wildland fire management and suppression. Features participation in a 20-person wildland fire suppression crew sponsored by the Utah Division of Forestry, Fire and State Lands. Also teaches about wildland fire behavior as well as fire suppression strategies and tactics. Requires students to participate in physically demanding assignments with long periods of time away from home. Exposes students to wildland fire and the various organizational and mechanical tools used to manage and suppress them, such as; aircraft, bulldozers, large engines and other fire management and suppression equipment. May be graded credit/no credit.

**ESWF 2000**
**S200 Initial Attack Incident Commander Type IV**
**1**
* Prerequisite(s): Departmental approval

Designed to meet the the training needs of the Initial Attack Incident Commander Type 4 (ICT4). Covers foundational skills, intelligence gathering and documentation, incident size up, development of a plan of action, post-fire activities, evaluation of incident objectives and incident management. Meets and/or exceeds NWCG standards for S-200.

**ESWF 2010**
**Basic Incident Command System for Initial Response**
**1**
* Prerequisite(s): Meet NWCG prequalifications or departmental approval

Introduces the principles of the Incident Command System (ICS) associated with incident-related performance. Includes leadership and management, delegation of authority, management by objectives, functional areas and positions, briefings, organizational flexibility, transitions and transfers. Built on the same lesson objectives and content as the NWCG I-200 course.

**ESWF 2110**
**S211 Portable Pumps and Water Use**
**1.5**
* Prerequisite(s): Departmental approval

Covers three skill areas: supply, delivery, and application of water. Includes correct water use, basic hydraulics, and equipment care. Requires set up, operation, and maintenance of pump equipment in the field exercise. Meets and/or exceeds NWCG standards for S-211

**ESWF 2150**
**S215 Fire Operations in the Wildland Urban Interface**
**2**
* Prerequisite(s): Deparmental approval

Designed to assist structure and wildland firefighters who will be making tactical decisions when confronting wildland fire that threatens life, property, and improvements in the wildland/urban interface. Includes interface awareness, size-up, initial strategy and incident action plan, structure triage, structure protection tactics, incident action plan assessment and update, follow up and public relations, and firefighter safety in the interface. Meets and/or exceeds NWCG standards for S-215.

**ESWF 2212**
**S212 Chain Saw Use in Wildland Fire Operations**
**2**
* Prerequisite(s): Department approval

Introduces the function, maintenance, and use of internal combustion engine powered chain saws and their tactical wildland fire application. Provides field exercises to support entry-level training for firefighters with little or no previous experience in operating a chain saw. Provides hands-on cutting experience in surroundings similar to fireline situations. Meets or exceeds the requirements for NWCG S-212 Chain Saws.

**ESWF 2231**
**S231 Wildland Fire Engine Boss**
**1**
* Prerequisite(s): Department Approval

Focuses on the tasks, tactical decision-making, and leadership concepts required to safely manage an engine and its personnel at a wildland fire incident. Meets or exceeds the requirements of NWCG S-231 Engine Boss.

**ESWF 2236**
**S236 Heavy Equipment Boss**
**2**
* Prerequisite(s): Department Approval

Teaches requirements of a Heavy Equipment Boss, Single Resource (HEQB) on wildland fire incidents as outlined in the NIMS: Wildland Fire Qualification System Guide, PMS 310-1, and the position taskbook developed for the position. Explores tactical use and safety precautions required to establish and maintain an effective heavy equipment operation. Requires a field exercise as part of the course. Meets or exceeds the requirements of NWCG S-236 Heavy Equipment Boss.

**ESWF 2244**
**S244 Field Observer**
**2**
* Prerequisite(s): Department Approval

Provides the skills necessary to perform as a Field Observer (FOBS) and/or a Fire Effects Monitor (FEMO) in an ALL-RISK environment. Introduces roles and responsibilities of the FOBS and FEMO; how to make observations and document those observations; how to produce hand drawn and GPS field maps; and how to navigate using a compass and GPS. Meets or exceeds the requirements of NWCG S-244 Field Observer.

**ESWF 2261**
**S261 Applied Interagency Incident Business Management**
**1**
* Prerequisite(s): Department Approval

Teaches interagency incident business management for entry-level finance positions of (a) Equipment Time Recorder (EQTR), (b) Compensation for Injury Specialist (INJR), (c) Claims Specialist (CLMS), and (d) Personnel Time Recorder (PTRC). Provides an understanding of management procedure and basic policy and direction for incident business management. Meets or exceeds the requirements of NWCG S-261 Applied Interagency Incident Business Management.

**ESWF 2301**
**S230 Crew Boss Single Resource**
**2**
* Prerequisite(s): Departmental approval

Designed to produce proficiency in the single resource boss position from initial dispatch through demobilization to the home unit. Introduces operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization, and post incident responsibilities. Meets or exceeds requirements for NWCG S230 Crew Boss Single Resource.

**ESWF 2340**
**Firing Operations**
**2**
* Prerequisite(s): Department Approval

Introduces the roles and responsibilities of a Firing Boss, Single Resource (FIRB), and outlines duties of other personnel who may engage firing operations. Discusses and illustrates common firing devices and techniques. Demonstrates a real ignition or the use of an actual firing device. Meets or exceeds the requirements of NWCG S219 Firing Operations.

**ESWF 2430**
**Wildland Firefighter Internship III**
**5**
* Prerequisite(s): ESWF 1420 and departmental approval

Increases the level of leadership training and responsibility for individual firefighters. Includes work on Advanced Firefighter/Squad Boss Task book. Teaches and improves upon the following skills; firefighter safety, supervision, communication, situational awareness and other fire suppression skills needed to advance to the Squad boss level. Offers valuable experience in wildland fire suppression techniques as well as safety and organizational skills. May be graded credit/no credit.

**ESWF 2600**
**S260 Interagency Incident Business Management**
**1**
* Prerequisite(s): Departmental approval

Studies the human resources aspect of emergency services in depth. Concentrates on personnel issues associated with day to day emergency service organizational management. Includes topics of ethical conduct, recruitment, resources, and financial management. Meets or exceeds the NWCG standards for S260 Interagency Incident Business Management.

**ESWF 2700**
**S270 Basic Air Operations**
**1**
* Prerequisite(s): Departmental approval

Introduces aircraft types and capabilities, aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. Addresses regulations, procedures and policies that primarily govern federal agency and ICS operations. Meets and/or exceeds NWCG standards for S270 Basic Air Operations.

**ESWF 2800**
**L280 Followership to Leadership**
**1**
* Prerequisite(s): Departmental approval

Provides a self-assessment opportunity for individuals preparing to step into a leadership role. Includes leadership values and principles, transition challenges for new leaders, situational leadership, team cohesion factors, ethical decision-making, and after action review techniques. Meets or exceeds the requirements for NWCG L280 Followership to Leadership.

**ESWF 2900**
**S290 Intermediate Wildland Fire Behavior**
**2**
* Prerequisite(s): Departmental approval

Designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. Second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Meets or exceeds the requirements of WFCG S290 Intermediate Wildland Fire Behavior.

**ESWF 3000**
**S300 Incident Commander Extended Attack**
**1**
* Prerequisite(s): Departmental approval and University Advanced Standing

Meets the training needs of the Incident Commander Type 3 (ICT3). Focuses on the lessons of leadership and command as they relate to the ICT3 position. Includes multiple tactical decision games for students to practice new knowledge. Covers foundation skills, situational awareness, command and control, managing the incident, transitional activities, post-fire activities and a final simulation. Meets or exceeds requirements for S300 Incident Commander Extended Attack.

**ESWF 3020**
**I300 Intermediate Incident Command System**
**1**
* Prerequisite(s): Departmental approval and University Advanced Standing

Provides description and detail of the Incident Command System (ICS) organization and operations in supervisory roles on expanding or Type 3 incidents. Includes: ICS fundamentals review, incident/event assessment and agency guidance in establishing incident objectives, Unified Command, incident resource management, planning process, demobilization, transfer of command, and incident close out. Meets or exceeds the requirements of NWCG I300 and ICS300 Intermediate Incident Command System.

**ESWF 3300**
**S330 Task Force-Strike Team Leader**
**1**
* Prerequisite(s): Departmental approval and University Advanced Standing

Teaches the application of risk management processes found in the Incident Response Pocket Guide (IRPG) to various incidents. Includes scenarios and exercises that assess the application of tactics specific to wildland fire suppression. Meets or exceeds requirements for NWCG S330 Task Force Strike Team Leader.

**ESWF 3301**
**RX301 Prescribed Fire Implementation**
**2**
* Prerequisite(s): Department Approval and University Advanced Standing

Introduces the tools and techniques used to perform in the role of a Prescribed Fire Burn Boss. Describes the duties and responsibilities associated with the position of the Prescribed Fire Burn Boss including evaluation and implementation of a prescribed fire plan. Meets or exceeds the requirements of NWCG RX 301-Prescribed Fire Implementation.

**ESWF 3341**
**RX341 Prescribed Fire Plan Preparation**
**2**
* Prerequisite(s): Department Approval and University Advanced Standing

Focuses on the skills/knowledge to prepare a prescribed fire plan for technical review and approval in accordance with the Interagency Prescribed Fire Planning and Implementation Procedures Guide, PMS 484. Meets or exceeds the requirements of NWCG RX-341 Prescribed Fire Plan Preparation.

**ESWF 3360**
**S336 Tactical Decision Making in Wildland Fire**
**1**
* Prerequisite(s): Departmental approval and University Advanced Standing

Meets training requirements in the Operations section of the Incident Command System. Includes examples and exercises specific to wildland fire suppression. Meets or exceeds requirements for NWCG S336 Tactical Decision Making in Wildland Fire.

**ESWF 3380**
**L380 Fireline/Fire Service Leadership**
**3**
* Prerequisite(s): Department Approval and University Advanced Standing

Provides leadership development training for wildland/fire service supervisors. Focuses on application of leadership styles and team building. Designed for incident personnel with supervisory responsibilities. Meets or exceeds the requirements of NWCG L-380 Fireline/Fire Service Leadership.

**ESWF 3381**
**L381 Incident Leadership**
**3**
* Prerequisite(s): Department Approval and University Advanced Standing

Focuses on leadership development training, recommended for command-level incident response personnel who will function in an ALL-RISK environment. Provides future leaders of divisions, groups, and Type 3 incidents with the leadership tools to effectively exert command and control over a quickly assembled team in a time constrained and rapidly changing incident environment. Meets or exceeds the requirements of NWCG L-381 Incident Leadership.

**ESWF 3390**
**S339 Division or Group Supervisor**
**1**
* Prerequisite(s): Departmental approval and University Advanced Standing

Prepares students to perform in the role of division/group supervisor. Includes division/group management, organizational interaction, division operations, and all-hazard operations. May include tactical decision games. Meets or exceeds the requirements of NWCG S-339, Division / Group Supervisor.

**ESWF 4000**
**I400 Advanced Incident Command System**
**1**
* Prerequisite(s): Departmental approval and University Advanced Standing

Provides an operational understanding of large single-agency and complex multi-agency/multi-jurisdictional incident responses. Includes: review for command and general staff, major and/or complex incident/event management, area command, and multi-agency coordination. Meets or exceeds the requirements for NWCG I400 Advanced Incident Command System or ICS 400.

**ESWF 4390**
**S390 Introduction to Wildland Fire Behavior Calculations**
**2**
* Prerequisite(s): Departmental approval and University Advanced Standing

Introduces fire behavior calculations by manual methods, using nomograms and the Fire Behavior Handbook. Covers the determinants of fire behavior though studying inputs (weather, slope, fuels, and fuel moisture). Teaches how to interpret fire behavior outputs, documentation processes, and fire behavior briefing components. Meets or exceeds the requirements of NWCG S390 Introduction to Wildland Fire Behavior Calculations.

**ESWF 4410**
**M410 Facilitative Instructor**
**2**
* Prerequisite(s): Department Approval

Develops effective facilitative instructors. Improves training delivery and quality by presenting instructional methods with an emphasis on student-oriented adult training techniques. Meets National Wildfire Coordinating Group (NWCG) instructor qualifications. Meets or exceeds requirements of NWCG M-410 Facilitative Instructor.

**ESWF 4480**
**L480 Organizational Leadership in the Wildland Fire Service**
**3**
* Prerequisite(s): Department Approval

Provides mid and upper-level organizational and Incident Management Team members with the leadership tools to deliver strategic direction and influence others to achieve team goals. Meets the NWCG requirements for L480.

**ESWF 4481**
**L481 Advanced Leadership for Command and General Staff**
**3**
* Prerequisite(s): Department Approval

Focuses on leadership within the context of large/complex incident management, to include team collective tasks and functions accomplished by large Incident Management Teams (IMTs). Describes individual tasks including functioning as a productive member of a staff organization, being a positive contributor to staff decision-making, maintaining a common operating picture, demonstrating staff member ethos, and projecting operational culture and leader's intent. Meets or exceeds the requirements for NWCG L-481 Advanced Leadership for Command & General Staff.

**ESWF 4580**
**L580 Leadership is Action**
**3**
* Prerequisite(s): Department Approval

Designed for senior fire management leaders. Fosters exchange of knowledge and experience in the art of leading during high-risk and complex incidents. Meets or exceeds the requirements for NWCG L-580 Leadership is Action.

# Exercise Science (EXSC)

**EXSC 2500**
**Sports Medicine**
**3**
* Prerequisite(s): EXSC Majors: ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), all with a C- or higher and (MATH 1050 or MATH 1055). PETE Majors: ZOOL 1090
* Prerequisite(s) or Corequisite(s): ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055). PETE Majors: PETE 2700 both with a C- or higher and (MATH 1050 or MATH 1055).

Explores the field of Sports Medicine. Provides instruction on injury management, including knowledge, skills and abilities in preventing, identifying, treating and rehabilitating sport related injuries. Teaches appropriate vocabulary, injury mechanisms, and the nature of tissue response to training, trauma and treatment.

**EXSC 270G**
**Foundations of Exercise Science**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L) all with a C- or higher, and (MATH 1050 or MATH 1055)

Introduces the study of the Exercise Sciences and discusses the global influence on the development of the field. Studies the national and international history and philosophy of the field of Exercise and sport science. Analyzes problems in areas covered under the umbrella of Exercise Science and Physical Education. Explores related career and employment opportunities in this area.

**EXSC 3270**
**Exercise Testing**
**2**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), all with a C- or higher, and (MATH 1050 or MATH 1055), and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), and EXSC 270G

Teaches key concepts related to exercise testing and program design for healthy populations and populations with controlled disease. Explores concepts in team, group, and individualized assessment and programming. Emphasizes principles in anatomy, exercise physiology, behavior modification, motivation, health promotion, fitness assessment and prescription. Encourages students to sit for certification exams upon course completion. Course fee of $20 for supplies.

**EXSC 3400**
**Statistical Analysis in Exercise Science**
**3**
* Prerequisite(s): (MATH 1050 or higher) and University Advanced Standing

Provides an introduction to statistics, as well as the role of statistics in experimental design that is necessary to evaluate data collected from measurements commonly used in exercise science, health, physical education and recreation.

**EXSC 3500**
**Kinesiology**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), all with a C- or higher and MATH 1050 or MATH 1055. PETE Majors: ZOOL 1090 and PETE 2700 both with a C- or higher and MATH 1050 or MATH 1055. REC Majors: ZOOL 1090 and REC 2200 both with a C- or higher and STAT 1040 or STAT 1045 or MATH 1050 or MATH 1055. All: University Advanced Standing
* Prerequisite(s) or Corequisite(s): ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), and EXSC 270G

Studies human movement. Includes the structure of the human body and fundamental mechanics. Emphasizes kinesiological and mechanical analysis.

**EXSC 3550**
**Motor Learning and Control WE**
**3**
* Prerequisite(s): EXSC Majors: ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), and Pre or Co-requisite all with a C- or higher and (MATH 1050 or MATH 1055). PETE Majors: ZOOL 1090 and Pre or Co-requisite PETE 2700 both with a C- or higher and (MATH 1050 or MATH 1055). REC Majors: ZOOL 1090 and Pre or Co-requistie REC 2200 both with a C- or higher and (STAT 1040 or STAT 1045 or MATH 1050 or MATH 1055). All: University Advanced Standing
* Prerequisite(s) or Corequisite(s): ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G

Examines motor and cognitive characteristics of individuals involved in learning or performing motor skills. Examines conditions that influence learning. Analyzes how humans learn complex movement skills and control voluntary, coordinated movement. Analyzes the basic psychological processes involved in learning and control of movement and their effect on instruction and practice conditions for the learner. Studies motor development and its effect on skill acquisition. Course fee of $14 for equipment, software applies.

**EXSC 3700 (Cross-listed with: ZOOL 3700)**
**Exercise Physiology**
**3**
* Prerequisite(s): EXSC Majors: ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), and EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055). PETE Majors: PETE 2700 and ZOOL 1090 with a C- or higher and (MATH 1050 or MATH 1055). All: University Advanced Standing
* Prerequisite(s) or Corequisite(s): ZOOL 2420 (or 242H), ZOOL 2425 (or 242L)

Studies acute and chronic physiological responses to exercise, as well as nutritional and environmental effects on these responses. Requires separate weekly laboratory. Canvas Course Mats $78/McGraw applies.

**EXSC 3705 (Cross-listed with: ZOOL 3705)**
**Exercise Physiology Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): EXSC 3700

Studies acute and chronic physiological responses to exercise, as well as nutritional and environmental effects on these responses. The laboratory is designed to offer the hands-on experience where students will experience the physiological responses to different stressors in the lab setting. The labs are arranged to be conducted as similar material is being discussed in class. Course Lab fee of $28 for materials applies.

**EXSC 3730**
**Biomechanics**
**3**
* Prerequisite(s): EXSC Majors: ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), and all with a C- or higher and (MATH 1050 or MATH 1055). PETE Majors: ZOOL 1090 and Pre or Co-requisite PETE 2700 both with a C- or higher and (MATH 1050 or MATH 1055). REC Majors: ZOOL 1090 and Pre or Co-requisite REC 2200 both with a C- or higher and (STAT 1040 or STAT 1045 or MATH 1050 or MATH 1055). All: University Advanced Standing
* Prerequisite(s) or Corequisite(s): ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G, and EXSC 3500

Emphasizes the application of engineering principles and technology in sports performance through interdisciplinary methodologies. Includes human gait analysis, locomotion, trunk biomechanics, computer modeling, and tissue biomechanics. Course fee of $20 for equipment, supplies, and lab applies.

**EXSC 3750**
**Psychosocial Aspects of Human Performance**
**2**
* Prerequisite(s): University Advanced Standing.
* Prerequisite(s) or Corequisite(s): ZOOL 1090 or ZOOL 2320 (or 232H) and ZOOL 2325 (or 232L)

Provides students with the necessary skills and understanding to adequately deal with the psychological and social aspects of human and sport performance. Develops techniques and psychological skills to enhance performance and establish a learning and social environment that would enhance the effectiveness of coaches and maximize the skill and personal growth of athletes.

**EXSC 3850**
**Ethical Concerns in Exercise Science**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), and Pre or Co-requisite EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055) and University Advanced Standing

Surveys applied concepts of ethical codes and legal liability. Explores systems used by community and adventure education programs for aspects protective of participants, staff, and institutions.

**EXSC 4000**
**Clinical Exercise Physiology**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G, and EXSC 3270 all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Emphasizes information and skills related to exercise testing and prescription in healthy and clinical populations. Teaches American College of Sports Medicine (ACSM) exercise testing guidelines.

**EXSC 4050**
**Obesity Physiology and Physical Activity**
**3**
* Prerequisite(s): EXSC 270G and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ZOOL 2420 and ZOOL 2425

Provides a broad understanding of the negative health impacts of obesity on physiology. Focuses on exercise modalities that are safe and appropriate as means to treat and ameliorate the negative health consequences of obesity.

**EXSC 4100**
**Fitness Across the Lifespan**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), and Pre or Co-requisite EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing.

Addresses key issues relative to fitness across the lifespan; including, fitness in youth, adult fitness, aging, physical activity program design and implementation, attrition, behavior modification, and the role of exercise in disease prevention and/or management. Canvas Course Mats $58/Human Kinetics applies.

**EXSC 4200**
**Exercise Metabolism**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Examines how exercise affects the functioning of human and animal organisms at the molecular level. Focuses on the tools of basic principles of biochemistry and teaches how to use the tools to understand how exercise affects metabolism. Studies how to use biochemical tests to assess an exercising person's health and performance.

**EXSC 4300**
**Research Methods in Exercise Science and Outdoor Recreation**
**3**
* Prerequisite(s): EXSC Majors: ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), and Pre or Co-requisite EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055). REC Majors: ZOOL 1090 and Pre or Co-requisite REC 2200 both with a C- or higher and (STAT 1040 or STAT 1045 or MATH 1050 or MATH 1055). All: University Advanced Standing.

Introduces students to key research in their field. Emphasizes analytical and interpretive skills. Develops scientific writing skills. Promotes design and utilization of comprehensive research methodologies commonly applied in Exercise Science and Outdoor Recreation.

**EXSC 4400**
**Physical Activity Promotion in the Community**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Emphasizes concepts related to physical activity promotion in the community. Critically reviews literature associated with physical activity programming in communities including barriers to physical activity participation, behavioral change theory, and social, environmental, and biological factors that influence physical activity behavior. Promotes application of concepts developed in class through introductory supervised field experience.

**EXSC 4500**
**Advanced Sports Nutrition**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G and Pre or Co-requisite EXSC 3700 and 3705 all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Designed to provide exercise science students a comprehensive understanding of basic nutritional principles as they relate to sports. Canvas Course Mats $57/HumanK applies.

**EXSC 4550**
**Principles of Strength and Conditioning**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G, EXSC 3500 and EXSC 3700 and EXSC 3705 all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Emphasizes knowledge of physiological principles and training techniques used in strength and conditioning. Teaches guidelines from the National Strength and Conditioning Association (NSCA). Prepares students for several sections of the NSCA Certified Strength and Conditioning Specialist exam.

**EXSC 4600**
**Advanced Biomechanics**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing
* Prerequisite(s) or Corequisite(s): EXSC 3730

Teaches the application of mechanical principles to the development of motor skills. Includes research and technology utilized in the field of biomechanics.

**EXSC 4700**
**Advanced Gross Motor Assessment**
**3**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G, EXSC 2500 and EXSC 3500 all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Provides the students with advanced instruction on and the development of knowledge, skills and abilities to be able to safely and effectively evaluate and interpret / qualify gross motor function. Includes but is not limited to surface anatomy, boney and soft tissue palpation, Range of Motion (ROM), muscular strength, neurologic enervation and stress tests of supportive structures.

**EXSC 481R**
**Internship in Exercise Science**
**1 to 8**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Provides students with hands-on professional experience in the field of exercise science. May be repeated for a maximum of 8 credits toward graduation. Graded credit/no credit.

**EXSC 489R**
**Undergraduate Research for Exercise Science**
**1 to 4**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Provides students the opportunity to conduct research under the mentorship of a faculty member. Students will put in practice the theoretical knowledge gained in prior major courses. Students will create a significant intellectual or creative product that is characteristic of the Exercise Science discipline and worthy of communication to a broader audience. May be repeated for a maximum of 8 credits toward graduation.

**EXSC 4950**
**Senior Seminar**
**2**
* Prerequisite(s): ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), ZOOL 2420 (or 242H), ZOOL 2425 (or 242L), EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055), and University Advanced Standing

Emphasizes critical evaluation of classic and current research in Exercise Science. Promotes research and writing skills within the discipline of Exercise Science. Promotes student centered learning and supports specialization within the field of Exercise Science.

# Facilities Management (FAC)

**FAC 1010**
**Survey of Facilities Management**
**3**

Orients Facilities Management (FAC) majors with core responsibilities in the industry. Uses case studies and theory to gain experience with problem solving and resource management.

**FAC 1020**
**Space Planning and Management**
**3**
* Prerequisite(s) or Corequisite(s): ENGL1010 or ENGH 1005

Focuses on the forecasting, growth, planning, allocation, and management of occupied space. Discusses the role of the facilities manager in planning and managing growth.

# Family Science (FAMS)

**FAMS 101G**
**Contemporary Families**
**3**

Analyzes variations within families due to form, gender, socioeconomic status, culture, race, and other factors. Focuses on the diversity of family organization, interaction patterns, parenting practices, values, and prejudice in a multicultural society. Fulfills the Global/Intercultural requirement. Canvas Course Mats $54/Sage applies.

**FAMS 1100**
**Life Span Development in the Family**
**3**

Studies issues surrounding physical, cognitive, social, and emotional development of the individual within the context of family across the lifespan. Emphasizes how the context of family influences development of the individual.

**FAMS 1150 SS**
**Marriage and Relationship Skills**
**3**

Guides students in building a lasting intimate relationship of their own and in understanding and teaching relationship maintenance and improvement strategies based on large-scale scientifically derived marriage and relationship principles. Utilizes cutting edge research on factors and issues related to relationship success and outcome including whom and when to marry and how to build stable and happy relationships over time. Stresses increased understanding of desirable relationship outcomes and how to achieve them.

**FAMS 2705**
**Ethics for Family Interventions**
**3**
* Prerequisite(s): ENGL 1010, ENGL 101H, or ENGH 1005 with a C+ or higher

Explores the ethical and legal responsibilities of the helping professional in various types of family intervention, including counseling, education, and case management. Examines the broad scope of these ethical and legal concerns and how they are applied in a variety of settings.

**FAMS 2800**
**Teaching Human Sexuality**
**3**
* Prerequisite(s): (ENGL 1010, ENGL 101H, or ENGH 1005 with a C+ or higher)

Introduces basic concepts of human sexuality and effective methods to teach these topics to adults, adolescents, and children. Discusses gender roles, sexual orientation, sexual dysfunction, and sexually transmitted disease. Examines sexuality from the perspective of ethics, religion, the law, and education. Requires students to assess their own sexual attitudes and acquire information that should enable them to make responsible sexuality decisions. Educates students in how to teach human sexuality effectively regardless of any biases or individual beliefs. Note: Due to Utah State Laws regarding sexuality education, students registering for FAMS 2800 must be 18 years of age or a high school graduate.

**FAMS 3000 (Cross-listed with: SW 3000)**
**Social Work Practice I**
**3**
* Prerequisite(s): Admission to the BSW program or declared major in Family Science and University Advanced Standing

Introduces the basic knowledge, values, and skills needed for generalist social work practice. Focuses on working with individuals using the planned change process within the strengths perspective. Assists students in understanding the social and environmental conditions that negatively affect clients and empowering clients to take steps to enhance their own well-being. Provides content on the evaluation of social work practice.

**FAMS 3020**
**Research Methods for Family Science WE**
**3**
* Prerequisite(s): University Advanced Standing

Surveys the most common research designs in the social sciences. Highlights experiments, quasi-experiments, correlational designs, survey research, single case, and the philosophy of qualitative methods. Includes the design of a study, original data collection, data analysis, presentation of results.

**FAMS 3100**
**Career and Graduate School Preparation**
**3**
* Prerequisite(s): University Advanced Standing

Emphasizes the development of skills necessary to apply for employment and/or graduate school in the field of family studies. Includes resume writing, cover letters, basic interview skills, preparation of application packages, and networking skills used with school and community resources to find employment and/or graduate school opportunities.

**FAMS 3250**
**Applied Parenting**
**3**
* Prerequisite(s): (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Exposes students to classical and contemporary parenting theory, research, and practice. Focuses on the application of the guidance of children. Includes the study of parenting concepts, challenges, risks, and alternatives while considering the social, physical, emotional, intellectual, and spiritual environments of the child.

**FAMS 3410 (Cross-listed with: COMM 3410)**
**Fundamentals of Mediation and Negotiation**
**3**
* Prerequisite(s): University Advanced Standing

Teaches students to understand and participate knowledgeably on a basic level in the processes of mediation and negotiation. Emphasizes conceptual knowledge of both processes and improves practical skills and effectiveness as a mediator and negotiator. Uses an interactive-workshop format that blends theory with simulated class role-play.

**FAMS 3800**
**Early Development in Families**
**3**
* Prerequisite(s): (ENGL 2010 with a C+ or higher) and University Advanced Standing

Studies physical, social, emotional, and cognitive development from conception through adolescence. Emphasizes normal child development within family, social, and cultural contexts.

**FAMS 3850**
**Adult Development and Aging**
**3**
* Prerequisite(s): (ENGL 2010 with C+ or higher) and University Advanced Standing

Explores the dynamic process of adult development from emerging adulthood to death. Focuses on current adult developmental research and theory and the development of adults within and without the family system. Includes the examination of physical, familial, emotional, and social development.

**FAMS 4040**
**Secondary Data Analysis**
**3**
* Prerequisite(s): PSY 3110; BESC 3020; (ENGL 2010 with a C+ or higher); and University Advanced Standing

Focuses on research in the academic discipline of Family Studies. Teaches how to use the tools of research as a problem solving resource in real-life and applied settings. Includes how to form a research question or hypothesis, develop a proposal, create measurement, and apply for IRB approval. Requires completion of a research project.

**FAMS 4200 (Cross-listed with: COMM 4200)**
**Advanced Mediation and Negotiation**
**3**
* Prerequisite(s): University Advanced Standing

Prepares students to manage the mediation and negotiation process. Provides the knowledge of both processes, and sharpens practical skills and effectiveness as a mediator or negotiator. Uses an interactive-workshop format that blends theory with simulated class role-play. A certification with the Utah State Court Administrator's office may be offered to those who pass the course and complete 10 hours of mediation and negotiation at the conclusion of the semester.

**FAMS 4300**
**Family Dispute Resolution**
**3**
* Prerequisite(s): FAMS 3410 or COMM 3410 or instructor approval; and University Advanced Standing

Builds on fundamentals learned in the basic mediation course. Reviews research and theories on family dynamics and conflicts. Examines the most effective mediation approaches, techniques, and skills for resolving family disputes. Presents information on specialized family mediation situations such as family mediation divorce, parent/teen, adoption, elder care. Prepares students to effectively participate in family mediations by utilizing an interactive workshop format with role-play, observation, and actual mediations.

**FAMS 4400**
**Family Policy**
**3**
* Prerequisite(s): (FAMS 101G or PSY 1010 or SOC 1010) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Creates an understanding of the role of family professionals as advocates for the institution of the family. Covers family theories and research methods which aid in critically analyzing current policy development and implementation patterns in Utah and the United States. Utilizes the developmental theory in support of advocacy for family members in all their diverse structures, ages, and life stages.

**FAMS 4500**
**Family Life Education Methodology WE**
**3**
* Prerequisite(s): (FAMS 101G) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Explores the field of family life education. Includes the history, development, and theory of family life education, as well as discussing the types of family-life education programs. Develops the knowledge and practical skills that are required to identify needs, design programs, teach family-life education, facilitate groups, and evaluate participants and programs in a wide variety of settings with a broad range of populations. Develops an appreciation for the impact of diversity in family-life education, which includes an awareness of multicultural factors, family structure, culture, economics, gender, race, religion, disability, ageism, and sexual orientation.

**FAMS 4600**
**Relationship Education Certification**
**3**
* Prerequisite(s): FAMS 101G and (ENGL 2010 or 2020 with a C+ or higher) and University Advanced Standing. FAMS 4500 is strongly encouraged but not required.

Certifies students in the Prevention and Relationship Enhancement Program and other relationship curricula.

**FAMS 4660**
**Family Financial and Resource Management**
**3**
* Prerequisite(s): FAMS 101G strongly recommended; University Advanced Standing

Introduces students to the fundamentals of family financial management. Focuses on norms, roles, values, and traditions of financial management in family systems. Evaluates emotional, subjective, and unstructured patterns, which contribute to financial mismanagement. Considers personal and social influences, including, marketing, holidays, spending pressure, goal definition, and debt accumulation.

**FAMS 4670**
**Family Dynamics and Systems**
**3**
* Prerequisite(s): (FAMS 101G) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Introduces the fundamentals of family dynamics and systems as they relate to family structure and function. Focuses on historical development, theoretical underpinnings, and applied utility of dynamics and systems. Includes boundary management, infraction, and renewal in contemporary family systems.

**FAMS 4680**
**Family Theory**
**3**
* Prerequisite(s): FAMS 101G and (ENGL 2010 or 2020 with a C+ or higher)

Explores the development and application of the major family theories and their tenets. Discusses the effectiveness of these theoretical approaches to family.

**FAMS 4700**
**Introduction to Marriage and Family Therapy**
**3**
* Prerequisite(s): FAMS 101G, and University Advanced Standing

Introduces the field of marriage and family therapy. Addresses history, theory, prominent clinicians and modalities, and therapeutic topics and techniques. Develops the knowledge of such topics as the systemic nature of therapy. Focuses on knowledge of theory and specific topics in therapy rather than skill development. Includes research, training, professional issues, and ethics in the field.

**FAMS 475R**
**Current Topics in Family Studies**
**1 to 3**
* Prerequisite(s): FAMS 101G and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Presents a selected topic in Family Studies and will vary each semester. Requires a project demonstrating competency in the specific topic. May be repeated with different topics for nine credits toward graduation.

**FAMS 481R**
**Community Practicum**
**1 to 8**
* Prerequisite(s): Department approval and University Advanced Standing

Provides practical experience in a governmental, corporate, or private agency to prepare for regular employment. Practicum placements require program approval by the faculty coordinator. May be repeated for up to 8 credits toward graduation. Course fee of $35 applies.

**FAMS 482R**
**Stronger Families Practicum**
**1 to 8**
* Prerequisite(s): Senior Standing in the Family Science program, FAMS 4500, permission of the instructor, and University Advanced Standing

Provides practical and research experience interning in the Strengthening Families Program. Supervised by faculty, staff, and agency representatives. Requires faculty approval. May be repeated for a maximum of 8 credits toward graduation. Course fee of $35 applies.

**FAMS 483R**
**Research Internship**
**1 to 8**
* Prerequisite(s): Senior Standing in the Family Science program or Family Studies emphasis, PSY 3110 and BESC 3020 and (ENGL 2010 or 2020 with a C+ or higher) and University Advanced Standing or department approval.

Provides research experience. Includes idea formation, survey creation, data collection, marketing, data cleaning, qualitative coding, codebook creation, data analysis, gathering or summarizing literature, or preparing presentations/manuscripts. May be graded credit/no credit. May be repeated for up to eight credits toward graduation.

**FAMS 485R**
**Internship Seminar**
**1**
* Prerequisite(s): Junior standing in the Family Studies emphasis, FAMS 4500, permission of instructor, and University Advanced Standing

Provides integration of classroom learning with learning that takes place in an on-site internship. Intended to be taken concurrently with FAMS 481R or FAMS 482R. May be repeated for a maximum of 8 credits toward graduation.

**FAMS 490R**
**Independent Study**
**1 to 3**
* Prerequisite(s): BESC Department major; instructor approval and University Advanced Standing

Requires students to complete a well-defined project or directed study related to an area of special interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. May include writing a publishable paper, passing a competency exam, producing an annotated bibliography, oral presentation, or other options as approved by instructor. May be repeated for a maximum of six credits toward graduation.

# Fine Arts Music and Theatre (FAMT)

**FAMT 281R**
**Cooperative Work Experience**
**2 to 9**
* Prerequisite(s): Approval of Cooperative Coordinator

Designed for Fine Arts majors. Provides paid work experiences in the student's major. Course content is individualized, with students setting objectives in consultation with their faculty coordinator and their on-the-job supervisor. Credit is determined by the number of hours a student works during the semester. May be repeated four times for credit. May be graded credit/no credit.

# Finance (FIN)

**FIN 1060** **SS**
**Personal Finance**
**3**

Designed as elective credit toward a business degree and for individuals interested in acquiring personal financial planning skills. Covers personal financial management with emphasis on decision making, budgeting, financial institutions, personal and family risk management, credit management, and estate planning. Methods include lectures, guest speakers, films, tapes, computer simulations and research. Completers should be able to prepare complete personal budgets and other family financial planning instruments. Lab access fee of $25 for computers applies. Canvas Course Mats $78/McGraw applies

**FIN 3020**
**Family Financial Management and Development**
**3**
* Prerequisite(s): MAT 1030 or higher and University Advanced Standing

Personal and family financial management and development for non PFP Majors. Focuses on norms, roles, values, and traditions for the management of family resources. Examines the interactions and best practices of individuals and family members in processing financial management issues such as goal definitions, budgeting, debt management, and related functions.

**FIN 3060**
**Introduction to the PFP Profession**
**3**
* Prerequisite(s): MATH 1050 or MATH 1055 or MATH 1090 and University Advanced Standing

Introduces the processes appropriate for entry into the personal financial planning (PFP) profession. Provides an overview of the skills and knowledge sets required to be a PFP professional including an outline of business models and practice management issues within the industry. Includes a review of basic PFP process such as the time value of money, cash and debt management, personal financial statement analysis, education funding, and related issues.

**FIN 3100**
**Principles of Finance**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing

For bachelor's degree business management majors. Examines financial management in the business environment; time value of money; fundamentals of security valuation; the capital asset pricing model and capital budgeting. Introduces finance terminology and quantitative techniques used in financial analysis. Covers financial ratios and financial statement analysis, cost of capital, working capital policies, dividend policy, and a brief overview of international finance. Lab access fee of $25 for computers applies. Canvas Course Mats $78/Cengage applies.

**FIN 3150**
**Financial Management**
**3**
* Prerequisite(s): FIN 3100 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MGMT 3345

Examines financial aspects of firm decisions; presents theoretical underpinings for financial management, together with quantitative techniques used to analyze financial questions. Covers financial analysis and planning; valuation methods; determination of required return; effect of capital structure decisions; funding alternatives; and corporate risk management. Requires analysis of a capital budgeting problem, including a written paper, quantitative analysis and presentation. Lab access fee of $25 for computers applies. Canvas Course Mats $78/McGraw applies.

**FIN 3160**
**Financial Management for Accounting Majors**
**3**
* Prerequisite(s): FIN 3100, MATH 1050, MATH 1055, or MATH 1090, and University Advanced Standing

Prepares accounting majors with the information and skills necessary to prepare for the certified management accounting (CMA) accreditation process. Includes coverage of financial statement analysis, evaluation of profitabililty, managing financial risk, management of capital issues, and other financial decision making processes.

**FIN 3170**
**Financial Statement Analysis**
**3**
* Prerequisite(s): FIN 3100 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MGMT 3345

Teaches the application of professional financial management processes required to analyze markets, sectors, obtaining experience with optimization, data analysis, and quantitative techniques appropriate to be successful in the profession. Promotes the skills necessary to determine the value of firms assets and the worth of those assets in financial markets.

**FIN 3200**
**Financial Counseling**
**3**
* Prerequisite(s): FIN 3060 and University Advanced Standing. For PFP Majors Only

Prepares students to be effective financial counseling practitioners. Trains students to begin their role as effective financial counselors and planners. Develops counselor and client relationships skills as well as communication techniques to help identify and assist clients in an integrated financial planning environment. Provides an overview of the learning process needed to recognize the financial issues and concerns of many individuals and families and how to appropriately recommend solutions to help clients help themselves, while focusing on counselor sincerity and effectiveness in client reality.

**FIN 3210**
**Retirement Planning**
**3**
* Prerequisite(s): FIN 3060, Matriculation into the Woodbury School of Business, University Advanced Standing, and For PFP Majors Only.

Examines the topics of retirement planning and retirement plans from both employer and individual client settings. Uses a case study approach to apply and integrate the material. Emphasizes the evaluation of financial alternatives. Provides learning activities that will facilitate student growth and development in written and oral communication skills.

**FIN 3220**
**Risk Management and Insurance**
**3**
* Prerequisite(s): FIN 3060, University Advanced Standing, and For PFP Majors Only.

Examines risk management and insurance planning for individual clients as well as employers of small corporations. Teaches the development of risk management and insurance plans with economic and behavioral theory. Uses a case study approach to apply and integrate the material. Emphasizes evaluation of financial alternatives. Provides learning activities that facilitate growth and development in written and oral communication skills.

**FIN 3300**
**Tax Planning for Personal Financial Planners**
**3**
* Prerequisite(s): FIN 3060, Matriculation into WSB, University Advanced Standing, and for PFP majors only

Examines the topic of income tax planning and forecasting for individual clients and small business owners. Uses a case study approach to integrate the material and apply it to personal financial planning situations. Emphasizes the evaluation of financial alternatives. Provides learning activities that will facilitate student growth and development in written and oral communication skills. Works with local practitioners to provide an engaged learning experience.

**FIN 3400**
**Investment Management**
**3**
* Prerequisite(s): FIN 3100 and University Advanced Standing

Overviews the field of investments. Introduces stocks, bonds, put and call options, commodity and financial futures. Emphasizes both theory and practical aspects of investment management. Includes security valuation, market hypothesis, capital asset pricing, strategies of portfolio construction, performance measures, and risk/return relationships. Lab access fee of $25 for computers applies.

**FIN 3410**
**Introduction to Venture Capital Skills**
**3**
* Prerequisite(s): University Advanced Standing, FIN 3100 strongly recommended.

Uses cases, supplemented with classroom instruction, to illustrate the various forms of financing a company can obtain. Provides insight into identifying and assessing investable opportunities using both qualitative and quantitative methods. Prepare students for more advanced coursework in venture capital and for professional roles after graduation in venture capital and private equity.

**FIN 3420**
**Wolverine Fund**
**3**
* Prerequisite(s): University Advanced Standing, FIN 3100 strongly recommended.
* Prerequisite(s) or Corequisite(s): FIN 3410

Provides a hands-on learning experience in venture capital. Provides opportunity alongside syndicate partners for investment of Wolverine Fund monies in current venture capital deals. Uses evaluation methods including market, cash flow and hybrid methods, as well as various data sources, to analyze a company's financial statements and predict future growth. Builds skill in constructing basic financial models and forecasting to evaluate the investable nature of a business.

**FIN 4020**
**Enterprise Risk Management**
**3**
* Prerequisite(s): FIN 3100, MGMT 2340, and University Advanced Standing

Introduces the risks and exposures to loss which affect businesses and non-profit entities. Includes pure, financial, operational, and strategic risk. Emphasizes data collection, analysis, and evaluation methods. Provides an in-depth examination of risk management program objectives and goals. Provides the tools for identification and treatment.

**FIN 4030**
**Foundations of Risk Management and Insurance**
**3**
* Prerequisite(s): FIN 3100, MGMT 2340, and University Advanced Standing

Introduces fundamental risk management and insurance principles as essential components of global business operations and personal risk management. Provides an in-depth examination of risk identification, risk analysis, global risk exposures, insurance company operations, legal principles, loss prevention and safety concepts, and the social and economic relevance of risk management and insurance.

**FIN 4040**
**Business Law for Insurance Professionals**
**3**
* Prerequisite(s): FIN 3100, MGMT 2340, and University Advanced Standing

Introduces the fundamentals of insurance law. Provides an in-depth examination of the definition of insurance, risk and the nature of the insurance relationship, insurable interests, indemnity, fortuity, and subrogation. Studies the coordination of benefits, interpretation of policies, rights at variance with policy provisions, contract formation, warranties, misrepresentation and concealment, conditions, agents and brokers, insurance regulation, and introduction to insurance coverage.

**FIN 4050**
**Commercial Property Risk Management and Insurance**
**3**
* Prerequisite(s): FIN 3100, MGMT 2340, and University Advanced Standing

Introduces commercial property risk management, with an emphasis on risk control, risk financing and using insurance as an essential component of an enterprise risk management program. Provides an in-depth examination of risk assessment, loss prevention, and the treatment of risk and insurance in the areas of commercial property, loss of business income, cyber risk, and equipment breakdown.

**FIN 4060**
**Commercial Liability Risk Management and Insurance**
**3**
* Prerequisite(s): FIN 3100, MGMT 2340, and University Advanced Standing

Introduces business liability exposures to risk and loss arising from negligence and/or other legal doctrines. Examines insurance as an essential component of an enterprise risk management program. Provides an in-depth examination of risk assessment, loss prevention, and treatment of risk in the areas of general liability, business auto, worker's compensation, cyber risk, and management and professional liability.

**FIN 4100**
**Management of Financial Institutions**
**3**
* Prerequisite(s): FIN 3100 and University Advanced Standing

Studies the U.S. financial system and its primary institutions and markets. Includes the role of the Federal Reserve System, American and international financial markets. Explores the impact of monetary policy on financial institutions and financial intermediation. Presents the term structure of interest rates, money, capital and mortgage markets, and management of thrift institutions and insurance companies. Lab access fee of $25 for computers applies.

**FIN 4160**
**Portfolio Management**
**3**
* Prerequisite(s): FIN 3400 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MGMT 3345

Examines portfolio theory and applied techniques used in selecting appropriate securities and managing the risk and return of a portfolio, with a focus on meeting investment objectives. Considers both stock and bond portfolios, and includes discussion of market efficiency, diversification, measurement of risk and of performance, bond duration and portfolio immunization, advanced bond pricing principles, bond swaps, term structure of interest rates, asset allocation, and portfolio hedging strategies.

**FIN 4170**
**Derivative Securities**
**3**
* Prerequisite(s): FIN 3100 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MGMT 3345

Covers characteristics and institutional information about derivative securities, including forward and futures, options and swaps. Examines pricing models for these securities, risk inherent in derivative investments, and the role of derivatives in risk management. May include discussion of real options and other topics dealing with financial engineering.

**FIN 4180**
**International Finance Management**
**3**
* Prerequisite(s): FIN 3100 and University Advanced Standing

Examines financial aspects of firms operating in an international business environment. Includes currency valuation and forecasting; international flow of funds; foreign and international capital markets; valuation of multinational enterprises; and the effect of decisions about structure of the business and its transactions on firm value; and management of currency, political, and other risks arising from multinational operations. Canvas Course Mats of $78/McGraw applies. Lab access fee of $25 for computers applies.

**FIN 4190**
**Applied Asset Diversification and Management**
**3**
* Prerequisite(s): FIN 3400 and University Advanced Standing

Teaches a wide variety of investment asset classes including performance measurement, analysis of portfolio investment assets, quantitative analyses of investment portfolios. Discusses complex investment concepts through simplification and modeling of these issues to help clients better understand the benefits of these investment concepts.

**FIN 4200**
**Financial Counseling Practicum**
**3**
* Prerequisite(s): FIN 3060, FIN 3200, Departmental Approval, Matriculation into WSB, and University Advanced Standing

Examines financial counseling with an engaged and practical focus. Uses actual client data in a supervised environment to integrate the material and core learning objectives, then apply them to financial counseling situations. Emphasizes the evaluation of credit and debt management, housing decisions and budgeting and forecasting. Provides learning activities designed to facilitate student growth and development in written, oral and presentation skills. Works with local practitioners to provide an engaged learning experience.

**FIN 4210**
**Estate Planning Fundamentals**
**3**
* Prerequisite(s): FIN 3060, Matriculation into the Woodbury School of Business, University Advanced Standing, and For PFP Majors Only.

Teaches gift, estate, and generation skipping transfer taxation, including financial and estate planning applications. Applies gift, estate, and generation skipping transfer taxation rules to personal financial planning scenarios. Studies financial regulations and taxation policy. May be delivered hybrid.

**FIN 4250**
**Personal Financial Planning Practicum**
**3**
* Prerequisite(s): FIN 3200, FIN 3210, FIN 3220, FIN 4210, FIN 3400, ACC 3400, and University Advanced Standing

Examines practice management in various financial planning firms. Teaches the basics of practice management with an understanding of the core areas of personal financial planning. Uses a case study approach to apply and integrate the material and evaluate financial alternatives. Emphasizes the benefits and drawbacks of various management methods. Provides learning activities that will facilitate student growth and development in written and oral communication skills.

**FIN 4270**
**Wealth Management Seminar**
**3**
* Prerequisite(s): FIN 3060, FIN 3100, and FIN 3400, Matriculation into the Woodbury School of Business, University Advanced Standing, and for PFP Majors Only.

Introduces investment theory, literature and theories which describe the unique process of household investment decision making. Introduces quantitative investment analysis and the instruments used to construct an efficient household portfolio. Uses quantitative and theoretical material which will require a basic knowledge of economics and finance, and the ability to work with spreadsheets. Applies practical concepts to prepare students to work as wealth managers in financial planning firms.

**FIN 4290**
**Technological Applications in Personal Financial Planning**
**3**
* Prerequisite(s): FIN 3060, WSB matriculation, University Advanced Standing, and For PFP Majors Only.

Introduces various financial planning software packages. Includes both goal based and cash flow based financial planning software, client relationship management software, investment research software, portfolio management software, and office support software. Provides access to a variety of premier software companies in the U.S. and Canada. Certification in core software packages is required. Includes training material and standards as outlined by software companies.

**FIN 4310**
**Real Estate Investment and Securities**
**3**
* Prerequisite(s): FIN 3100 and University Advanced Standing

Examines real estate investments and debt and equity capital markets linked to real estate assets. Focuses primarily on real estate investments and valuation of debt and equity securities, including commercial and residential mortgages, real estate investment trusts, and mortgage-backed securities, and some related instruments such as CDOs. Examines the process of securitization and the secondary markets for real estate securities, together with the role of financial institutions in this sector. Provides an overview of real estate investment, measurement of prices, and fundamental determinants of value with particular attention given to the effect of interest rate risk, default risk, and the embedded prepayment options on the value of mortgages and mortgage-backed securities.

**FIN 457R**
**Advanced Topics in Finance**
**3**
* Prerequisite(s): FIN 3100, Instructor Approval, and University Advanced Standing

Uses case method, examination of current academic and professional literature and/or student research to explore selected finance topics in considerable detail. Emphasizes student analysis, exposition and presentation of information. May be repeated four times for a maximum of 12 credits toward graduation.

**FIN 4700**
**CFP Examination Preparation**
**3**
* Prerequisite(s): FIN 3060, FIN 3210, FIN 3220, FIN 3300, FIN 3400, FIN 4210, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): FIN 4800

Prepares personal financial planning students completing his/her bachelor of science degree who are planning to take the Certified Financial Planner accreditation exam. Provides review of the concepts and issues individuals need to be successful. Uses Dalton Education materials.

**FIN 4800**
**Personal Financial Planning Capstone**
**3**
* Prerequisite(s): FIN 3060, FIN 3210, FIN 3220, FIN 4210, FIN 3400, University Advanced Standing, and For PFP Majors Only.

Develops the concept of a comprehensive plan. Reviews each of the major aspects of financial planning in the context of a comprehensive case. Analyzes the financial planning profession and the various types of financial planning models. Provides an overview of software applications as well as interview skills, data gathering, working with clients, presentation skills, and the creation of a comprehensive financial plan.

**FIN 481R**
**Personal Financial Planning Internship**
**2 to 8**
* Prerequisite(s): Departmental Approval and University Advanced Standing

Provides supervised, practical, and professional experience for students preparing for careers in Personal Financial Planning. May be repeated for a maximum of 8 credit hours. May be graded Credit/No Credit.

**FIN 482R**
**Internship**
**2 to 8**
* Prerequisite(s): Instructor Approval and University Advanced Standing

For upper-division students in Finance. Provides a transition from school to work where learned theory is applied to actual practice through meaningful on-the-job paid experience commensurate with upper-division classroom instruction. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and oral presentations. Completers should obtain experience in establishing and accomplishing individualized work objectives that improve work performance. May be repeated for 6 credits toward graduation. May be graded credit/no credit.

**FIN 483R**
**Colloquium in PFP Professionalism**
**1**
* Prerequisite(s): University Advanced Standing and For PFP Majors Only.

Prepares PFP Program students for internships and other professional development activities. Features industry professionals who interact with students and discuss opportunities within the industry and their specific professional practices. Covers special topics such as business etiquette, dressing for success, preparing professional resumes, correspondence, etc. May allow students to experience extended personal interaction with visiting professionals by hosting them, providing transportation to/from the airport, escorting them to local points of interest, and more. May be repeated for a maximum of 3 credits toward graduation.

**FIN 5130**
**Financial Statement Analysis and Modeling**
**3**
* Prerequisite(s): FIN 3100

Explains the relationships among the three primary financial statements including income statement, balance sheet, and cash flow statements. Analyzes companies in three primary sectors and does reviews and valuations of these companies. Describes basic merger, acquisition, and initial public offering valuation concepts.

**FIN 5160**
**International Financial Management**
**3**
* Prerequisite(s): FIN 3100

Translates financial topics within an international perspective. Teaches international corporate finance transactions and the impact of currency implications on company financial translations. Provides a global context for cultural differences of financial concepts and practices in varied countries. Provides additional financial perspectives about international business transactions within the context of earlier financial courses.

**FIN 5170**
**Investment Analysis and Portfolio Analysis**
**3**
* Prerequisite(s): FIN 3100

Provides an introduction to the global securities market and its role in capital formation, wealth-creation, economic development, risk mitigation, wealth management, and other finance-related goals.

**FIN 5180**
**CFA Examination Preparation**
**3**
* Prerequisite(s): Permission of instructor or department chairr

Prepares participants to sit for the Chartered Financial Analysis (CFA) Level 1 section of the exam. Requires students to work through a modular process covering outlined topics required for the exam including ethics, quantitative methods, economics, corporate finance, financial reporting/analysis, security analysis, and portfolio management.

**FIN 6100**
**Research Methods**
**3**
* Prerequisite(s): Admission to Masters FPA Program

Describes graduate level research methods, processes, and skills appropriate to the analysis of applied business projects. Reviews scientific methods analysis, research design, measurement and scaling, testing reliability and validity, communication of research results, and other relevant concepts.

**FIN 6130**
**Financial Statement Analysis and Modeling**
**3**
* Prerequisite(s): Acceptance in MBA Program

Develops fluency with the three primary financial statements including income statement, balance sheet, and cash flow statement. Projects statements for companies in three primary sectors and conducts a full enterprise valuation for projected companies. Conducts a mock merger, acquisition, and initial public offering valuation.

**FIN 6140**
**Regulatory Policy in the Financial Services Industry**
**3**
* Prerequisite(s): Admission to Masters of Financial Planning and Analytics Program

Describes the functions and purposes of regulatory policy within the financial services industry. Outlines alternative philosophies which influence regulatory policy development including implementation of public policy for these purposes. Reviews varied government, industry, and other agencies responsible for regulatory policy in the financial service industry.

**FIN 6150**
**Financial Management**
**3**
* Prerequisite(s): Acceptance in the MBA program

Discusses corporate financial management cases and analyses dealing with problems of working capital management, capital budgeting, cost of capital evaluation, and corporate restructuring. Canvas Course Mats $78/ Cengage applies.

**FIN 6160**
**International Financial Management**
**3**
* Prerequisite(s): Acceptance into MBA Program

Translates financial topics into an international perspective. Focuses on international corporate finance transactions and the currency implications of financial statement translations. Provides a global context for cultural differences of financial concepts and practices around the world. Offers a financial perspective treating international business.

**FIN 6170**
**Investment Analysis and Portfolio Analysis**
**3**

Provides an introduction to the global securities market and its role in capital formation, wealth-creation, economic development, risk mitigation, wealth management, and other finance-related goals. Utilizes extensive use of Bloomberg Terminals in the development of company and industry analyses. Canvas Course Mats $78/Cengage applies.

**FIN 6180**
**Asset Protection and Trust Planning**
**3**
* Prerequisite(s): Acceptance in Masters of FPA Program

Describes a variety of processes for evaluating asset values and paring those processes with client's requirements. Reviews alternative trust types, policies for achieving varied client objectives, and evaluating trust effectiveness.

**FIN 6200**
**Behavioral Finance Seminar**
**3**
* Prerequisite(s): Admission to the Masters in Financial Planning and Analytics Program

Describes complementary approach to traditional finance theory which assumes investors and managers always use rational decision processes. Presents alternative perspectives using behavioral finance theory which assumes investors and finance professionals use cognitive processes in decision making and the implications for these behavioral finance concepts in investment and corporate decision making activities.

**FIN 6210**
**Retirement Planning**
**3**
* Prerequisite(s): Admission to the Masters in Financial Planning and Analytics Program

Examines topics of retirement planning and retirement plans at the graduate level from both employer and individual client perspectives. Uses case study approach to apply and integrate the material. Emphasizes the evaluation of financial alternatives. Provides learning activities that will facilitate student growth and development in written and oral communication skills.

**FIN 6250**
**Retirement Income Planning**
**3**
* Prerequisite(s): Acceptance in the Masters of FPA

Describes the special issues related to managing and sustaining retirement income for people depending on that source for livelihood. Evaluates alternative sources of income for retired individuals including social security, pensions, 401K, and other sources. Describes varied strategies for sustaining value, evaluating withdraws from principal, reviews of sustainability, and other related concepts.

**FIN 6260**
**Estate Planning**
**3**
* Prerequisite(s): Acceptance into Masters FPA Program

Describes elements of estate planning including gift, estate, generation skipping, tax implications and other relevant issues financial planners need to identify client needs. Identifies planning concepts, tools, and varied processes important to meet needs of individual clients.

**FIN 6270**
**Wealth Management**
**3**
* Prerequisite(s): Acceptance into Masters of FPA Program

Introduces investment theory, literature and theories relating to the unique processes of household investment decision making. Implements quantitative investment analyses and the instruments appropriate to the development of an efficient household portfolio. Teaches quantitative and theoretical concepts requiring a basic knowledge of economics, finance, and the ability to work with spreadsheets. Applies practical concepts to prepare students to work as wealth managers in financial planning firms.

**FIN 6290**
**Advanced Technology Applications in PFP**
**3**
* Prerequisite(s): Acceptance in the Masters of FPA

Introduces various financial planning software packages. Includes both goal based and cash flow based financial planning software, client relationship management software, investment research software, portfolio management software, and office support software. Provides access to a variety of premier software companies in the U.S. and Canada. Describes training material and standards as outlined by software companies. Requires certification in core software packages.

**FIN 6300**
**Income Tax Planning**
**3**
* Prerequisite(s): Acceptance into the Masters of FPA

Examines the topic of income tax planning and forecasting for individual clients and small business owners. Executes a case study approach to integrate material and apply it within a personal financial planning context. Implements materials to facilitate student growth and development in written and oral communication skills. Organizes activities with local practitioners to provide an engaged learning experience.

**FIN 6340**
**Analytics and Advanced Statistics**
**3**
* Prerequisite(s): Acceptance in the Masters of FPA Program

Describes processes and methods that statisticians use to analyze business, financial, and related issues. Teaches how to determine types of data required to address specific problems, how to gather, analyze, and report that information to suggest solutions to identified problems. Evaluates the effectiveness of varied statistical processes in applying those techniques to address specific types of issues. Practices the application of statistical methods to the evaluation of identified problems.

**FIN 6400**
**Client Relationships Management**
**3**
* Prerequisite(s): Acceptance into Masters of FPA Program

Outlines processes for developing and sustaining client relationships to manage a professional financial planning operation. Reviews alternative electronic applications designed to support client relationships. Evaluates the effectiveness of alternative client management systems including both strengths and challenges of such systems.

**FIN 6450**
**Planning for Financial Planning Business Owners**
**3**
* Prerequisite(s): Acceptance into the Masters of FPA Program

Reviews varied business organizations, structures, processes, and other related activities necessary to the effective management of a financial planning business. Evaluates client management, financial planning software, business and tax accounting software, and other needed technology support. Teaches professional development activities for planning professionals and staff. Analyzes marketing, human resources, and other business function processes. Integrates best business practices.

**FIN 657R**
**Special Topics in Financial Planning**
**3**
* Prerequisite(s): Admission to the Masters FPA

Reviews special topics such as new tax laws, revisions of charitable giving procedures, developing specialized trusts, changes in financial industry regulatory processes, and other related topics. May be repeated for a maximum of 6 credits toward graduation.

**FIN 6700**
**CFP Exam Preparation**
**3**
* Prerequisite(s): FIN 6210, FIN 6300, and FIN 6260
* Corequisite(s): FIN 6800

Prepares personal financial planning students completing master's degree who are planning to take the Certified Financial Planner accreditation exam. Provides review of the concepts and issues individuals need to be successful.

**FIN 6800**
**PFP Capstone**
**3**
* Prerequisite(s): Acceptance into Masters of FPA

Develops the concept of a comprehensive plan. Reviews each of the major aspects of financial planning in the context of a comprehensive case. Analyzes the financial planning profession and the various types of financial planning models. Provides an overview of software applications as well as interview skills, data gathering, working with clients, presentation skills, and the creation of a comprehensive financial plan.

**FIN 6810**
**CFA Exam Preparation**
**3**
* Prerequisite(s): Admission to Masters of FPA Program and instructor approval

Prepares participants to sit for the Chartered Financial Analysis (CFA) Level 1 section of the exam. Requires students to work through a modular process covering outlined topics required for the exam including ethics, quantitative methods, economics, corporate finance, financial reporting/analysis, security analysis, and portfolio management.

# French (FREN)

**FREN 1010** **LH**
**Beginning French I**
**4**

Emphasizes understanding, speaking, reading and writing skills. Basic language usage and cultural understanding are acquired through an activity-based approach. Lab access fee of $10 applies.

**FREN 1020** **LH**
**Beginning French II**
**4**
* Prerequisite(s): Students need equivalent knowledge of FREN 1010

Completes the first year of study. Includes the remaining grammar, language concepts, and culture, and introduces students to literature in French. Lab access fee of $10 applies.

**FREN 115R**
**French Conversation I**
**1**

Offers novice French speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen listening comprehension for natural conversational flow. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**FREN 1500** **LH**
**French Travel Study**
**3**

Introduces students to a French-speaking foreign country for a minimum of 10 days of intensive language and culture study. Course entails several meetings prior to departure and at least one after the return home to facilitate observation and analysis of data to be gathered on the tour. An organized presentation of that data will be contained in a multimedia project due no later than one month after tour.

**FREN 2010** **LH**
**Intermediate French I**
**4**
* Prerequisite(s): Students need equivalent knowledge of FREN 1020

Reviews grammar, reading, writing, and conversation skills learned throughout the first year. Introduces readings and discussions on the history, culture, and literature of the French world. Lab access fee of $10 applies.

**FREN 202G** **HH**
**Intermediate French II**
**4**
* Prerequisite(s): Students need equivalent knowledge of FREN 2010

Emphasizes reading, writing, and conversational skills through socio-cultural studies in history, literature and art. Lab access fee of $10 applies.

**FREN 2050**
**Advanced French Grammar and Composition**
**3**
* Prerequisite(s): FREN 202G or equivalent

Explores grammar of French focusing on areas typically difficult for English speakers. Provides extensive instruction in, and opportunity for the students' improvement in language production, both oral and written. Completers should improve considerably their ability to express themselves in the foreign language both orally and in written form.

**FREN 215R**
**French Conversation II**
**1**
* Prerequisite(s): Students should have equivalent knowledge of FREN 1020

Offers lower division / novice speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, sharpen listening comprehension, and develop conversational strategies such as circumlocution and managing a conversation with useful expressions for starting a conversation, gaining time to think, helping the other speaker, seeking agreement, etc. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**FREN 3030**
**French Composition and Conversation WE**
**3**
* Prerequisite(s): (FREN 202G or instructor approval) and University Advanced Standing

Advances mastery of French grammar while emphasizing production skills of speaking and writing. Expands reading and listening skills to a lesser degree. Reviews and extends lexical depth. Allows students without experience living in a French immersion setting to advance in their communication skills to where they may participate more comfortably in future upper division courses with other students who do have immersion experience. Offers a variety of topics presented in a variety of media as content basis for real communicative practice in French. Conducts all course work primarily in French.

**FREN 3040**
**Introduction to Literary Genres in French**
**3**
* Prerequisite(s): (FREN 202G or equivalent) and University Advanced Standing

Explores different literary genres in the French language throughout the centuries. Provides extensive opportunity for improvement in oral and reading/writing development of language skills, as well as new ways of thinking about literature in cultural contexts. Completers should considerably improve their ability to express themselves in the foreign language. Taught entirely in French.

**FREN 3050** **LH**
**Advanced French**
**3**
* Prerequisite(s): It is recommended that students take FR 202G prior to enrolling in FR 3050. If you have advanced study of French, you may also contact the French Program Director for a placement test.

Building upon lower-division courses, continues to emphasize reading, writing, and conversational skills through studies in literary and other texts, including films dealing with Francophone cultures. Includes an in-depth review of grammar. Lab access fee of $10 applies.

**FREN 3116**
**Adventure and Discovery-Journeys through the French and Francophone Worlds**
**3**
* Prerequisite(s): Pass French AP Exam with minimum score of 3.

This course is part of the French Bridge Program in the State of Utah, open only to high school students in the Bridge Program. Not to be taught on main campus, and not open to students who are not enrolled in a participating high school. Explores themes of discovery, adventure, and journey in the French and Francophone world through the prism of the fine arts, history, music, texts, films, and other areas. Taught in French.

**FREN 3117**
**Francophonie-Past/Present/Future**
**3**
* Prerequisite(s): Pass French AP Exam with a minimum score of 3.

This course is part of the French Bridge Program in the State of Utah, open only to high school students in the Bridge Program. Not to be taught on main campus, and not open to students who are not enrolled in a participating high school. Explores themes such as coming of age, rite of passage, and education as encountered in cultural artifacts and literatures from France and the Francophone world. Taught in French.

**FREN 3118**
**Paris City of Lights**
**3**
* Prerequisite(s): Pass French AP Exam with a minimum score of 3.

This course is part of the French Bridge Program in the State of Utah, open only to high school students in the Bridge Program. Not to be taught on main campus, and not open to students who are not enrolled in a participating high school. Explores the City of Lights through the prism of important themes, including, but not limited to, the arts, history, commerce, technology, sports, etc. Examines course themes through a variety of approaches, such as project based instruction, class discussion, and reaction papers. Taught in French.

**FREN 3200** **LH**
**Business French**
**3**
* Prerequisite(s): (FREN 3050 or equivalent knowledge) and University Advanced Standing

For those who plan to pursue careers in international business or related fields, learn French business language, understand French corporate culture, or plan to major or minor in French. Teaches French business terminology and prepares students to take the Chambre de Commerce et d'Industrie de Paris exam. Explores technological, personal, and professional aspects of business. Will be taught entirely in the French language. Lab access fee of $10 applies.

**FREN 351G**
**Culture and Civilization to 1700**
**3**
* Prerequisite(s): FREN 3050 and University Advanced Standing

Explores chronologically to 1700 the formation and development of French speaking societies and cultures. Traces the ethnic development and linguistic history of these societies and peoples, as well as examines manifestations of their aesthetic endeavors. Presentations and class instruction conducted entirely in French.

**FREN 352G**
**Culture and Civilization from 1700**
**3**
* Prerequisite(s): FREN 3050 and University Advanced Standing

Explores chronologically to 1700 the formation and development of French speaking societies and cultures. Traces the ethnic development and linguistic history of these societies and peoples, as well as examines manifestations of their aesthetic endeavors. Presentations and class instruction conducted entirely in French.

**FREN 353G**
**Contemporary French Civilization and Culture**
**3**
* Prerequisite(s): (FREN 3050 or equivalent) and University Advanced Standing

Examines contemporary French culture topics (family, education, love and the couple, religion, social challenges, governmental functions, etc.) through studying a variety of French sources: readings, film, lecture, individual research, etc. Analyzes topics through active class discussion in French. Integrates new cultural perspectives in papers and assignments researched and written in French. Conducted entirely in French.

**FREN 3610**
**French Literature to 1700**
**3**
* Prerequisite(s): (FREN 3050 or equivalent knowledge) and University Advanced Standing

Introduces chronologically to 1700 representative French authors. Emphasizes literary analysis and criticism. Completers should develop knowledge of literary history, acquire skills in interpreting literary texts, and deepen understanding of the French language. Presentations and class instruction conducted entirely in French.

**FREN 3620**
**French Literature from 1700 WE**
**3**
* Prerequisite(s): (FREN 3050 or equivalent knowledge) or department approval; University Advanced Standing

Introduces representative French authors chronologically from the year 1700. Emphasizes literary analysis and criticism. Focuses on literary history, interpretation of literary texts, and deeper understanding of the French language. Presentations and class instruction conducted entirely in French. Emphasizes writing skills.

**FREN 4050**
**Special Topics in Grammar Usage and Style**
**3**
* Prerequisite(s): FREN 3050 and University Advanced Standing

Focuses on understanding French grammar in context. Uses various literary texts and other print materials in an effort to underscore the grammar concepts studied.

**FREN 4100**
**Teaching French Grammar**
**3**
* Prerequisite(s): FREN 4050, instructor approval, and University Advanced Standing

Focuses on the fundamental concepts and practices of teaching French grammar in context. Prepares students to teach French language in secondary school settings. Requires a portfolio of best teaching practices as related to grammar instruction.

**FREN 4200**
**Advanced Business French**
**3**
* Prerequisite(s): (FREN 3200 or equivalent knowledge) and University Advanced Standing

For those taking the exam leading to the Diplome de francais des affaires (DFA 2) awarded by the Chambre de Commerce et d'Industrie de Paris. Emphasizes case studies, marketing, resumes, cover letters, job interviews, computers, and the Internet. Taught entirely in French.

**FREN 4900**
**French Capstone Seminar**
**3**
* Prerequisite(s): FREN 4050, instructor approval, and University Advanced Standing

Provides the opportunity to showcase language abilities through various oral and written assignments. Culminates in a final research project in the target language. Requires a selected subject to explore for the capstone project. Possible research areas include literary, film, and gender studies.

**FREN 490R**
**Special Topics in French**
**3**
* Prerequisite(s): (FREN 202G or instructor approval) and University Advanced Standing

Studies topic in detail not offered in other courses. Addresses key aspects of the topic. Engages students in critical analysis and discourse. Develops language skills requisite to such analysis and specific to the topic. Possible topics include French Film, Translation and Interpretation, Francophone Literature, Women's Texts, Courtly Love. Conducted entirely in French. May be repeated for up to 9 credit hours towards graduation.

# Forensic Science (FSCI)

**FSCI 3300**
**Forensic Photography**
**3**
* Prerequisite(s): (CJ 1350 or FSCI 3400 with a 'C+' or higher) and University Advanced Standing

Explains the basic concepts of Forensic Photography while exploring the fundamental skills for the selection and use of photography equipment. Identifies the basic principles and fundamentals of using photography with regard to crime scenes, forensic evidence, and identification photography. Illustrates skills utilizing a DSLR camera with various types of lighting, camera settings, and common camera accessories. Explains techniques involving surveillance, impression, close up, alternate light sources, infrared photography, and the legal aspects of forensic photography as it pertains to criminal investigations. Course fee of $155 applies. Lab access fee of $15 applies.

**FSCI 3400**
**Criminalistics**
**3**
* Prerequisite(s): CJ 1350 with a C+ or higher and University Advanced Standing

Emphasizes the learning and proper use of technical vocabulary used in forensic science. Introduces basic photography and presentation techniques as they relate to the field of forensics. Teaches laws pertaining to making photographic copies and the legal steps required for altered photographs to be accepted in the criminal court system. Introduces basic laboratory measurement and statistical techniques. Uses stereo and compound light microscopes to visually examine physical evidence. Discusses the scientific theory and analytical procedures for analyzing refractive index of glass, species identification of hair, bullet rifling, DNA and the calculation of Post Mortem Interval. Course Lab fee of $142 for materials applies. Lab access fee of $15 applies.

**FSCI 3500**
**Footwear and Tire Mark Evidence and Examination**
**3**
* Prerequisite(s): (CJ 1350 or FSCI 3400 with a C+ or higher) and University Advanced Standing

Presents the history of footwear and tire impression evidence and introduces the examination of impression evidence. Explains crime scene protection and searching procedures for impression evidence. Identifies and lists the basic equipment needed for footwear and tire impression recovery at a crime scene. Identifies applicable chemical formulas and instructs in the preparation of chemical reagents used to visualize impression evidence. Teaches the recovery of footwear and tire evidence through photography, lifting, and casting. Includes the methodology of footwear and tire identification by image comparison techniques. Course fee of $128 for materials applies. Lab access fee of $15 applies.

**FSCI 3540**
**Forensic Trace Analysis I**
**3**
* Prerequisite(s): FSCI 3400 with a C+ or higher, CHEM 1220/1225 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): CHEM 2310 and CHEM 2315

Emphasizes the learning and proper use of technical vocabulary as it relates to forensic trace evidence. Teaches theory of techniques and operation of spectroscopic instruments. Performs spectroscopic analyses of various types of physical evidence. Uses stereo and compound light microscopes to prepare small samples for examination. Teaches forensic comparison analysis and technical report writing. Lab access fee of $15 for computers applies. Course fee of $135 for materials applies.

**FSCI 3550**
**Forensic Trace Analysis II**
**3**
* Prerequisite(s): (FSCI 3400 or CHEM 2310 with a C+ or higher) and University Advanced Standing

Teaches theory of chromatographic/mass spectrometry techniques and operation of their analytical instruments. Teaches proper use of technical vocabulary related to forensic analysis. Performs chromatographic and mass spectrum analyses of physical evidence commonly found in criminal investigations. Teaches sample preparation, forensic comparison analysis and technical report writing. Lab access fee of $15 for computers applies.

**FSCI 3600 (Cross-listed with: ZOOL 3600)**
**Forensic Anthropology I**
**3**
* Prerequisite(s): ZOOL 1090, or ZOOL 2320 and ZOOL 2325, University Advanced Standing

Provides instruction on the study of human bones and their remains as physical evidence in criminal investigations. Teaches the importance of dentition in determining an age estimate of human remains. Identifies the differences among the sexes, whether the remains are human or nonhuman, and what is of forensic significance. Explains crime scene methodology and clinical applications in Forensic Anthropology. Teaches problem solving and analytical thinking in order to develop a biological profile based on population-specific data and standards. Investigates different pathological conditions and variables which must be taken into consideration when determining the cause of death.

**FSCI 3700**
**Fingerprint Processing**
**3**
* Prerequisite(s): (CJ 1350 or FSCI 3400 with a C+ or higher) and University Advanced Standing

Teaches professional conduct in fingerprint processing. Explains the differences in latent fingerprints as they relate to the physical condition in which they are found. Describes and utilizes the equipment needed for fingerprint development, lifting, and comparison. Course fee of $143 for materials applies. Lab access fee of $15 applies.

**FSCI 3720**
**Fingerprint Examination**
**3**
* Prerequisite(s): (CJ 1350 or FSCI 3400 with a C+ or higher) and University Advanced Standing

Presents the history of fingerprint examination. Teaches recent technical advances in fingerprint development and examination. Describes the theory and make-up of fingerprints, palm prints, and footprints. Explores charting and comparison techniques. Teaches criteria used to determine successful identification versus non-identification. Lab access fee of $15 computers applies. Course fee of $30 materials applies.

**FSCI 3780**
**Bloodstain Pattern Analysis**
**3**
* Prerequisite(s): (CJ 1350 or FSCI 3400 with a C+ or higher) and University Advanced Standing

Teaches the basics of handling blood evidence typically encountered at a crime scene. Explains terminology and the techniques of documentation as it relates to the analysis of bloodstain patterns. Presents the physical properties of blood as they apply to forensic investigation. Identifies characteristic patterns and computer applications to interpret the impact patterns of spattered blood. Illustrates the concepts of motion, directionality, area of convergence, and the area of origin of impact bloodstain patterns. Teaches traditional and modern techniques in crime scene reconstruction for documenting and reconstructing the crime scene. Describes guidelines for presenting bloodstain evidence at trial. Course lab fee of $75 for materials applies. Lab access fee of $15 applies.

**FSCI 3820**
**Crime Scene Investigation Techniques I WE**
**3**
* Prerequisite(s): (CJ 1350 or FSCI 3400 with a C+ or higher) and University Advanced Standing

Explains the fundamental goals of crime scene investigation and the importance of physical evidence. Teaches fundamental crime scene documentation skills including note taking, sketching, and photography. Teaches evidence identification, collection, and packaging procedures. Provides experience in evidence identification, documentation, collection, and packaging procedures. Course Lab fee of $145 applies

**FSCI 3830**
**Crime Scene Investigation Techniques II WE**
**3**
* Prerequisite(s): FSCI 3820, FSCI 3780, and University Advanced Standing

Teaches computer-based crime scene measurement and diagram tools utilized to properly document crime scenes including clandestine human graves, scattered human remains, and under water, fire, and arson scenes. Provides instruction in proper approach, documentation, and analysis of complex crimes scenes. Teaches crime scene reconstruction techniques in bloodstain patterns and shooting incident scenes. Course fee of $155 for materials applies. Course fee of $30 applies.

**FSCI 3850**
**Marijuana Identification Certificate**
**3**
* Prerequisite(s): (CJ 1350 or FSCI 3400 with a C+ or higher or Instructor Approval) and University Advanced Standing

Teaches the botanical and chemical methodology required for the legal identification of marijuana. Identifies the microscopic morphological features of the plant material. Uses thin layer chromatography to detect hallucinogenic chemicals. Uses the Duquenois-Levine Test to detect the cannabinoid family of chemicals and how to recognize false-positive results. Teaches the methodology to detect marijuana residues in charred debris. Interprets data, writes a marijuana analysis report and presents results in a Moot Court. Course fee of $155 for materials applies. Lab access fee of $15 applies.

**FSCI 3860**
**Forensic Microscopy**
**3**
* Prerequisite(s): (CJ 1350 or FSCI 3400 with a C+ or higher) and University Advanced Standing

Lays the foundation of forensic microscopy. Explains the theory of the microscope: light and lenses. Describes the major variants of the compound microscope including the stereo, polarized light and comparison varieties. Explains the function and purpose of the illuminator, sub-stage condenser, objective, and ocular. Establishes acceptable performance criteria and image quality as it relates to compromises among resolution, magnification, and visibility. Presents the use of specialized contrast enhancement methods and illumination techniques. Explains the theory and use of the polarized light microscope in the examination of anisotropic, birefringent, and optical properties of crystalline materials. Describes the use of the microscope as a quantitative measuring tool. Introduces instrument systems calibration methods for both the microscope as well as imaging software. Describes the collection and examination of micro-traces and the use of micro-trace catalogs. Examination and discussion of firearms, bullet, tool marks, hair and fiber characteristics. Lab access fee of $15 for computers applies. Course fee of $152 for materials applies.

**FSCI 3880**
**Expert Witness Professional Practices**
**3**
* Prerequisite(s): (CJ 1330 and CJ 2350 each with a C+ or higher) and University Advanced Standing

Stresses the importance of background checks, polygraph tests and personal integrity. Teaches Professional Competence: training, degrees and certificates, publications, affiliations, testimony track record, continuing education. Describes the duties and the special privileges of opinion testimony afforded to expert witnesses. Explains the Rules of Evidence and statistical reliability as they pertain to scientific data and findings. Presents guidelines for case review and report writing. Discusses trial strategy, testimony, presentations, and dangers that confront the expert witness at court. Discusses cross-examination strategies. Teaches professional business practices including personal organization, contracts for hiring the expert for professional services, consultation, correspondence, record keeping, fee setting, and fee collection.

**FSCI 4000**
**Firearms Examination**
**3**
* Prerequisite(s): (CJ 1350 and FSCI 3400 with a 'C+' or higher) and University Advanced Standing
* Prerequisite(s) or Corequisite(s): FSCI 3860

Identifies modern firearms and ammunition while teaching how they operate and are manufactured. Explains how to collect, preserve, transport, and safely handle firearms and ammunition. Discusses the procedures of firing and the recovery of test bullets. Teaches the procedures of serial number restoration, gun shot residue tests, distance determinations, microscopic and chemical examinations. Includes how to interpret data, write reports of findings, and present results in a court of law. Course fee of $65 applies. Lab access fee of $15 applies.

**FSCI 4100**
**Forensic Pathology**
**3**
* Prerequisite(s): ZOOL 1090, or ZOOL 2320 and 2325, University Advanced Standing

Teaches the fundamentals of scientific techniques used by forensic pathologists in medicolegal investigations. Differentiates between sudden or unexpected deaths, homicides, suicides, accidental deaths, and trauma.

**FSCI 4200**
**Medicolegal Death Investigations**
**3**
* Prerequisite(s): FSCI 4100 and University Advanced Standing

Discusses the foundation for understanding death scene analysis by an investigator in conjunction with a medical examiner while discussing the integration of medical, scientific, and legal methodology as applied to Medicolegal Death Investigations. Examines various techniques used in the study of forensic science and medicine. Teaches the interpretation of the facts and evidence to help determine and reconstruct the sequence of events at a variety of classic death scenes. May be delivered hybrid.

**FSCI 443R**
**Directed Research in Forensic Science**
**2 to 7**
* Prerequisite(s): Instructor Approval and University Advanced Standing

Provides guided research studies in forensic science under the direction of a Forensic Science faculty mentor. Involves students in the methodology of research within various forensic science disciplines. Includes the process of forming a testable hypothesis through the combination of literature and data review, experimental design, data acquisition, interpretation of results and overall conclusive findings. May be repeated for a maximum of 7 credits toward graduation. Lab access fee of $15 for computers applies. Course fee of $310 for materials applies.

**FSCI 475R**
**Current Topics in Forensic Science**
**3**
* Prerequisite(s): CJ 1350 or FSCI 3400 with a 'C+' or higher, and University Advanced Standing

Presents selected topics in Forensic Science and Forensic Investigations. Requires a special topic related to the area of study. May be repeated with different topic areas for a maximum of 9 credits toward graduation.

**FSCI 481R**
**Forensic Science Internship**
**1 to 9**
* Prerequisite(s): Department application approval and University Advanced Standing

Provides actual, on-the-job work experience on a paying or non-paying (volunteer) basis in a Forensic Science profession or other approved related discipline. Emphasizes successful work experience through job shadowing of a professional. May be repeated for a maximum of 9 credits toward graduation. May be graded Credit/No Credit.

**FSCI 491R**
**Directed Reading and Special Projects**
**1 to 3**
* Prerequisite(s): Department Approval and University Advanced Standing

Offers independent study as directed in theoretical, experimental, or practical discipline emphasis in an area not covered by regular courses. May be Graded Credit/No Credit. May be repeated for a maximum of 9 credits toward graduation.

**FSCI 4990**
**Forensic Investigation Capstone**
**3**
* Prerequisite(s): FSCI 3300, FSCI 3830 and University Advanced Standing

Applies qualitative, quantitative, and/or mixed research methods for selected issues in forensic investigation. Requires the student to develop and present an undergraduate research project both orally and in writing. Students should plan to register for this course in their last semester of the program.

# Geography (GEOG)

**GEOG 1000** **PP**
**Introduction to Physical Geography**
**3**

Explores the world through each of the major components of physical geography: climatology, hydrology, geomorphology, and biogeography, focusing on how they are interrelated. Emphasizes the dynamic interactions among climate, vegetation, soils, and landforms. Can be taken in conjunction with laboratory exercises in GEOG 1005.

**GEOG 1005**
**Introduction to Physical Geography Lab**
**1**
* Prerequisite(s) or Corequisite(s): GEOG 1000

Designed to be taken in conjunction with GEOG 1000. Explores the world from a broad perspective, examining each of the major components of physical geography: climatology, hydrology, geomorphology, and biogeography. Investigates physical processes of and interactions among climate, vegetation, soils, and landforms.

**GEOG 130G** **SS**
**Survey of World Geography**
**3**

Explores the world in which we live. Studies major countries of the world with special emphasis on location, physical environment, culture, resources, and current events. May be delivered online.

**GEOG 140G** **SS**
**Introduction to Human Geography**
**3**

Examines the theoretical, spatial, and relational aspects of human activity across the Earth's surface. Discusses the analytical frameworks for understanding the interactions of social, cultural, economic and political systems. Includes topics of population dynamics, culture, language, religion, international development, human conflicts, and urbanization.

**GEOG 2000** **SS**
**Sustainability and Environment**
**3**

Explores relationships of human and natural systems, how cultural groups experience nature, and global sustainability. Examines different ways of perceiving nature, resources, the environment, and society. Critically analyzes links between social, economic, political, historical, cultural, and environmental processes. Discusses environmental problems and ways to build more sustainable futures. Includes participation in locally sustainability issues.

**GEOG 2100** **SS**
**Geography of the United States**
**3**

Surveys primarily the regional geography of the United States and, secondarily, of Canada. Explores subregions of each country in detail. Includes topics such as culture, environment, economy, urbanization, transportation systems, territory and political borders.

**GEOG 2200**
**Geography of Europe**
**3**

Provides a regional survey of Europe including topics such as economic development, environment, politics, society and culture. Explores the place of Europe in geopolitical and global economic systems. Discusses internal relationships within the European Union, Eastern Europe and Russia.

**GEOG 2500**
**Geography of Latin America and the Caribbean**
**3**

Surveys the Americas south of the United States. Explores each subregion of Latin America and the Caribbean in detail. Includes topics such as development, environment, indigenous peoples, history, and national political and financial crises.

**GEOG 3010**
**Economic Geography**
**3**
* Prerequisite(s): University Advanced Standing

A course encompassing the study of humankind's economic activities on the earth, including hunting, gathering, agriculture, mining, manufacturing, forestry, fishing, high technology, and world trade. Studies population, environmental issues, urban patterns, and travel and tourism. Uses lectures, oral response, field trips, and audiovisual aids.

**GEOG 3100**
**Cartography**
**3**
* Prerequisite(s): (MAT 1030, MAT 1035, STAT 1040, STAT 1045, MATH 1050, MATH 1055, or higher) and (GEO 1010 or GEOG 1000 or GEOG 1300 or equivalent); and University Advanced Standing

Introduces fundamental principles of cartography including perception, visualization, topographic and thematic map interpretation, field mapping techniques (including GPS), and creating computer-based maps. Includes concepts of direction, scale, grids, projections, spatial transformations, spatial data analysis, data manipulation decisions, color theory and application, and principles of cartographic design and critical evaluation.

**GEOG 3110**
**Urban Geography WE**
**3**
* Prerequisite(s): University Advanced Standing; GEOG 1300 preferred

Focuses on the origins, growth, structure and function of cities. Examines social and political dimensions of urban life and the emergence of new urban spaces around the world. Includes case studies in the decline of urban industrial America and the rise of Sunbelt and Edge Cities.

**GEOG 3200**
**Geography of Utah**
**3**
* Prerequisite(s): University Advanced Standing

Applies principles and methods of physical, cultural, and human-environment geography to the study of Utah's people, places, and environments; considers problems of adjustment, including natural hazards, environmental concerns, and human problems.

**GEOG 3250**
**Cultural Geography**
**3**
* Prerequisite(s): (ENGL 2010 or instructor approval) and University Advanced Standing

Explores the cultural landscape of the world's peoples. Describes the geographic complex of cultural forms including language, religion, music, art, architecture, folklore, food, clothing and land use. Topics include cultural conflicts, globalization, and the international entertainment industry.

**GEOG 3300**
**Biogeography**
**4**
* Prerequisite(s): (BIOL1010, or BIOL1620, or GEOG1000) and University Advanced Standing

Examines the geography of nature. Expands on the subjects of ecology, biology, and history to examine nature over time and space. Examines nature at different scales: from the molecule to the global biome. Explores the foundations, major concepts, and trends in biogeography, as well as related analytical and data visualization techniques.

**GEOG 3350**
**Geography of Africa**
**3**
* Prerequisite(s): University Advanced Standing

Examines the historical and contemporary human geographies of Africa. Focuses on the impact of colonialism on societies, economies, politics, and environments across the continent and the historical context of contemporary challenges. Analyzes human-environment relationships across both rural and urban areas. Problematizes the concept of development and outlines key challenges facing the continent in the future.

**GEOG 3400**
**Environmental Remote Sensing**
**3**
* Prerequisite(s): GEOG 3600 or GIS 3600; and an upper division course in natural science recommended; and University Advanced Standing

Introduces the history, theory, and operation of remote sensing software. Includes an introduction to the electromagnetic spectrum and signals, sensors, image processing, and classification techniques. Provides a survey of the concepts and techniques of remote sensing and image analysis for mapping and monitoring natural resources, environment and land use, and an array of geoscientific applications at different scales. Software fee of $18 applies. Lab access fee of $35 applies.

**GEOG 3430**
**Political Geography**
**3**
* Prerequisite(s): University Advanced Standing

Surveys the geographic dimensions of political action and theory at local, national and global scales. Covers topics such as geopolitics, nationalism, territoriality, and political conflicts. Examines subjects such as American electoral patterns, Cold War geographies, and 21st century global security.

**GEOG 3500 (Cross-listed with: GEO 3500)**
**Geomorphology WE**
**4**
* Prerequisite(s): GEO 1010 or GEOG 1000; University Advanced Standing

Examines the geologic processes operating at the Earth's surface to understand the origin of our planet's varied landscapes. Explores how landforms respond to climate change, tectonic forcing, and changes in land use. Addresses common geomorphic processes including weathering, soils, hill slope processes, fluvial processes and landforms, aeolian transport, glacial and periglacial environments, karst, and coastal processes. Course lab fee of $21 applies.

**GEOG 3600 (Cross-listed with: GIS 3600)**
**Introduction to Geographic Information Systems**
**4**
* Prerequisite(s): [Completion of a course that meets the PP (Physical Science) or SS (Social Science) general education requirement is recommended] and University Advanced Standing

Introduces the history, theory, and operation of Geographic Information Systems (GIS). Includes an introduction to GIS data sources, database design, data input, spatial analysis, and map production. Offers valuable preparation for careers in geology, geography, geographic information systems, geomatics, planning, surveying, marketing, environmental technology, biology, engineering, and other related fields. Lab access fee of $35 for computers applies. Software fee of $18 applies.

**GEOG 3650**
**Advanced Geographic Information Systems**
**4**
* Prerequisite(s): GEOG 3600 and University Advanced Standing

Expands on GEOG 3600, Introduction to Geographic Information Systems (GIS), and reviews advanced GIS functions and applications to the sciences. Fundamental topics include spatial analysis, geostatistical analysis, 3-D modeling, and project development and implementation. Lab access fee of $35 applies. Software fee of $18 applies.

**GEOG 3700**
**Wetland Studies**
**3**
* Prerequisite(s): GEOG 1000 OR GEO 1010 OR ENVT 1110 OR BIOL 1010 OR CHEM 1210 OR Instructor Approval; University Advanced Standing

Examines the structure and function of wetlands with emphasis on wetland biogeochemistry processes, soils, hydrology, flora and fauna, mitigation and restoration, policies and regulations. Explores research methods applied in wetland studies. Provides students with essential skills to critically evaluate wetland issues to make informed decisions. Prepares students to conduct research and communicate scientific information.

**GEOG 3705**
**Wetland Studies Laboratory**
**1**
* Prerequisite(s): GEO 1010 OR ENVT 1110 OR BIOL 1010 OR CHEM 1210 OR Instructor Approval; and University Advanced Standing
* Corequisite(s): GEOG 3700

Designed to be taken in conjunction with GEOG 3700. Applies techniques for sampling and mapping of wetland soils, plants, water, etc. and analyzes chemistry of wetland samples using modern instrumentation to address outstanding scientific questions related to wetlands. Addresses skills to interpret and present scientific data. Normally includes field trips.

**GEOG 3800 (Cross-listed with: HIST 3800)**
**Environmental History of the United States**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Examines human modification of the American landscape. Surveys the physical geography of the United States, landscape change during Native American to European transition, and causes of agricultural and industrial pollution. Topics include land ethics, processes of environmental degradation, technological remedies, history of federal laws and protection agencies. May include field experiences.

**GEOG 4100**
**Geospatial Field Methods**
**3**
* Prerequisite(s): (GEOG 3600 or GIS 3600) and MATH 1060; University Advanced Standing

Provides an introduction to measuring, recording, and finding geographic locations in the field using GPS and other methods widely used in industry and research. Applies GPS and other field techniques to scientific problems, and emphasizes hands-on experience with field equipment. Covers geographic reference frames, and integrates field data with desktop GIS software. Software fee of $18 applies. Lab access fee of $35 applies.

**GEOG 482R**
**GIS Internship**
**1 to 3**
* Prerequisite(s): (GEOG 3600 and GEOG 3650 or equivalent), department approval, declared major in any Earth Science program, and University Advanced Standing

Engages students in supervised GIS work in a professional setting. Includes maintaining a journal of student experiences and preparing a paper summarizing their experience. A maximum of 3 credit hours may be counted toward graduation. May be graded Credit/No Credit.

**GEOG 489R**
**Student Research in Geography**
**1 to 4**
* Prerequisite(s): Junior or Senior standing, instructor approval, and University Advanced Standing

Provides the opportunity to conduct research under the mentorship of an Earth Science department faculty member. Includes any combination of literature reviews, original research, and/or participation in ongoing departmental projects. Involves students in the methodology of original geographic research. Requires preparation and presentation of oral and/or written reports, typically presented in a public forum. May be repeated for a maximum of 4 credits toward graduation.

**GEOG 490R**
**Special Topics in Geography**
**1 to 4**
* Prerequisite(s): Instructor approval and University Advanced Standing

Explores or examines special topics in geography. Topics vary depending on student demand and current topics of significance in geography. May be repeated for a maximum of 4 credits toward graduation.

# Geology (GEO)

**GEO 1010** **PP**
**Introduction to Geology**
**3**

Studies planet earth: its materials, structure, dynamics, and surface features. Taken alone it is designed for non-science students who want a broad introduction to earth science and a greater appreciation of their physical surroundings. Taken in conjunction with laboratory exercises in GEO 1015, the class is sufficiently rigorous to articulate as an introductory geology class.

**GEO 1015**
**Introduction to Geology Laboratory**
**1**

Designed to be taken in conjunction with GEO 1010. Includes the identification of rocks, minerals, basic land forms and structures. Studies geologic processes occurring in desert, glacial, mountainous and other environments. Taken with GEO 1010, the class will articulate as an introductory earth science class. Course Lab fee of $10 for transportation, lab applies.

**GEO 101H** **PP**
**Introduction to Geology**
**3**

Studies the structural and dynamic systems of the earth that create our environment. Stresses geology and related topics chosen for astronomy and meteorology.

**GEO 1020 (Cross-listed with: BIOL 1200)** **PP**
**Prehistoric Life**
**3**
* Prerequisite(s): BIOL 1010 or GEO 1010 recommended

Studies prehistoric life. Uses the concepts of biology and physical science. Studies major groups of ancient animals and plants as found in the rock record. Includes aspects and fundamental concepts of biology, ecology, and geology.

**GEO 1080** **PP**
**Introduction to Oceanography**
**3**

Introduces the origin and development of the oceans, marine geology and its effect on life in the seas. Discusses waves, tides, currents, and their impact on shorelines, the ocean floor, and basins. Examines physical processes as they relate to oceanographic concepts. Includes media as an alternative to the actual oceanic experience. Completers should have a basic knowledge and appreciation of the ocean's impact to the world's ecology.

**GEO 1085**
**Introduction to Oceanography Laboratory**
**1**

A basic laboratory experience in the physical aspects of Oceanography. Introduces applied skills in Oceanography such as Marine Geology and Oceanographic Chemistry. Studies the physical parameters that allow marine life to flourish. Uses maps to study the structure of the sea floor and its relationship to plate tectonics. Provides hands-on experiences with salinity and marine chemistry. Course lab fee of $10 applies.

**GEO 1220**
**Historical Geology**
**3**
* Prerequisite(s): GEO 1010

Examines the physical and biological evolution of the Earth from its origins 4.6 billion years ago up to present day. Reviews fundamental processes and principles of geology and biology. Develops tools for interpreting rocks and the fossil record. Explores important changes through geologic time, including plate tectonics, paleogeography, mountain building, geochemical cycles, climate, sea level, and the origin and evolution of the great diversity of life on Earth.

**GEO 1225**
**Historical Geology Laboratory**
**1**
* Prerequisite(s): GEO 1010
* Prerequisite(s) or Corequisite(s): GEO 1220

Is designed to be taken in conjunction with GEO 1220. Reviews fundamental processes and principles of geology and biology. Develops skills for identifying main types of minerals, rocks, and fossils. Develops tools for interpreting Earth history through analysis of rocks, fossils, and paleoclimate data. Develops skills for correlating strata and reading geologic maps. Includes field trips to study local outcrops. Course lab fee of $10 applies.

**GEO 202R (Cross-listed with: BIOL 202R)**
**Science Excursion**
**1**

For students interested in the natural world. Explores a wide variety of topics in science, including geology, botany, astronomy, zoology, ecology, and archeology. Consists of a minimum of a four-day field trip. Participants should gain an increased understanding of several fields of scientific study. May be repeated as many times as desired for interest, however a maximum of 3 credits may count toward graduation.

**GEO 204R (Cross-listed with: BIOL 204R)** **PP**
**Natural History Excursion**
**3**

For students interested in the natural world. Promotes an in-depth look at a wide variety of topics in science, including geology, botany, astronomy, zoology, ecology, and archeology. Consists of 15 hours of lecture plus an appropriate field trip. Participants should gain an interdisciplinary understanding of science and nature. May be repeated for up to six credits toward graduation.

**GEO 2070 (Cross-listed with: BIOL 2070)**
**Desert Natural History**
**3**

Integrates the teaching of geological and biological systems of the southwestern deserts. Discusses the ecology and geology of unique desert ecosystems; the rocks and strata providing the foundation of the landscape; the evolutionary and geological processes that mold the landscape and the species within it over time; and, the relationships between the physical and biological aspects of the ecosystem, including humans. Provides an intense, hands-on field course where faculty and students participate together in daily activities in a natural setting. Is held for part of the time on the UVU main campus and part of the time at the Capitol Reef Field Station. Requires students to live and learn at the field station for approximately 1/3 of the course.

**GEO 3000**
**Environmental Geochemistry**
**3**
* Prerequisite(s): GEO 1010, (MATH 1050 or MATH 1055), CHEM 1210, University Advanced Standing

Introduces low temperature, environmental geochemistry with a focus on the use of quantitative measures to understand surficial geologic processes. Includes equilibrium thermodynamics and kinetics of chemical reactions, aqueous solutions, sorption and complexation, oxidation-reduction reactions, and the chemistry of the continental, marine, and atmospheric environments. Incorporates numerous examples to demonstrate how the conceptual framework can be applied in solving practical problems.

**GEO 3070 (Cross-listed with: BIOL 3070)**
**Advanced Desert Natural History**
**3**
* Prerequisite(s): University Advanced Standing

Integrates the geological and biological systems of the southwestern deserts. Includes discussion of the ecology and geology of unique desert ecosystems; the rocks and strata providing the foundation of the landscape; the evolutionary and geological processes that mold the landscape and the species within it over time; and, the relationships between the physical and biological aspects of the ecosystem, including humans. Provides an intense, hands-on field course where faculty and students participate together in daily activities and experimental design in a natural setting. Is held part of the time on the UVU main campus and part of the time at the Capitol Reef Field Station. Requires students to live and learn at the field station for approximately 1/3 of the course.

**GEO 3080**
**Earth Materials WE**
**3**
* Prerequisite(s): GEO 1010, GEO 1015, and University Advanced Standing; CHEM 1210 or other chemistry course recommended
* Corequisite(s): GEO 3085

Investigates the physical characteristics, chemical properties, formation, and distribution of geologically significant igneous and metamorphic rocks and minerals. Develops ability to examine rocks and minerals, and analyze their chemical properties to understand geologic processes. Involves field trips, including the possibility of weekend trips. Course lab fee of $22 for transportation, lab applies.

**GEO 3085**
**Earth Materials Laboratory**
**1**
* Prerequisite(s): GEO 1010, GEO 1015, and University Advanced Standing; CHEM 1210 or other chemistry course recommended
* Corequisite(s): GEO 3080

Focuses on identification and classification of common rocks and minerals in hand sample and introduces optical mineralogy and petrography. Investigates the occurrence and formation of common rocks and minerals through direct observation of their properties and occurrence. Involves field trips, including the possibility of weekend trips.

**GEO 3100**
**Isotope Geochemistry**
**3**
* Prerequisite(s): GEO 1010, (MATH 1050 or MATH 1055), CHEM 1210 and University Advanced Standing

Provides an introduction to the principles and applications of isotope geochemistry, which plays an important role in a wide variety of geological, biological, and environmental investigations, and summarizes the analytical techniques used in the field. Examines the theory of radiometric dating and provides an overview of the most commonly used geochronometers. Focuses on stable isotopes with emphasis on oxygen, hydrogen, carbon, nitrogen, and sulfur and with applications in paleoclimatology, ecology and paleoecology, archeology, and hydrology.

**GEO 3105**
**Isotope Geochemistry Laboratory**
**1**
* Prerequisite(s): GEO 1010, (MATH 1050 or MATH 1055), CHEM 1210 and University Advanced Standing

Explores the analysis and interpretation of real isotope data and provides hands-on experience in their use to solve problems and answer questions in geochronology, paleoclimatology, hydrology, and archaeology. Requires data analysis utilizing Microsoft Excel.

**GEO 3200**
**Geologic Hazards**
**3**
* Prerequisite(s): GEO 1010, GEO 1015, and University Advanced Standing
* Corequisite(s): GEO 3205

Examines the ways in which geologic hazards (including earthquakes, landslides, volcanoes, problem soils, ground subsidence and earth fissures) impact civilization. Studies the processes responsible for these hazards, how to geologically assess whether each of these hazards is a concern at a particular site, how each type of hazard can be planned for, and what laws and regulations need to be considered during site investigations. Facilitates discussion of hazards, vulnerability, risk and societal planning/mitigation. Course Lab fee of $21 for transportation, lab applies.

**GEO 3205**
**Geologic Hazards Laboratory**
**1**
* Prerequisite(s): GEO 1010, GEO 1015, and University Advanced Standing
* Corequisite(s): GEO 3200

Investigates geologic hazards through field observation, mapping, geospatial analyses, quantitative analyses, and report writing. Applies geologic hazards science to associated laws and regulations. Facilitates discussion of hazards, vulnerability, risk and societal planning/mitigation.

**GEO 3500 (Cross-listed with: GEOG 3500)**
**Geomorphology WE**
**4**
* Prerequisite(s): GEO 1010 or GEOG 1000; University Advanced Standing

Examines the geologic processes operating at the Earth's surface to understand the origin of our planet's varied landscapes. Explores how landforms respond to climate change, tectonic forcing, and changes in land use. Addresses common geomorphic processes including weathering, soils, hill slope processes, fluvial processes and landforms, aeolian transport, glacial and periglacial environments, karst, and coastal processes. Course lab fee of $21 applies.

**GEO 3700**
**Structure and Tectonics**
**4**
* Prerequisite(s): GEO 1220, GEO 3080, (PHYS 2010 or PHYS 2210), and University Advanced Standing

Investigates the fundamentals of global plate tectonics and rock deformation. Includes applications to petroleum geology, environmental geology, and engineering geology. Explores geometric techniques of structural analysis in the laboratory. Involves field trips, possibly including weekend trips. Course lab fee of $21 for transportation, lab applies.

**GEO 4080**
**Petrology**
**3**
* Prerequisite(s): GEO 3080, CHEM 1220, and University Advanced Standing
* Corequisite(s): GEO 4085

Examines the Earth’s rock factories, specifically igneous and metamorphic processes and how they are related to plate tectonics. Delves into geochemistry, applied thermodynamics, and kinetics in igneous, sedimentary, and metamorphic rocks as it pertains to the genesis of these rocks. Further explores the techniques of petrographic microscopy and introduces other analytical techniques such as scanning electron microscopy, electron probe microanalysis, and mass spectrometry. Requires students to collect, analyze, and interpret petrologic data to gain insight into a petrogenetic process. Course lab fee of $21 applies.

**GEO 4085**
**Petrology Laboratory**
**1**
* Corequisite(s): GEO 4080

Takes a hands-on approach to petrology. Provides opportunities for the student to collect and work with data to illuminate a variety of petrologic processes. Implements rock and mineral sample reference collections, field trip(s), petrographic microscopes, sample preparation labs, analytical instrumentation to investigate petrogenetic processes.

**GEO 4200 (Cross-listed with: BIOL 4200, CHEM 4200, PHYS 4200)**
**Teaching Methods in Science**
**3**
* Prerequisite(s): Acceptance into secondary education program, senior-level standing, instructor approval, and University Advanced Standing

Examines objectives, instructional methods and curriculum for teaching science in the secondary school. Includes developing, adapting, evaluating, and using strategies and materials for teaching biological and physical sciences, appropriate both to the special needs of the learners and the special characteristics of science discipline.

**GEO 4500**
**Sedimentary Geology**
**4**
* Prerequisite(s): GEO 1220, GEO 1225, GEO 3080, and University Advanced Standing; CHEM 1210 or other chemistry recommended

Explores the origin, classification, and spatiotemporal distribution of sedimentary rocks. Examines the fundamental principles of sedimentology, petrology, and stratigraphy. Reviews weathering processes and soil formation. Develops analytical skills regarding particle erosion, transportation, and deposition. Develops skills for identifying and classifying sedimentary rocks. Develops tools for describing stratigraphic sections and interpreting the rock record. Develops skills for correlating strata and reading geologic maps. Develops critical thinking and writing skills. Includes field trips to study various outcrops in the state of Utah. Course Lab fee of $21 applies.

**GEO 4510**
**Paleontology**
**4**
* Prerequisite(s): GEO 1220, GEO 1225, GEO 3080, (BIOL 1010 or BIOL 1610), and University Advanced Standing; GEO 4500 recommended

Exposes students to a wide variety of topics encompassed within the field of paleontology. Offers substantial knowledge of the major groups of life represented in the fossil record. Discusses the most fundamental concepts in paleontology, such as key principles of evolution and paleoecology. Offers an understanding of what paleontologists do, why the field is so crucial, and why all earth scientists should have at least a basic understanding of paleontology. Requires two weekend field trips (dates will be discussed in class). Course lab fee of $21 for transportation, lab applies.

**GEO 4600**
**Field Experience**
**6**
* Prerequisite(s): GEO 3080, GEO 3700, GEO 4500, and University Advanced Standing

Is an intensive field course giving students hands-on experience with several aspects of Earth Science field work. Involves 8 to 10 hours of field work per day, for three to five days per week, for four to six weeks. Is the required capstone experience for Geology majors. Course lab fee of $650 for practical experience applies.

**GEO 480R**
**Earth Science Seminar**
**.5**
* Prerequisite(s): University Advanced Standing

Exposes students to current research topics in Earth Science and related fields. Provides an opportunity for students to attend bi-weekly lectures presented by department faculty and invited speakers. Incorporates lectures that are usually a summary of the speaker's recent research results, or investigative projects in an earth science industry. May be repeated for a maximum of 1 credits toward graduation.

**GEO 482R (Cross-listed with: ENVT 482R)**
**Geologic Environmental Internship**
**1 to 3**
* Prerequisite(s): GEO 1010 or ENVT 1110; 12 credit hours of any GEO, GEOG, or ENVT courses; declared major in any Earth Science program and University Advanced Standing

Engages students in supervised geologic or environmental work in a professional setting. Requires approval by the Chair of the Department of Earth Science. Includes maintaining a journal of student experiences and preparing a paper summarizing their experience. A maximum of 3 credit hours may be counted toward graduation. May be graded Credit/No Credit.

**GEO 489R**
**Student Research**
**1 to 4**
* Prerequisite(s): GEO 1015, Junior or Senior standing, instructor approval, and University Advanced Standing

Provides students the opportunity to conduct research under the mentorship of an Earth Science department faculty member. Includes any combination of literature reviews, original research, and/or participation in ongoing departmental projects. Involves students in the methodology of original geologic research. Requires preparation and presentation of oral and/or written reports, typically presented in a public forum. May be repeated for a maximum of 6 credits total toward graduation.

**GEO 490R**
**Special Topics in Geology**
**1 to 4**
* Prerequisite(s): GEO 1010, GEO 1015, Junior or Senior standing, instructor approval, and University Advanced Standing

Explores or examines special topics in geology. Topics vary depending on student demand and current topics of significance in geology. May be repeated for a maximum of 8 credits toward graduation.

**GEO 495R**
**Independent Study**
**1 to 4**
* Prerequisite(s): GEO 1010, GEO 1015, and University Advanced Standing

Requires an independent study program to be developed with one or more Earth Science faculty member and approved by a committee of Earth Science faculty. Includes some combination of literature review, field work, numerical analysis, and/or laboratory analysis. Involves the preparation of a written report. An oral presentation may also be required. May be repeated for up to 4 credits.

**GEO 525R**
**Advanced Topics for Geology Teachers**
**1 to 5**
* Prerequisite(s): Departmental Approval

For licensed teachers or teachers seeking to recertify their earth science or integrated science endorsements from the Utah State Office of Education. Teaches principles of geology and pedagogy of teaching geology for teachers in public or private schools. Emphasis will be placed on correlation with the Utah Core Curriculum, the National Science Education Standards, and the Benchmarks of Project 2061. Topics will vary.

# German (GER)

**GER 1010** **LH**
**Beginning German I**
**4**

Provides an introduction to the language and culture of German-speaking countries. Emphasizes listening, speaking, reading, and writing skills along with basic grammar and vocabulary within the cultural context of modern German-speaking societies. Uses an eclectic method of instruction, with extra attention given to oral and written proficiency. Requires weekly lab. Lab access fee of $10 applies.

**GER 1020** **LH**
**Beginning German II**
**4**
* Prerequisite(s): Student should have equivalent knowledge of GER 1010

Provides a second-semester introduction to the language and culture of German-speaking countries. Emphasizes listening, speaking, reading, and writing skills along with basic grammar and vocabulary within the cultural context of modern German-speaking societies. Uses an eclectic method of instruction, with extra attention given to oral and written proficiency. Requires weekly lab. Lab access fee of $10 applies.

**GER 1110** **LH**
**German Conversation I**
**4**

A total immersion course taught in a classroom in a German speaking country. Students live in native, German-speaking homes or other total immersion environments. Practices creative language in conversation to develop proficiency in the German language at the novice level. Includes intensive listening and speaking experience to improve aural-oral proficiency. Students will attend cultural and sporting events. Offered only with the Summer Study Abroad program. May be taken concurrently with GER 2700.

**GER 115R**
**German Conversation I**
**1**

Offers novice German speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen listening comprehension for natural conversational flow. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**GER 2010** **LH**
**Intermediate German I**
**4**
* Prerequisite(s): Students should have equivalent knowledge of GER 1020

Reviews and builds upon the grammar, reading, writing and conversational skills learned in the first year courses. Introduces readings and discussions on the history, culture, and literature of the German speaking world, maintaining a focus on oral proficiency. Lab access fee of $10 applies.

**GER 202G** **HH**
**Intermediate German II**
**4**
* Prerequisite(s): Students need equivalent knowledge of GER 2010

Studies fourth-semester conversational German that is used in daily settings. Includes culture study, pronunciation, reading, and grammar. Emphasizes conversation in real life situations. Uses field trips and guest lecturers. Prepares students to enter the advanced level of German. Completers should be able to converse enough to visit or work in a German speaking country. Lab access fee of $10 applies.

**GER 215R**
**German Conversation II**
**1**
* Prerequisite(s): Students should have equivalent knowledge of GER 1020

Offers lower division / novice German speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, sharpen listening comprehension, and develop conversational strategies such as circumlocution and managing a conversation with useful expressions for starting a conversation, gaining time to think, helping the other speaker, seeking agreement, etc. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**GER 2700** **LH**
**Immersion German Civilization and Culture**
**4**

A total immersion course of classroom study and experience in a German speaking country. Students will live in native, German-speaking homes or other total immersion environments. Includes classroom study, supervised travel of cultural interest, and attendance at various cultural and sporting events. Includes written response, journals, and examinations. Offered only with the Summer Study Abroad program. May be taken concurrently with GER 1110.

**GER 3030**
**German Composition and Conversation**
**3**
* Prerequisite(s): (GER 202G or equivalent experience) and University Advanced Standing

Expands knowledge and skill base developed in lower-division courses with an emphasis in idiomatic expression in spoken and written German. Using authentic texts, students will learn to read, speak, and write with more precision and accuracy. Successful completion of this course will prepare students to participate fully in subsequent advanced courses.

**GER 3050** **LH**
**Advanced German**
**3**
* Prerequisite(s): It is recommended that students have GER 202G, one-year residency in German speaking country, or instructor approval

Designed for non-native German speakers who have lived in a German speaking country for at least one year. Includes a review of grammar and an introduction to German literature, art, music, and expository writing. Lab access fee of $10 applies.

**GER 3200** **LH**
**Business German**
**3**
* Prerequisite(s): (GER 3050 or equivalent knowledge) and University Advanced Standing

For those who plan to pursue careers in international business or related fields, learn the business language for German, understand the German corporate culture, or plan to major or minor in German. Teaches German business terminology and prepares students to take the International German Business Certificate examination. Presents Germany's role in a global economy. Explores how students can effectively do business with German companies within the framework of German culture. Includes current materials dealing with today's issues. Will be taught entirely in the German language. Lab access fee of $10 applies.

**GER 351G**
**German Culture and Civilization**
**3**
* Prerequisite(s): GER 3050 and University Advanced Standing

Explores chronologically the cultural formation and development of German-speaking societies and cultures in Germany, Austria, Switzerland, and other German-speaking regions. Discusses the ethnic development and linguistic history of these societies and countries. Presentations and class instruction conducted entirely in German.

**GER 380R**
**Topics in German Studies**
**3**
* Prerequisite(s): University Advanced Standing

Explores a variety of subjects relevant to the study of German language, literature, history and culture. Engages students in critical analysis and discourse. Possible topics may include Medieval German literature, Weimar film, History of the German Language, current events in Germany, or the Holocaust. May be repeated for a maximum of 6 credits toward graduation.

**GER 4200**
**Advanced Business German**
**3**
* Prerequisite(s): (GER 3200 or equivalent knowledge) and University Advanced Standing

For those planning to pursue the Bachelor of Science with an emphasis in International Business or related field. Traces in depth German business terminology, documentation, case studies and transactions. Reviews and builds upon the business terminology learned in German 3200. Prepares students to take the examination for the International Certificate of Business German (Pruefung Wirtschaftssdeutsch). Explores how students can effectively do business with German companies within the framework of German culture. Includes current materials dealing with today's issues. Taught entirely in German.

**GER 4410**
**History of the German Language**
**3**
* Prerequisite(s): GER 3050 and University Advanced Standing

Explores the history of the German language from its Indo-European roots to its present form today. Investigates the differences between the major families of Germanic languages and looks at examples of these languages in the literary record, with a focus on the direct predecessors of modern German, especially Old High German, Middle High German, and Early New High German. Introduces historical linguistics to understand the processes of change in terms of morphology, phonology, and syntax, and basic phonetics.

# Geographic Information Systems (GIS)

**GIS 1600**
**Principles of Geographical Information Science**
**3**

Introduces strategies for integrating GIS to support instruction and learning on any topic of spatial data. Discusses concepts of basic GIS activities that enhance student learning and critical thinking. Teaches skills to visualize global, regional and local data and establish connections to those disciplines. Explains design standards and processes for investigating a problem and preparing a GIS map. Introduces ArcGIS Online to increase GIS applicability to the workplace.

**GIS 2640**
**Fundamentals of Geographic Information Systems**
**3**

Introduces the concepts and components of a Geographic Information System (GIS). Includes the essential skills of operating a functional GIS through the use of ArcGIS 10.x software. Explains the operational processes of spatial data acquisition, editing, file geodatabase design, spatial query and display, spatial analysis, map layouts and various visualizations, preliminary application development, and project applications. Describes various GIS data sources. Lab access fee of $45 for computers applies.

**GIS 3600 (Cross-listed with: GEOG 3600)**
**Introduction to Geographic Information Systems**
**4**
* Prerequisite(s): [Completion of a course that meets the PP (Physical Science) or SS (Social Science) general education requirement is recommended] and University Advanced Standing

Introduces the history, theory, and operation of Geographic Information Systems (GIS). Includes an introduction to GIS data sources, database design, data input, spatial analysis, and map production. Offers valuable preparation for careers in geology, geography, geographic information systems, geomatics, planning, surveying, marketing, environmental technology, biology, engineering, and other related fields. Lab access fee of $35 for computers applies. Software fee of $18 applies.

**GIS 3620**
**Advanced Geographic Information Systems**
**3**
* Prerequisite(s): (GIS 3600 or GEOG 3600) and University Advanced Standing

Presents Geospatial data and modeling principles and techniques using raster and vector geoprocessing. Teaches Geovisualization and Geospatial information sources, digital terrain modeling, spatial data analysis, and mapping project implementation. Describes concepts of real property related to land registration and information systems and the value of maps for governance, commerce, and research of social and environmental systems regionally, nationally, and globally. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**GIS 3630**
**Geographic Information Systems Application Development**
**3**
* Prerequisite(s): GIS 3600 or GEOG 3600, GIS 3620 or GEOG 3650, and University Advanced Standing

Develops customization skills for geospatial data, modeling, and automation. Introduces and defines basic Python concepts and scripting environments for the most common GIS software. Delineates common scripting errors and applies Python syntax rules when writing scripts. Lab access fee of $45 applies.

**GIS 3640**
**Thematic Mapping Environmental Impacts**
**3**
* Prerequisite(s): GIS 2640 and University Advanced Standing

Analyzes ways to geographically visualize the impact of natural disasters, energy processes, human impacts, and other impacts on the environment. Reviews the regional and global interrelationships of land, water, and atmosphere to the environment. Involves producing a thematic global and regional mapping project(s) considering the environmental impacts or potential impacts as presented in this course. Lab access fee of $45 for computers applies.

**GIS 3650**
**Thematic Mapping Culture and Societies**
**3**
* Prerequisite(s): GIS 2640 and University Advanced Standing

Focuses on thematic maps of human activity covering the major cultural regions of the world considering cultural, political, and economic environments. Presents various ways to cartographically depict sociological data such as; population, religion, language, migration, and industries, etc.. Involves producing a thematic global and regional mapping project(s) as presented in this course. Lab access fee of $45 for computers applies.

# Greek (GRK)

**GRK 1010** **LH**
**Beginning Ancient Greek I**
**4**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Studies Ancient Greek language at the introductory level, focusing primarily on Attic Greek. Centers on grammar and textbook exercises with some analysis of literary and/or philosophical selections in Ancient Greek. Relates particularly to students interested in studying Ancient Greek culture and thought.

**GRK 1020** **LH**
**Beginning Ancient Greek II**
**4**
* Prerequisite(s): GRK 1010

Continues study of the Ancient Greek language at the introductory level, focussing primarily on Attic Greek. Centers on grammar and textbook exercises with some analysis of literary and/or philosophical selections in Ancient Greek. Relates particularly to students interested in studying Ancient Greek culture and thought.

**GRK 2010** **LH**
**Intermediate Ancient Greek I**
**4**
* Prerequisite(s): GRK 1020

Studies the Ancient Greek language at the intermediate level, focusing primarily on Attic Greek. Centers on grammar and textbook exercises with some analysis of literary and/or philosophical selections in Ancient Greek. Relates particularly to students interested in studying Ancient Greek culture and thought.

**GRK 2020** **HH**
**Intermediate Ancient Greek II**
**4**
* Prerequisite(s): GRK 2010

Studies Ancient Greek language at the intermediate level, focussing primarily on Attic Greek. Centers on grammar and textbook exercises with some analysis of literary and/or philosophical selections in Ancient Greek. Relates particularly to students interested in studying Ancient Greek culture and thought.

**GRK 3010**
**Readings in Ancient Greek**
**3**
* Prerequisite(s): GRK 2020 and University Advanced Standing

Instructs students in the translation of selected Ancient Greek poetry and prose.

# History (HIST)

**HIST 1500** **SS**
**World History to 1500**
**3**

Serves as an introduction to pre-modern world civilization. Surveys cultural, economic, intellectual, and social history up to the year 1500, with special attention to the rise of world religions.

**HIST 151G** **SS**
**World History from 1500 to the Present**
**3**

Serves as an introduction to modern world civilization. Surveys cultural, economic, intellectual and social developments from 1500 to the present. Emphasizes global, comparative, and intercultural issues.

**HIST 1700** **AS**
**American Civilization**
**3**

Stresses movements and developing institutions that are important for an appreciation of American History from the Pre-Colombian period to the present. Discussions include analysis of developing political, economic, and social institutions and their interrelationships with, and impact upon, the geographical features of the land. Includes book reports, oral response, research papers, media presentations and applications to current events.

**HIST 170H** **AS**
**American Civilization**
**3**

Stresses movements and developing institutions that are important for an appreciation of American History from the Pre-Colombian period to the present. Discussions include analysis of developing political, economic and social institutions and their interrelationships with and impact upon the geographical features of the land. The honors section extends the course's historical inquiry with additional written and reading requirements which will allow the student a fuller participation in historical debate and the process of "doing" history.

**HIST 1740** **AS**
**US Economic History**
**3**

Studies economic development in America, with emphasis on resources, commerce, agriculture, capital, manufacturing, government, and labor organizations.

**HIST 204G**
**Colonial Latin America**
**3**

Introduces the history of Latin America from the earliest New World inhabitants through the nineteenth-century Latin American Wars for Independence. Analyzes the social, political, economic, and cultural developments of Latin America. Explores the complex dynamics that shaped pre-Columbian and colonial societies which culminated in early nineteenth-century independence movements.

**HIST 205G**
**Modern Latin America**
**3**

Introduces the history of Latin America from 1820 to the present. Focuses on the key issues and themes of the last 190 years including social revolution, dependency and foreign intervention, gender and race. Includes case studies from specific countries.

**HIST 2700** **AS**
**US History to 1877**
**3**

Surveys the origins of the United States from the Pre-Columbian era and early colonization through Reconstruction. Focuses on encounters among indigenous, African and European peoples; gender, race, and Atlantic slavery; the causes and consequences of the American Revolution; the westward expansion of the United States; and the sectional crisis that lead to the American Civil War.

**HIST 270H** **AS**
**US History to 1877**
**3**

Examines the first half of the American experience, beginning with the Paleo-Indian cultures through Post-Civil War Reconstruction. Surveys social, political, cultural, and diplomatic developments throughout this period.

**HIST 2710** **AS**
**US History since 1877**
**3**

Surveys the making of a modern United States, beginning with the promises and failures of Reconstruction and concluding with contemporary American issues. Emphasizes diverse American experiences at the intersections of race, gender, and class while tracing social, cultural, political and diplomatic developments during this period.

**HIST 271H** **AS**
**US History since 1877**
**3**

Examines the second half of the American experience, beginning with the collapse of Post-Civil War Reconstruction and concluding with contemporary American issues. Surveys social, political, cultural, and diplomatic developments during this period. The honors section extends the course's historical inquiry with in-depth discussions and additional written and reading requirements, all of which allow the student a fuller participation in historical debates and the process of "doing" history.

**HIST 290H**
**Independent Study**
**1**
* Prerequisite(s): Honors Director Approval

Provides independent study for Honors students unable to secure a desired class within regular semester curriculum offering. Involves designing and completing readings and other projects at the lower-division level in cooperation with the Honors director. Maximum of 3 credits may be applied toward Honors graduation.

**HIST 290R**
**Independent Study**
**1 to 4**
* Prerequisite(s): Dean and/or Department Chair approval

Provides independent study for students unable to secure a desired class within regular semester curriculum offering. With approval of dean and/or department chair, student and instructor design and complete readings and other projects at the lower-division level. Maximum of 6 credits may be applied toward graduation.

**HIST 3010**
**The Historians Craft WE**
**3**
* Prerequisite(s): HIST 1500, HIST 151G, HIST 2700, and HIST 2710 and University Advanced Standing

Develops methodological skills to prepare students for Junior/Senior-level coursework. Teaches historical research skills, including information and library literacy skills. Refines analytical writing skills using primary and secondary sources. Introduces debates in the field of history.

**HIST 3020**
**Public and Digital History**
**3**
* Prerequisite(s): University Advanced Standing

Introduces the disciplines of public history and digital history, including methodology and literature. Exposes students to the major fields in public history, and identifies career opportunities. Covers the tools of public history, such as archives, special collections, oral histories, photographs, documents, journals, museum exhibitions. Emphasizes new digital techniques for collection, preservation, and presentation of primary sources. Teaches skills such as analyzing, interpreting, and communicating historical data for the public and by digital means. Discusses the professional and ethical dimensions of public history.

**HIST 3030**
**Introduction to African History**
**3**
* Prerequisite(s): University Advanced Standing

Surveys African history since the sixteenth century: traditional societies, the slave trade, European colonialism, struggles for independence, underdevelopment, and challenges of globalization.

**HIST 3110**
**Greek History**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Explores historical and geographical context of Greece from 1600 B.C.E. to the Roman conquest in 30 B.C.E. spanning Minoan, Mycenaean, Hellenic, and Hellenistic ages. Examines the development of social/cultural, political, and economic institutions emphasizing their influence on Western civilization and our own cultural context.

**HIST 3130**
**Roman History**
**3**
* Prerequisite(s): University Advanced Standing

Examines the growth of Rome from a small city-state to a continental empire and its collapse covering from 1000 BCE to 700 CE. Discusses political and cultural change in the city of Rome and the way Rome and its neighbors interacted and affected each other. Analyzes the legacy of Rome in the modern day including art, political theory, and religion.

**HIST 3140**
**Roman Empire**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing.

Covers Roman history from the first century B.C. to the fourth century A.D. Surveys social, cultural, political, economic and military aspects of the Roman Empire. Examines the influence of Imperial Rome on Western Civilization. Part of a two semester sequence on Roman history. Each semester may be taken independently.

**HIST 3150**
**Medieval Europe**
**3**
* Prerequisite(s): University Advanced Standing

Introduces the history of Europe from the collapse of Greco-Roman civilization to the fifteenth century. Covers the rise of Western Christendom, the challenge of Islam, the twelfth-century renaissance, the flowering of medieval art, education and literature, feudalism and rural economies, the commercial revolution, human and ecological calamities. Considers the medieval foundations of modern European culture, politics, and society.

**HIST 3160**
**Renaissance and Reformation Europe 1350 to 1600**
**3**
* Prerequisite(s): University Advanced Standing

Explores European history from the Italian Renaissance to the Reformation era, including the Age of Exploration. Focuses on cultural, religious, and social interactions and changes that established the modern worldview.

**HIST 3170**
**Absolutism Enlightenment and Revolution Europe from 1600 to 1815**
**3**
* Prerequisite(s): University Advanced Standing

Explores the major political, social, and intellectual developments in European history from the Age of Absolutism to the French Revolution.

**HIST 3180**
**Nineteenth Century Europe**
**3**
* Prerequisite(s): University Advanced Standing

Analyzes political, economic, and social transformations in Europe in the nineteenth century. Traces the development of nationalism and the rise of various political and social movements. Introduces cultural and intellectual currents that shaped the history of Europe. Identifies the significance of European colonialism in the era. Discusses legacies of nineteenth-century European ideologies.

**HIST 3190**
**Twentieth Century Europe**
**3**
* Prerequisite(s): University Advanced Standing

Surveys major forces, events and experiences that have shaped Europe and defined its place in the contemporary world. Examines industrialization, nationalism, colonial empires, world wars, Cold War polarization, the European Union, and migration. Explores social movements and major cultural and intellectual trends.

**HIST 320G**
**Women in American History to 1870 WE**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Surveys women's experiences in America from the pre-Columbian era to 1870. Explores how race, ethnicity, sexuality, and class shaped women's lives. Emphasizes discipline-specific writing.

**HIST 320R**
**Issues and Topics in Global History**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Surveys specific global issues or topics at the Junior/3000-level. May be repeated for a maximum of 6 credits toward graduation.

**HIST 321G**
**Women in American History since 1870**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Surveys women's experiences in American culture from 1870 to the present. Emphasizes ways in which race, ethnicity, and class shaped women's experiences.

**HIST 322G**
**History of the American West to 1850 WE**
**3**
* Prerequisite(s): University Advanced Standing

Surveys the development of the American West from the pre-Columbian era to 1850 and places the West in both a national and North American context. Explores topics such as pre-contact cultures, Indian-European relations, exploration, colonization, conquest, territorial expansion, resource exploitation, as well as an examination of economic, political, social, and cultural developments that created a distinct regional identity. Emphasizes discipline-specific writing.

**HIST 323G**
**History of the American West since 1850 WE**
**3**
* Prerequisite(s): University Advanced Standing

Surveys the development of the American West from 1850 to the present. Explores key issues such as cultural encounters in the West, economic development, urban growth, rural life, the politics of race, ethnicity, class and gender, environmental change, the role of the federal government, and the cultural symbolism of the American West. Emphasizes discipline-specific writing.

**HIST 3260**
**History of Utah**
**3**
* Prerequisite(s): University Advanced Standing

Surveys the history of Utah and its peoples from prehistoric times to the present, covering cultural, social, economic, political, and religious topics. Places Utah history within regional and national contexts. Can be used for teacher education and re-certification requirements.

**HIST 330G**
**Mediterranean World 1500-1800**
**3**
* Prerequisite(s): University Advanced Standing

Examines religious, political, and social life of the Mediterranean Basin from 1500 to 1800. Focuses on the shared traditions, rituals, and cultural practices of Christians, Jews, and Muslims of the Mediterranean Basin. Analyzes the legacy and influence of this period of Mediterranean History on today's world.

**HIST 3320**
**Modern Britain**
**3**
* Prerequisite(s): University Advanced Standing

Surveys major themes in British history from the Glorious Revolution to the end of the 20th century.

**HIST 3340**
**The French Revolution and Napoleon**
**3**
* Prerequisite(s): University Advanced Standing

Examines important individuals, events, and ideas of the French Revolution and Napoleonic era. Explores the causes of the French Revolution; the political, social, and cultural changes it brought about; Napoleon’s rise to power and rule; and legacies of the era. Analyzes the development of nationalism and notions of rights. Investigates revolutionary debates over slavery and citizenship. Focuses on global dimensions of the French Revolution and Napoleonic era.

**HIST 3440**
**The History of World War I**
**3**
* Prerequisite(s): University Advanced Standing

Explores the numerous factors leading to, sustaining, and concluding World War I, including military developments, diplomacy, and political and economic rivalries. Discusses various battles and campaigns of the conflict, the experiences of soldiers and civilians, the crumbling of old governments, colonial aspects of the conflict, the cultural significance of the war, and the beginnings of modern genocide.

**HIST 345G**
**The History of World War II**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Deals with background and cases, course, conduct, and consequences of World War II in Europe and Asia, with special attention to strategy, tactics, diplomacy, and politics.

**HIST 3540**
**History of South Africa**
**3**
* Prerequisite(s): University Advanced Standing

Explores the history of South Africa from first peoples to the present, with special attention to twentieth-century developments. Surveys Khoisan and Bantu societies, Dutch settlement at the Cape of Good Hope, British colonization, the Zulu kingdom, the Great Trek, British-Boer conflict, the mining economy, Union, segregation and Apartheid, and the struggle for non-racial democracy.

**HIST 3650**
**Imperial Russia--Autocracy to Opposition 1696-1917**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Presents the evolution of Russian economics, politics, and society between c. 1696 and 1917. Focuses on such movements and events as the Enlightenment in Russia, constitutionalism, bureaucratization, industrialization, and revolutions.

**HIST 366G**
**The History of Modern Russia--1864 to Present**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Surveys the history of Imperial Russia, the Soviet Union, and Russia from 1864 to the present, with special attention to Russia's politics, economics, and society.

**HIST 371R**
**Issues and Topics in American History**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Surveys specific American history issues or topics at the Junior/3000-level. May be repeated for a maximum of 6 credits toward graduation.

**HIST 3730**
**American Origins to 1790**
**3**
* Prerequisite(s): University Advanced Standing

Surveys the origins of the United States from the Pre-Columbian era and early colonization through the Early Republic. Focuses on adaptation and transformations of Native, African and European peoples; the causes and consequences of the American Revolution; the US Constitution, and the search for a national identity.

**HIST 3731**
**US History-Early Republic through the Progressive Era**
**3**
* Prerequisite(s): University Advanced Standing

Surveys United States history thematically and focuses upon social, cultural, economic, and political movements. Includes topics such as the New Republic, slavery, westward expansion, sectionalism, the Civil War and its aftermath, immigration, reform, and the development of modern culture.

**HIST 3732**
**U.S. History-Progressive Era to the 21st Century**
**3**
* Prerequisite(s): University Advanced Standing

Surveys social, cultural, political, and economic movements and turning points in the U.S. from Progressivism through the 21st century. Builds an inclusive, multicultural narrative for various topics including reform and radical movements, wartime crucibles, the U.S. and the world, inclusion and exclusion in U.S. history, and the construction of a present-day U.S.

**HIST 3740**
**American Revolution**
**3**
* Prerequisite(s): University Advanced Standing

Examines origins, progress, and consequences of the American Revolution. Focuses on social effects of the War for Independence, creation of republican governments, and the U.S. Constitution. Addresses the search for stability at home and security abroad, and the development of a national identity.

**HIST 3745**
**Civil War and Reconstruction**
**3**
* Prerequisite(s): University Advanced Standing

Describes forces at work in the antebellum period that led to sectionalism and eventually to civil war. Examines military, political, social, economic, and racial issues before, during, and after the war. Analyzes the Reconstruction Era and its historiography.

**HIST 3800 (Cross-listed with: GEOG 3800)**
**Environmental History of the United States**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Examines human modification of the American landscape. Surveys the physical geography of the United States, landscape change during Native American to European transition, and causes of agricultural and industrial pollution. Topics include land ethics, processes of environmental degradation, technological remedies, history of federal laws and protection agencies. May include field experiences.

**HIST 382G**
**Indians of Eastern North America**
**3**
* Prerequisite(s): Sophomore Standing and University Advanced Standing

Surveys the histories of native communities of Eastern North America from the pre-Columbian period to the present. Includes the diversity of cultures in this region; encounters in the colonial period with France, England, and Spain, and the geopolitics of Native-White relations; the role of native communities in the American Revolution; resistance movements and leaders, such as Tecumseh; Indian Removal; the role of native communities in the Civil War; land loss in the 19th and 20th centuries; cultural survival; and modern economic development.

**HIST 384G**
**Indians of the Southwest**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; and University Advanced Standing

Surveys the cultural geography and social institutions of cultures of Indians of the American Southwest and their antecedents. Examines the similarities and differences among Southwestern Indian cultures and between Indian cultures and other social groups in the United States. Focuses on historic and contemporary relations among Indian cultures and between Indian cultures and the United States federal and state governments.

**HIST 4130**
**Anti-Semitism and the Holocaust**
**3**
* Prerequisite(s): University Advanced Standing

Analyzes the rise of modern anti-semitism in the late 19th and early 20th century and the factors that contributed to the mass destruction of Jews. Explores how the same racial ideas that furthered anti-semitism were used against Gypsies, Slavs, and other minority groups.

**HIST 4140**
**Genocide in the Twentieth Century**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Explores and analyzes the major genocides of the twentieth century: the Armenian Massacre, the Holocaust, the Killing Fields of Cambodia, the Balkan genocides, and the Rwandan genocide. Promotes a greater understanding of why and how genocides occurred in the twentieth century. Teaches and improves critical thinking, writing, and comprehension skills and develops additional skills in using comparative history, historiography, and primary and secondary sources.

**HIST 4180**
**The Italian Renaissance WE**
**3**
* Prerequisite(s): University Advanced Standing

Examines the origins, development, and impact of Renaissance culture in Italy from 1300 to 1600. Focuses on the social and urban background that gave rise to such Renaissance achievements as humanism, modern individualism, secularism, and artistic innovation. Analyzes the legacy and influence of Italian Renaissance culture on the modern world.

**HIST 420R**
**Issues and Topics in Global History**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; and University Advanced Standing

Surveys a specific topic in Global History. Topic varies each semester. A maximum of 6 credits may be applied toward graduation.

**HIST 4250**
**Teaching History in the Secondary Curriculum**
**3**
* Prerequisite(s): Admission to Professional Education Program, (EDSC 455G or instructor approval), and University Advanced Standing

For students majoring in secondary education. Examines teaching methodology as related to teaching history and learning teaching strategies to prepare students for secondary education certification. Utilizes various group projects, classroom exercises, and an actual teaching project at the end of the semester. Evaluated by participation, teacher evaluation, written evaluation, exams, personal journal, and a final teaching project.

**HIST 430G**
**Violence and Social Conflict in Latin America**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Examines impact of violence and social conflict in Latin American society. Covers from Ancient Native American cultures to the present.

**HIST 4320**
**History of Scientific Thought**
**3**
* Prerequisite(s): University Advanced Standing

Explores development of Western scientific context from 6th century B.C. Greece to modern times. Emphasizes how our understanding of nature is influenced by a scientific approach. Examines technological impact of science on our lives.

**HIST 461G**
**Peoples of the Atlantic World 1450-1800**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Offers an introduction to the main themes and issues of the early Atlantic world and the field of Atlantic History, from the angle of intercultural relations and social/ political productions. Examines in depth the encounters, exchanges, and clashes between Africans, Europeans, and Native Americans through the life experiences of the peoples who lived "between cultures," such as interpreters, mariners, missionaries, creoles, etc. Encourages reflection about the modern legacies of the colonial period and issues of multiculturalism and post-colonialism.

**HIST 463G**
**Missions and Conversion in Early North America**
**3**
* Prerequisite(s): (HIST 2700 or HIST 3730) and (ENGL 2010 with a grade of C+ or higher, or instructor approval) and University Advanced Standing

Examines in a comparative perspective various European religious missionary enterprises in North America and their reception among Indians from the seventeenth century through the antebellum period. Surveys the origins, doctrines, methods, and changes over time of the Jesuit, Franciscan, Moravian, Puritan, and other Protestant missions, emphasizing the international and multicultural aspects of the missionary landscape in early America. Addresses the ways in which various Native American groups and individuals responded to these European missionary efforts.

**HIST 466G**
**Legacies and Reckonings in the American West WE**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Surveys key theories and issues in the American West, the diverse experiences of peoples and cultures in the West, the often contested interactions of these cultures, the cultural symbolism of the American West, human impact upon the western environment, and the role of myth in the formulation of regional identity. Emphasizes discipline-specific writing.

**HIST 471R**
**Special Issues and Topics in American History**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

Surveys a specific topic in American History. Topic varies each semester. May be repeated once for credit as long as course topic is substantially different than previous class.

**HIST 482R**
**Public History Internship**
**2 to 9**
* Prerequisite(s): University Advanced Standing

Provides opportunities for internship experience in public history organizations, including, but not limited to, museums, archives, manuscript collections, federal, state, local, and private historical sites, and governmental and non-governmental history organizations. May be repeated for a maximum of 9 credits toward graduation. May be graded credit/no credit.

**HIST 491R**
**Directed Readings**
**2 to 4**
* Prerequisite(s): HIST 3010 and instructor approval; University Advanced Standing

Allows students to work intensively with faculty to deeply explore specific topics that are not normally offered in the two-year cycle of the History Program. May be repeated for a maximum of 4 credits toward graduation.

**HIST 4980**
**Senior Research Thesis Research Component WE**
**3**
* Prerequisite(s): HIST 3010 or instructor approval; University Advanced Standing

First half of the capstone experience for Majors. Requires students to work with a faculty member in a directed and extensive research and writing project. Topics vary according to thesis director. Honors students should consult Honors Program for thesis options.

**HIST 4990**
**Senior Research Thesis Writing Component**
**3**
* Prerequisite(s): HIST 4980 and Senior Standing in History and University Advanced Standing

Second half of the required capstone experience for History Majors. Student continues to work on and complete the extensive research, analysis, and writing project developed in Hist 4980 under faculty direction. Honors students should consult Honors Program for thesis options.

# Community Health (HLTH)

**HLTH 1100** **TE**
**Personal Health and Wellness**
**2**

Examines the challenges to individual and community health, and encourages students to become actively engaged in preserving, protecting, and promoting health at all levels. Develops a greater appreciation for bodies and understanding of requirements to maintain or achieve good physical, mental, emotional, social, and spiritual health. Includes lecture, discussion groups, guest lecturers, media, and role-playing.

**HLTH 1200**
**First Aid**
**3**

Provides first aid and emergency care training as well as instruction with Automated External Defibrillators. Structured to meet National Safety Council First Aid requirements with successful completers being certified in First Aid and CPR. Includes lectures, hands-on experience with mannequins, audiovisuals, discussions, and field trips. Course lab fee of $15 applies

**HLTH 1300**
**Medical Terminology I**
**2**

Helps students read and understand the language of medical terminology. Stresses terminology usage and accuracy. Studies elements, abbreviations, spelling, pronunciation, and logic of medical terminology. Includes lectures and audiovisual presentations. Canvas Course Mats $82/ Pearson applies.

**HLTH 2000**
**Body Image Self-Esteem and Weight Management**
**3**

Provides students with the information and tools necessary to understand and manage eating habits, body size, and self-esteem concerns in a healthy way.

**HLTH 2200**
**Introduction to Health Professions**
**2**

For students planning to major in a health related field. Examines the historical and continuing evolution of health care. Explores work description, environment, employment opportunities, education, expectations, legal requirements, and expected earnings of each covered health profession. Focuses on, but not limited to medicine, dentistry, nursing, community health, optometry, respiratory care, dental hygiene, physical therapy, and social work.

**HLTH 2400**
**Concepts of Stress Management**
**3**

For those interested in developing skills and techniques necessary to work with clients in stress reduction programs. Includes identifying, managing, and eliminating stress in individuals, families, and communities. Examines effects of stress on the immune, endocrine, and nervous systems and the relationship to disease. Teaches stress reduction application and methods in wellness and health care settings.

**HLTH 2510**
**Media and Computer Applications in Health**
**3**

Introduces students to computer-based methods for accessing, analyzing, and communicating health-related information. Explores the relationship between mass media and health promotion and the key elements in the development of successful health communication campaigns.

**HLTH 2600** **SS**
**Drugs Behavior and Society**
**3**

For students interested in drug abuse prevention. Studies substance mis-use and abuse. Discusses addictive behaviors, dependence, and treatment modalities. Examines common substances of abuse and dependence and effects upon individuals and society. Investigates the use of psychotherapeutic drugs in the treatment of mental illness. Promotes awareness of personal and social decisions concerning drugs, behaviors, and habits.

**HLTH 2800 (Cross-listed with: PSY 2800)** **SS**
**Human Sexuality**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Interdisciplinary course in human sexuality, exploring topics in biology, health, psychology, and sociology. Introduces basic concepts of human sexuality, including anatomy, reproduction, and sexual response across the life-cycle. Studies gender roles, sexual orientation, dysfunction, and sexually transmitted disease. Examines sexual behavior from the perspective of ethics, religion, the law, and education. Students assess their sexual attitudes and should be able to make responsible sexuality decisions.

**HLTH 2900**
**Health Education for Elementary Teachers**
**2**

For Elementary Education majors. Emphasizes the role of the teacher as a health educator and team member in providing a healthy school environment. Studies the basic Utah health core curriculum. Develops learning activities applicable to the health needs of the elementary school student. Canvas Course Mats of $66/ McGraw applies.

**HLTH 3000** **SS**
**Health Concepts of Death and Dying**
**3**
* Prerequisite(s): University Advanced Standing

Examines information and data pertaining to death in the United States. Discusses historical and cultural perspectives of death, causes of death, definitions of death, stages of dying, bereavement, the will to live, legal and ethical issues, euthanasia, and suicide. Focuses on attitudes and values of Americans concerning death. Studies ways to work with and relate to dying individuals and their families. Will also be offered summer of odd years.

**HLTH 3160**
**Healthcare Law**
**3**
* Prerequisite(s): University Advanced Standing

Explores impact of laws, regulations, social policies on management and delivery of healthcare. Includes provider liability, managed healthcare contracts, HIV-related concerns, assisted suicide, and other issues.

**HLTH 3200**
**Principles of Community Health**
**3**
* Prerequisite(s): University Advanced Standing

For students in health and behavioral sciences who wish to work in community health settings. Presents the role and function of various community health services and agencies and how they interface. Examines health care models and agencies, health care reform, health objectives for the nation, and health planning and promotion. Explores life style risk reduction, environmental issues, ethical health issues, and other appropriate topics.

**HLTH 3220**
**Foundations of Health Education**
**3**
* Prerequisite(s): University Advanced Standing and matriculation into BS Community Health or BS School Health Education

For students interested in a community health career. Examines the history and role of health education in today's society. Covers the philosophical principles and models utilized in the delivery of health education. Analyzes types of health information available in health journals and on the internet. Introduces the major health associations and describes the competencies necessary for certification as a Health Education Specialist.

**HLTH 3230**
**Professional Development for Community Health**
**3**
* Prerequisite(s): Matriculation into BS Community Health or BS School Health Education and University Advanced Standing
* Prerequisite(s) or Corequisite(s): HLTH 3200

Provides students with preparation for a Community Health internship, first job, or graduate school.

**HLTH 3240**
**Womens Health Issues**
**3**
* Prerequisite(s):HLTH 1100 or PES 1097 and University Advanced Standing

For students in various health care professions. Reviews important dimensions of a woman's health and examines the contributing epidemiological, historical, psychosocial, cultural/ethnic, legal, political, and economic influences. Focuses on women throughout their lifespan and incorporates the many factors that affect health and well-being. Stresses prevention, health promotion, research, clinical intervention, and public policy that form the interlocking basis when considering the different diseases, disorders, and conditions that afflict women. Provides a practical approach to examining and understanding health issues that are unique to women--all ages, races, socioeconomic strata, and cultures. Will also be offered summers of even years.

**HLTH 3260**
**Theory-Based Approaches to Modifying Health Behavior**
**3**
* Prerequisite(s): HLTH 3200, University Advanced Standing, and matriculation into BS Community Health, BS School Health Education, BS Nursing, or BS Dental Hygiene

For students interested in community and school health programs. Investigates holistic health and behavioral changes that can positively influence total human well-being. Discusses factors that impact personal health behavior. Focuses on behavioral change models and theories including planning, implementation and evaluation. Examines health counseling approaches, group process, and strategies related to specific health problems.

**HLTH 3300**
**Health Promotion for Older Adults**
**3**
* Prerequisite(s): University Advanced Standing

For students in health and behavioral sciences and other related fields who wish to work in gerontological settings. Examines health issues and problems of older adults. Addresses topics affecting older adults including: the aging process, chronic and infectious diseases, health care resources, and health promotion. Covers medication issues, long-term care, death and dying, and other related topics.

**HLTH 3400** **BB**
**Human Diseases**
**3**
* Prerequisite(s): ZOOL 1090 and University Advanced Standing

For students interested in a Community Health option within the Integrated Studies Degree. Also for students interested or working in health care fields such as nursing, dental hygiene, etc. Introduces the study of human disease including general principles of disease and major diseases of body systems and organs. Applies genetic, behavioral and environmental issues to the study of human diseases.

**HLTH 3450**
**Public Health and the Environment**
**3**
* Prerequisite(s): HLTH 3200, University Advanced Standing

Examines the relationship of people to their environment as well as public health environmental issues. Develops an understanding of the causes of those issues, and possible future approaches to control major environmental public health problems. Includes environmental epidemiology, public health policy and regulation, zoonotic and vector-borne diseases, toxic materials, radiation, water quality, air quality, food safety, solid and liquid wastes, occupational health, injuries, and emerging global environmental public health problems.

**HLTH 350G**
**International Health**
**3**
* Prerequisite(s): University Advanced Standing

Provides knowledge regarding the various health issues that affect people around the world. Focuses on the role of culture, ethnicity, country of origin, politics, and gender on health. Examines the importance of cultural sensitivity and competence when attempting to eradicate public health concerns. Will also be offered summer of even years.

**HLTH 3600**
**Social Marketing**
**3**
* Prerequisite(s): University Advanced Standing

Identifies how to promote social changes to the consumer. Teaches packaging, positioning and framing of programs to appeal to more salient, powerful, and influential core values: freedom, independence, autonomy, control, fairness, democracy, and free enterprise. Discusses marketing principles, planning, implementing, and evaluation of public health programs, strategic planning, social change theory, and case studies.

**HLTH 3700**
**Grant Writing WE**
**3**
* Prerequisite(s): University Advanced Standing and matriculation into BS Public Health or BS School Health Education

Provides students with the needed knowledge and skills for public health grant writing. Teaches the major elements of grant writing including the identification of grant sources, writing grant proposals, and preparation of budgets and timelines.

**HLTH 3750**
**Biostatistics for Public Health**
**3**
* Prerequisite(s): Matriculation into Community Health BS, School Health BS, or Nursing BS program; University Advanced Standing; and completion of MATH 1050 or 1055 or STAT 1040 or 1045

Introduces use of statistics for research purposes in the fields of public and community health. Teaches descriptive and inferential statistics. Includes central tendency, variability, correlation and regression, probability, and various inferential techniques such as t-test for independent and dependent samples, one-way and two-way analysis of variance, post-hoc tests, and non-parametric statistical tests.

**HLTH 3800**
**Epidemiology**
**3**
* Prerequisite(s): HLTH 3400, University Advanced Standing, and matriculation into BS Community Health or BS School Health Education

Introduces epidemiologic principles and methods. Examines the historical and theoretical bases of epidemiology; statistical methods; distribution of disease over person, place, and time; research methods utilized in epidemiology; and the application of epidemiology to the prevention of disease and the promotion of health.

**HLTH 4100**
**Health Education Curriculum for Secondary Teachers**
**3**
* Prerequisite(s): University Advanced Standing and matriculation into the BS School Health program

For secondary education majors. Emphasizes the role of the teacher as a health educator and team member in providing a healthy school environment. Examines comprehensive school health education and studies the basic Utah health core curriculum for secondary education. Develops learning activities applicable to the health needs of secondary education students.

**HLTH 4140**
**Community Health Assessment and Program Development WE**
**3**
* Prerequisite(s): HLTH 3200, HLTH 3220, University Advanced Standing, and matriculation into the BS Public Health

Intended for Public Health majors. Covers building a rationale, gaining support of stakeholders, selecting an appropriate model or theory, conducting a needs assessment, developing goals and objectives, and determining appropriate public health education strategies. Helps students develop the skills to successfully begin the program planning process.

**HLTH 4160**
**Program Implementation and Evaluation WE**
**3**
* Prerequisite(s): HLTH 4140 and University Advanced Standing

Intended for Public Health majors. Builds upon HLTH 4140 and develops the knowledge, skills, and abilities to conduct health program implementation and evaluation. Includes a systematic approach to the implementation and evaluation of health education programs.

**HLTH 4200**
**Health Education Teaching Methods WE**
**3**
* Prerequisite(s): HLTH 4100, University Advanced Standing and matriculation into BS School Health

For secondary education school health majors. Examines teaching methods, materials and techniques. Studies secondary education health curriculum, program planning, development, implementation, and evaluation. Helps students develop lesson plans and present them in secondary education settings.

**HLTH 4250 (Cross-listed with: POLS 4250)**
**Public Health Organization and Policy WE**
**3**
* Prerequisite(s): HLTH 3200, University Advanced Standing, and matriculation into BS Public Health or BS School Health Education; or department approval

Focuses on U.S. health policy and policy analysis. Describes the basic machinery of policymaking and legal processes that underpin the individual health care and public health systems. Analyzes the fundamental problems and contemporary issues in health policy and teaches students how to properly develop and analyze health policy.

**HLTH 4300**
**Community Health Ethics**
**3**
* Prerequisite(s): University Advanced Standing & matriculation into BS Community Health

For students majoring in Community Health or Integrated Studies with a Community Health emphasis. Also for students interested or working in health-care fields such as nursing, dental hygiene, etc. Explores and interprets ethical codes of conduct as set forth by health professions and/or organizations. Emphasis will be given to the Code of Ethics for the Health Care profession. Examines various health care issues such as: health care allocation, health care costs, death and dying issues, patient rights, informed consent, confidentiality etc. Investigates conflicts arising from existing and evolving codes of conduct using care studies as an arena for discussion.

**HLTH 440G**
**Health and Diversity**
**3**
* Prerequisite(s): University Advanced Standing

Provides students with a specific set of skills and knowledge in cultural competence. Focuses on understanding the public health system, identifying one's own cultural biases, understanding biases regarding one's own cultural identity, and developing culturally competent approaches and tools. Enables students to be more effective public health professionals whether they work with diverse populations within the United States or in international settings. Is offered each Fall and Spring Semester and Summer of odd years.

**HLTH 4500**
**Healthcare Administration**
**3**
* Prerequisite(s): University Advanced Standing and matriculation into BS Community Health

Gives individuals a working and practical look at numerous aspects of healthcare administration and leadership. Includes definitions of leadership, qualities of an effective leader, sources of power, time management, the planning and decision making process, three core functions of public health, social marketing strategies, as well as other timely topics related to healthcare practice and administration.

**HLTH 4560**
**Introduction to Healthcare Systems**
**3**
* Prerequisite(s): University Advanced Standing and matriculation into BS Healthcare Administration

Examines the history, structure, operation, function, major components, and direction of healthcare systems. Highlights national systems and explores how systems across the U.S. are addressing healthcare issues. Assesses operational components such as physician issues, billing, and common terminology.

**HLTH 4600**
**Research Methods for Community Health WE**
**3**
* Prerequisite(s): Matriculation into BS Community Health or BS School Health Education; or instructor approval; University Advanced Standing

Introduces research techniques, methodology, and designs. Examines the planning, organizing, and conducting of research studies for solving problems unique to community health. Includes literature review and research article critiques.

**HLTH 4640**
**Population Health and Strategic Management**
**3**
* Prerequisite(s): University Advanced Standing & matriculation into BS Healthcare Administration

Examines the determinates of population health, outcomes on a community, payment models, and strategies to improve management of healthcare resources. Highlights the importance of quality improvement, health insurance (commercial and government), concepts of risk in insurance, utilization management, patient engagement, accountable care organizations, and social determinants of health. Uses basic data analysis to apply course concepts.

**HLTH 4720**
**CHES Preparation**
**3**
* Prerequisite(s): Department approval; University Advanced Standing; Senior standing

Provides an overview of the health education areas of responsibilities in preparation for the Certified Health Education Specialist national exam. For students in their last semester at UVU, planning to register and take the CHES exam in October or April.

**HLTH 4780**
**Strategic Planning and Operations Management**
**3**
* Prerequisite(s): University Advanced Standing & matriculation into BS Healthcare Administration

Introduces strategic planning and operations management in relation to current and future topics and trends in healthcare. Examines historical and current quality improvement models and applies them to current industry topics. Discusses the relationship between industry and healthcare.

**HLTH 482R**
**Community Health Internship**
**1 to 8**
* Prerequisite(s): HLTH 3230, University Advanced Standing, and matriculation into BS Community Health

Provides field experience and enhanced knowledge in community health services and education, under the preceptorship of an individual qualified by education and/or experience. May be repeated for a maximum of 6 credits toward graduation. May be graded credit/no credit.

**HLTH 489R**
**Undergraduate Research**
**1 to 3**
* Prerequisite(s): Instructor approval, departmental approval, and University Advanced Standing

Provides students the opportunity to conduct research under the mentorship of a faculty member. Provides an opportunity to put in practice the theoretical knowledge gained in prior major courses. Requires the creation of a significant intellectual or creative product that is characteristic of the community health discipline and worthy of communication to a broader audience. May be repeated for a maximum of 3 credits toward graduation.

**HLTH 490R**
**Special Topics in Public Health**
**1 to 3**
* Prerequisite(s): Department Approval and University Advanced Standing

Explores and examines special topics related to public health issues and problems. Includes public health topics such as AIDS/HIV, West Nile Virus, special drug and sexuality issues, obesity, suicide, teenage pregnancy and terrorism. May be repeated for a maximum of 6 credits toward graduation.

**HLTH 4950**
**Senior Capstone**
**1**
* Prerequisite(s): University Advanced Standing, Senior Standing, Matriculation in BS Community Health
* Prerequisite(s) or Corequisite(s): HLTH 4250

Assesses both content knowledge and skills developed during the course of the Community Health Education program. Provides students an opportunity to reflect on their learning and demonstrate the program outcomes through the development and presentation of a professional electronic portfolio, and the completion of a cumulative post-test. For Community Health Education seniors in their last semester.

**HLTH 6200**
**Issues in Public Health**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Examines public health principles and concepts by focusing on the five core public health knowledge areas and the ten essential public health services. Explores public health infrastructure, surveillance, social determinants of health, policy, and emerging issues. Provides a broad framework for understanding public health's role in community health, prevention, and medicine.

# Hospitality Management (HM)

**HM 1010**
**Introduction to Hospitality Industry**
**3**

Designed for hospitality management majors and as elective credit for other business majors. Provides a basic understanding of the lodging and food service industry by tracing the industry's growth and development. Analyzes management's functions and responsibilities in such areas as administration, organization, communications, accounting, marketing, and human relations. Examines industry opportunities and future trends. Includes lecture, field trips, guest speakers, film, and tapes. Completers should have a knowledge of career opportunities and basic hospitality management principles. Lab access fee of $25 for computers applies.

**HM 1130**
**Hotel Operations I**
**3**

Designed for hospitality management majors and as elective credit for other business majors. Presents a systematic approach to front office procedures by detailing the flow of business through a hotel beginning with the reservation process and ending with check-out settlement. Examines various elements of effective front office management, paying particular attention to planning and evaluating front office operation and to personnel management. Front office procedures and management are placed within the context of the overall operation of a hotel. Includes role play and computer simulations. Completers should be competent to be a beginning front desk clerk. Lab access fee of $25 for computers applies.

**HM 1180**
**Food and Beverage Management**
**3**

Designed for hospitality management majors and as elective credit for other business majors. Studies management principles of menu planning, purchasing, storage, food and beverage production, service, and sanitation. Includes lecture, case studies, guest speakers, field trip and project. Completers should understand the basic structure of a hospitality unit and how management principles relate to a restaurant. Lab access fee of $25 for computers applies.

**HM 2500**
**Statistics for the Hospitality Industry**
**3**
* Prerequisite(s): MAT 1030, MAT 1035, STAT 1040, STAT 1045, MATH 1050, MATH 1055, or MATH 1090, or higher

Provides a step-by-step approach to gathering, analyzing, and using numeric market, operating, and financial data in the hospitality management industry. Hospitality/industry scenarios and hands-on exercises and labs are used to build student skills in data analysis as a platform to practice data-gathering and analysis for projects in business planning, market research, revenue management, or designing customer- employee satisfaction surveys. Canvas Course Mats $78/Wiley applies

**HM 281R**
**Cooperative Work Experience**
**2 to 9**
* Prerequisite(s): Approval of School of Business Career and Corporate Manager

Provides opportunities to apply classroom theory on the job. Students work as paid employees in a job that relates to their careers while enrolled at the College. Credit is determined by the number of hours a student works during the semester. Completers meet individually set goals. A total of six credits may be applied toward graduation with a diploma or AAS degree and three credits toward Certificate programs. May be graded credit/no credit.

**HM 2890**
**Industrial Work Experience**
**1 to 8**

Designed for hospitality management majors as elective credit. Provides practical work experience in an actual restaurant, applying management theory in carrying out duties assigned by the manager/owner.

**HM 296R**
**Hospitality Management Seminar**
**1 to 3**
* Prerequisite(s): Instructor/Department Chair Approval

Provides short courses, workshops, and special programs in hospitality management or culinary arts topics. Repeatable for up to three credits.

**HM 297R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Department Chair Approval

Offers independent study as directed in reading, in individual projects, etc., in the area of hospitality management or culinary arts at the discretion and approval of the department chair. May be repeated for up to 6 credits toward graduation.

**HM 3020**
**Hospitality Managerial Accounting I**
**3**
* Prerequisite(s): ACC 2010 or ACC 2110, Matriculation into the Woodbury School of Business, and University Advanced Standing

Presents managerial accounting concepts and explains how these concepts apply to specific operations within the hospitality industry. Utilizes lectures, demonstrations, and case studies in class. Lab access fee of $25 for computers applies.

**HM 3030**
**Hospitality Managerial Accounting II**
**3**
* Prerequisite(s): ACC 2010, HM 3020, Matriculation into the Woodbury School of Business and University Advanced Standing
* Prerequisite(s) or Corequisite(s): HM 3020

Is the second in a two part series designed to integrate principles of operations and managerial accounting as they relate to the hospitality industry. Emphasizes developing competencies in analyzing real world hospitality industry scenarios using spreadsheet software. Includes: cost volume profit analysis and applications, forecasting, production controls, budget creation and uses, flexible budgets, depreciation, taxation, time value of money basics, capital budgeting, evaluating and financing investments, and cost benefit analysis.

**HM 3050**
**Country Club Management**
**3**
* Prerequisite(s): University Advanced Standing

Provides a basic understanding of country club management with golf operations. Analyzes management's functions and responsibilities in such areas as administration, organization, communications, accounting, marketing, and human relations. Examines industry opportunities and future trends. Includes lectures, field trips, guest speakers, films, and tapes. Completers should have knowledge of career opportunities and basic hospitality management principles.

**HM 3100**
**Hospitality Law**
**3**
* Prerequisite(s): University Advanced Standing

Teaches rights and responsibilities that the law grants to or imposes upon a hotelkeeper, and illustrates the possible consequences of failure to satisfy legal obligations. Explains the issues surrounding the need for individualized security programs; examines a wide variety of security and safety equipment and procedures, and discusses guests safety. Presents a systematic approach to the legal issues affecting human resource management. Includes lecture, case studies, videos, and site visits. May be delivered online and/or hybrid.. Lab access fee of $25 for computers applies.

**HM 3150**
**Hospitality Finance**
**3**
* Prerequisite(s): HM 3020 and University Advanced Standing

Presents the general conceptual framework for understanding and applying techniques of value creation for a hospitality firm. Includes risk and value, timing and value of cash flows, valuation and required rates of return, capital expenditure analysis, project valuation criteria, capital structure management, and financial markets. Introduces financial topics and practices application techniques. Includes lecture, demonstration, case studies, and guest speakers. May be delivered online. Lab access fee of $25 for computers applies.

**HM 320G**
**Global Tourism**
**3**
* Prerequisite(s): (MKTG 220G or ENGL 2010) and University Advanced Standing

Explores global tourism in a variety of sociocultural environments. Teaches world travel destinations and helps to develop a deeper understanding and cultural values and traditions that exist outside the student's own culture. Examines global tourism destinations in the context of environment, culture, economy, and society. Explores pull factors for prospective tourists to specific destinations. Focuses on the nature of the world's largest industry (i.e. tourism industry) and its multiplier-effect on society and national economies. Enhances engaged learning experiences through the Global Tourism Project and facilitates students' preparation to participate as active, informed, and respectful citizens.

**HM 3210 (Cross-listed with: MGMT 3210)**
**Event Venue and Convention Management**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Analyzes and explores the conventions and meetings market, event venue management, and the corresponding relationship with convention and visitors bureaus. Covers various procedures in site selection, site layout and logistics, operations, negotiations and contracts, food and beverage service, and convention sales.

**HM 3390**
**Hotel Operations II**
**3**
* Prerequisite(s): HM 1130 and University Advanced Standing

Overviews fundamentals of housekeeping management. Describes the management functions, tools, and practices required in today's lodging and institutional housekeeping departments. Provides students with information they need to successfully manage a physical plant and work effectively with engineering and maintenance. Includes lecture, role play, site visits, film, and tapes. Completers should have a basic understanding of housekeeping and facility management. Lab access fee of $25 for computers applies. Canvas Course Mats $54/Wiley applies.

**HM 3400**
**Hotel Industry Analytics**
**2**
* Prerequisite(s): University Advanced Standing

Familiarizes students with key hotel analytics, such as, foundational hotel industry dynamics, industry standard key performance indicators (KPIs) and their calculation, industry standard property level reporting, and various other industry standard performance reports. Prepares students to earn the Certification in Hotel Industry Analytics (CHIA).

**HM 3640**
**Food and Beverage Controls**
**3**
* Prerequisite(s): ACC 2010 and University Advanced Standing

Designed for hospitality management majors and as elective credit for other business majors. Covers the principles and procedures involved in an effective food and beverage control system, including standards determination, the operating budget, income and cost control, menu pricing, and computer applications. Includes lecture and computer simulation. Completers should have a basic understanding of control functions within a hospitality unit and be familiar with computer control systems. Lab access fee of $25 for computers applies. Canvas Course Mats $54/Wiley applies.

**HM 3710**
**Marketing of Hospitality Services**
**3**
* Prerequisite(s): MKTG 220G, Matriculation into the Woodbury School of Business and University Advanced Standing

Provides basic knowledge and practical experience which will enable students to develop strategic marketing plans for hotel/motel properties. Focuses on practical sales techniques, proven approaches to selling to targeted markets, and advertising's role in sales. Includes lecture, role play, case studies, simulations and projects. Lab access fee of $25 for computers applies. Canvas Course Mats $54/Wiley applies.

**HM 3800**
**Vacation Rental Management**
**3**
* Prerequisite(s): University Advanced Standing

Introduces management practices used in the short term rental market of the lodging industry. Provides an overview of the industry including regulations and accounting, marketing and reservations, guest and neighbor relations, maintenance and housekeeping, design and décor, security and guest safety, tech devices and innovations, and opportunities for entrepreneurial entry.

**HM 4150**
**Hospitality Revenue Management**
**3**
* Prerequisite(s): HM 1130, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): HM 3710

Designed for Hospitality Management majors. Addresses the emerging revenue management process and the keys to effective revenue management planning. Explores how to develop, implement, and evaluate strategic management processes. May be delivered hybrid and/or online.

**HM 4200**
**Event Planning**
**3**
* Prerequisite(s): HM 3210 and University Advanced Standing

Introduces the event industry, its scope and responsibilities, and the multidimensional nature of an event experience. Develops needs assessment, feasibility studies, and project management techniques to help students understand events in greater detail. Explores the interaction between attendee and the environment that enhances the event experience. Provides experience managing food and beverage services, technical services, ancillary activities, and marketing for events.

**HM 4250**
**Advanced Event Production**
**3**
* Prerequisite(s): HM 4200 and Advanced University Standing

Explores advanced techniques and procedures to effectively execute an event production. Includes creating feasible site plans, lighting and sound designs, table-top and stage décor, menu and food set-up designs, and event marketing plans. Focuses on how to successfully manage an event from inception to implementation to evaluation. Provides hands-on experience in event production and the creation of a professional event portfolio.

**HM 4300**
**Food and Beverage Consulting**
**3**
* Prerequisite(s): HM 1180, HM 3030, and University Advanced Standing

Provides a consulting experience with a local company. Promotes application of principles taught throughout the hospitality management program with a specific focus on effectively managing food and beverage functions. Tailors projects to students completing the food and beverage track. Recommends but does not require at least a year of experience working in the foodservice industry. Uses student-led consulting teams to complete real-world projects.

**HM 4400**
**Advanced Hotel and Tourism Analytics**
**3**
* Prerequisite(s): HM 3400 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): HM 3150

Familiarizes students with key hotel analytics, such as, foundational hotel industry dynamics, industry standard key performance indicators (KPIs) and their calculation, industry standard property level reporting, and various other industry standard performance reports. Includes project and group work. Develops augmented capacity for analyzing and interpreting current industry data, conducting market research, identifying and forecasting trends, and effectively communicating findings effectively through public speaking. Includes opportunities to interview industry consultants, developers, and professionals to gain additional insights into the markets they are studying.

**HM 4550**
**Hospitality Strategic Management**
**3**
* Prerequisite(s): HM 3030 and Matriculation into the Woodbury School of Business and University Advanced Standing.

Examines delivery of the organization's product or service. Includes investigative and production planning, scheduling of operations, allocation of resources, manpower and equipment decisions, inventory control, production planning, and quality. May be delivered online. Lab access fee of $25 for computers applies. Canvas Course Mats $54/ Wiley applies.

**HM 470G**
**International Human Resource Management**
**3**
* Prerequisite(s): University Advanced Standing

Introduces the field of international human resource management (IHRM). Provides an understanding of global influences on and practices in human resource management in international organizations. Includes globalization, internationalization of HR, cultural influences on HR, global employment law, global talent management, global training, global compensation, international performance evaluations, global human relations, and global employee engagement.

**HM 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Approval of School of Business Career and Corporate Manager and University Advanced Standing

For Bachelor of Science Degree students in Business Management or Hospitality Management. Provides opportunities to apply classroom theory on the job. Allows students to work as employees in a job that relates to their careers while enrolled at the College. Credit is determined by the number of hours a student works during the semester. Completers meet individually set goals. 3 credits may be applied toward a Bachelor of Science degree in Business Management; 6 credits may be applied to the Hospitality Management degree. May be graded credit/no credit.

**HM 496R**
**Hospitality Management Seminar**
**1 to 3**
* Prerequisite(s): Instructor/Department Chair Approval and University Advanced Standing

Provides short courses, workshops, and special programs in hospitality management. Repeatable for up to 3 credits.

**HM 497R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

For bachelor's degree students and other interested persons. Offers independent study as directed in reading, in individual projects, etc., in the area of hospitality management at the discretion and approval of the department chair.

# Honors (HONR)

**HONR 100R**
**Honors Colloquium**
**1**
* Prerequisite(s): Current enrollment in Honors program

Limited to students accepted to the Honors Program. Includes experiential education activities and cohort-building academic experiences, cultural events, and research/ service projects. Develops reflective writing abilities. May include readings, guest lectures, community/campus service and leadership projects, research groups, outdoor excursions, and attendance at fine arts performances. May be repeated for a maximum 6 credits toward graduation. Course fee of $15 for tickets, vehicle costs, and equipment rental applies

**HONR 150R**
**Honors Housing Colloquium**
**1**
* Prerequisite(s): Current enrollment in Honors program and receipt of Honors Housing Scholarship.

Limited to students currently receiving the Honors Housing Scholarship. Builds collegiate and adult life skills through cohort-based collaborative learning. Develops reflective and communication abilities. May include readings, guest lectures, community or campus service and leadership projects, outdoor excursions, and attendance at fine arts or sporting events. May be repeated for a maximum 4 credits toward graduation.

**HONR 2000**
**Ancient Legacies**
**3**
* Prerequisite(s): Current enrollment in Utah Valley University Honors program or permission of the instructor

Provides students with the opportunity to study selected great works in the history of ideas from an interdisciplinary perspective. Examines Ancient, Medieval, and early Renaissance thought through primary texts composed before 1500 C.E. Focus of the class determined by instructor, but must include at least one text written during each of these periods, and at least one non-Western text. Emphasizes close study of primary texts drawn from disciplines including, but not limited to, astronomy, physics, biology, literature, history, philosophy, and religion. Develops strong critical thinking, writing, and rhetorical skills.

**HONR 2100**
**Modern Legacies**
**3**
* Prerequisite(s): Current enrollment in Honors program or permission of the instructor

Provides students with the opportunity to study selected great works in the history of ideas from an interdisciplinary perspective. Examines Modern and Contemporary thought through primary texts composed after 1500 C.E. Focus of the class determined by instructor, but must include at least one text that adds diversity (for instance, in ethnicity, class, or gender). Emphasizes close study of primary texts drawn from disciplines including, but not limited to, astronomy, physics, biology, literature, history, philosophy, and religion. Develops strong critical thinking, writing, and rhetorical skills.

**HONR 300R**
**Honors Interdisciplinary Seminar**
**1 to 4**
* Prerequisite(s): Current enrollment in UVU Honors Program or instructor approval and University Advanced Standing

Topics may be drawn from any academic discipline including but not limited to business, technology and computing, education, fine and performing arts, physical and biological sciences, health science, humanities, and social sciences. Specific content determined by faculty. Consists of rigorous analysis and synthesis of innovative, current, or special topics. May include lab or performance requirement. May be repeated for a maximum of 12 credits toward graduation.

**HONR 400R**
**Honors Capstone**
**1**
* Prerequisite(s): Senior status or permission of Honors Director and University Advanced Standing
* Corequisite(s): Enrollment in Honors Program and a GPA of at least 3.20

Prepares students to complete an Honors Thesis or Honors Project (HONR 498R or HONR 499R). Initiates the research or design for an Honors Thesis or Honors Project. Includes drafting and completing a proposal, performing background design or research, and assembling a committee of at least two faculty or community mentors. May include completion of an Institutional Review Board application for research involving human subjects. Consists of rigorous analysis and synthesis of current topics in the student's discipline. May be repeated for a maximum of 2 credits toward graduation.

**HONR 498R**
**Honors Thesis**
**3**
* Prerequisite(s): HONR 400R (Senior status or permission of Honors Director) and University Advanced Standing
* Corequisite(s): Enrollment in Honors Program

For students completing a baccalaureate degree and the Honors Program. Provides an opportunity for seniors in the Program to research and write on a topic related to their major, supervised by a faculty mentor. Includes independent research as necessary. Culminates in the preparation of a written paper and oral presentation describing the results of the research project. Honors Project HONR 499R may be substituted. May be repeated for a maximum of 6 credits toward graduation. Course fee of $10 for binding applies.

**HONR 499R**
**Honors Project**
**3**
* Prerequisite(s): HONR 400R and (Senior status or permission of Honors Director) and University Advanced Standing
* Corequisite(s): Enrollment in Honors Program

For students completing a baccalaureate degree and the Honors Program. Provides an opportunity for seniors in the Program to research, design, carry out, and report results of an project related to their major, supervised by a faculty mentor. Includes independent research and creative endeavor as necessary. Culminates in the public presentation in a seminar, colloquium, recital, show, portfolio, or other appropriate method in the discipline, and the preparation of a written section evaluating or reflecting on the project's results. May be taken as an extension of research pursued in Honors Thesis 498R; may be taken as a substitute for Honors Thesis 498R. If a student's major department requires a comparable course (with, for instance, substantial written component), that course may be substituted, with permission of the Honors Director. May be repeated for a maximum of 6 credits towards graduation. Course fee of $10 for binding applies.

# Human Resource Management (HR)

**HR 3430**
**Introduction to Human Resource Management**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Covers labor and management relations, legal issues, job analysis and design, recruiting and selecting, job placement and orientation, training, career planning, EEO, performance appraisal, and employee benefits. Presents tools for the implementation of a human resource management program. Includes class discussions, case studies, videos, oral presentations, written assignments, group projects, and guest speakers. May be delivered online and/or hybrid. Lab access fee of $25 for computers applies

**HR 3530 (Cross-listed with: LEGL 3530)**
**Employment and Labor Law**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Covers employment and labor law, cases, and policy. Includes employment discrimination along with labor relations statues exploring the link between employment discrimination and traditional labor relations law. Presents tools necessary to formulate and write policy for profit and non-profit organizations. Includes lecture, class discussions, case studies, a service learning project, and guest speakers. Lab access fee of $25 for computers applies.

**HR 3550**
**Organization Development**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing; HR 3430 highly recommended

Studies the process of ensuring skills, knowledge, abilities, and performance of the workforce meet current and future individual, team, and organizational needs. Includes the development, implementation, evaluation activities, interventions, and programs that focus on customized organization development (change), performance management, training and development, career development, and other unique employee or employee group needs.

**HR 3570**
**Training and Development**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing; HR 3430 recommended

Studies current models, methods, and skills for training and development designed to improve individual, group, and organizational performance. Examines the organizational role of the training specialist, identifying training needs, maximizing the trainee's learning, evaluating training programs, on-site training methods, off-site training methods, developing and training leaders, management and executive development, and societal concerns. Includes teaching techniques such as lecture, class discussions, small group activities or projects, oral presentations, written assignments, guest speaker, and scholarly dialogue. Includes a semester-long training and development academic service-learning project.

**HR 4000**
**Total Compensation I--Pay and Incentives**
**3**
* Prerequisite(s): HR 3430 and University Advanced Standing

Studies wage and salary administration in private and public organizations; total compensation systems; interrelationship among employee performance, intrinsic and extrinsic rewards, perceived equitable payments, and employee satisfaction; employee benefits; employee incentive programs. Lab access fee of $25 for computers applies.

**HR 4010**
**Total Compensation II--Benefits**
**3**
* Prerequisite(s): HR 3430 and University Advanced Standing

Identifies a framework for implementing benefits systems to attract and retain a high performance workforce in a global environment; provides a comprehensive overview of benefits management strategies in organizations; discusses relevant models of compensation; and reviews various benefits influences, including laws and regulations.

**HR 4050**
**Human Resource Information Systems**
**3**
* Prerequisite(s): HR 3430 and University Advanced Standing

Provide students with introductory knowledge of Human Resource Information Systems. Examines HR information system adoption, implementation, and the assessment and building of management support to achieve HR strategic objectives.

**HR 4060**
**HR Analytics**
**3**
* Prerequisite(s): Matriculation to the Woodbury School of Business and University Advanced Standing

Explores key metrics, analysis, interpretation and communication tools necessary in developing comprehensive human capital strategies. Enables students to identify, analyze and interpret data to make human resource recommendations for individuals and organizations. Includes exploration of data analysis and presentation skills for human capital research and decision-making for planning, employee selection, compensation, employee survey data, organizational effectiveness and utilization analysis.

**HR 4610**
**Strategic Staffing & Performance Evaluation**
**3**
* Prerequisite(s): Matriculation into the Woodbury School of Business and University Advanced Standing; HR 3430 and HR 3530 recommended

Addresses the key HR functions of planning, staffing, and maintaining a quality workforce. Includes identifying critical specifications for filling positions, recruiting a pool of talent, developing selection methods, and creating desirable person/job matches. Lab access fee of $25 for computers applies.

**HR 470G**
**International Human Resource Management**
**3**
* Prerequisite(s): University Advanced Standing

Introduces the field of international human resource management (IHRM). Provides an understanding of global influences on and practices in human resource management in international organizations. Includes globalization, internationalization of HR, cultural influences on HR, global employment law, global talent management, global training, global compensation, international performance evaluations, global human relations, and global employee engagement.

**HR 4800**
**Strategic Human Resource Management**
**3**
* Prerequisite(s): HR 3430, HR 4050, HR 4060, Matriculation into the Woodbury School of Business, and University Advanced Standing

Facilitates students' understanding of the total alignment of human resource management (HRM) and business strategies. Provides an overview of the role of HRM as a capstone course. Considers the overall design of the HRM infrastructure to enable optimal employee performance relative to the strategic goals of the organization, to achieve competitive advantages. Examines the techniques, policies, processes, strategies, and practices used by companies and / or managers to effectively and efficiently utilize human resources. Teaches theories and practices in multiple HRM areas, including staffing, performance evaluation, work and job design, training, total compensation, the legal environment, labor relations, and megatrends in the external labor market. Provides extensive training to prepare for the aPHR (Associate Professional of Human Resources) exam as a professional certification from the Human Resource Certification Institute (HRCI).

**HR 495R**
**Advanced Topics in Strategic Human Resource Management**
**1 to 3**
* Prerequisite(s): Department chair approval and University Advanced Standing.

Provides exposure to emerging current interests in strategic human resource management topics. Topics vary each semester. May be repeated for a maximum of 6 credits toward graduation.

# Humanities (HUM)

**HUM 1010** **HH**
**Humanities Through the Arts**
**3**

Studies the media and compositional elements of the various art forms (literature, music, visual arts, theater, film, dance, and architecture), for greater understanding and enjoyment. Teaches how to interpret artistic meaning by analyzing artworks formally as well as in their historical contexts, such as the predominant subject matters and styles of their period. Encourages students to integrate the arts into their daily lives habitually, so that they become lifelong learners and educators.

**HUM 101G** **HH**
**Humanities Through the Arts**
**3**

Studies the media and compositional elements of the various art forms (literature, music, visual arts, theater, film, dance, and architecture), for greater understanding and enjoyment. Teaches how to interpret artistic meaning by analyzing artworks formally as well as in their historical contexts, such as the predominant subject matters and styles of their period. Encourages students to integrate the arts into their daily lives habitually, so that they become lifelong learners and educators. Places emphasis on the global, trans- and intercultural nature of human creativity and its impacts.

**HUM 101H** **HH**
**Humanities Through the Arts**
**3**

Studies the media and compositional elements of the various art forms (literature, music, visual arts, theater, film, dance, and architecture), for greater understanding and enjoyment. Teaches how to interpret artistic meaning by analyzing artworks formally as well as in their historical contexts, such as the predominant subject matters and styles of their period. Encourages students to integrate the arts into their daily lives habitually, so that they become lifelong learners and educators.

**HUM 120R**
**Humanities Forum**
**3**

Introduces students to a wide variety of aspects of the humanities. Provides enriched learning situations in which students are exposed to humanities events or noted guest scholars and other lecturers. Requires attendance of a choice of specified events on campus and off, as well as of workshop meetings with an instructor. May be repeated for a maximum of 6 credits toward graduation.

**HUM 2010** **HH**
**World History Through the Arts I**
**3**

Studies early societies through the 1600s, as the first part of a two-part series which examines world civilizations through the arts. Explores formative creative events in history and their relationships to modern issues. Presents perspectives of traditional humanistic values of arts and ideas. Investigates how others have dealt with problems that humans faced in the past, and possible strategies for problem solving that might aid students today.

**HUM 201G** **HH**
**World History Through the Arts I**
**3**

Studies early societies through the 1600s, as the first part of a two-part series which examines world civilizations, including non-Western civilizations, through the arts. Explores formative creative events in history, and their relationships to modern issues. Presents perspectives of traditional humanistic values of arts and ideas. Investigates how others have dealt with problems that humans faced in the past, and possible strategies for problem solving that might aid students today. Promotes a trans- and intercultural, global understanding of human creativity and its impact through the ages.

**HUM 201H** **HH**
**World History Through the Arts I**
**3**

The first of a two-part series which examines world civilizations through the arts. Studies early societies through the 1600s. Explores formative creative events in history and their relationships to modern issues. Presents perspectives of traditional humanistic values of arts and ideas. Investigates how others have dealt with problems that humans faced in the past, and possible strategies for problem solving that might aid students today.

**HUM 2020** **HH**
**World History Through the Arts II**
**3**

Studies societies from the 1600s, as the second part of a two-part series which examines world civilizations through the arts. Explores formative creative events in history and their relationships to modern issues. Presents perspectives of traditional humanistic values of arts and ideas. Investigates how others have dealt with problems that humans face in the past, and possible strategies for problem solving that might aid students today.

**HUM 202G** **HH**
**World History Through the Arts II**
**3**

Studies societies from the 1600s, including non-Western societies, as the second part of a two-part series which examines world civilizations through the arts. Explores formative creative events in history and their relationships to modern issues. Presents perspectives of traditional humanistic values of arts and ideas. Investigates how others have dealt with problems that humans face in the past, and possible strategies for problem solving that might aid students today. Promotes understanding of the global, trans- and intercultural nature of human creativity and its impacts.

**HUM 202H** **HH**
**World History Through the Arts II**
**3**

The second of a two-part series which examines world civilizations through the arts. Studies societies from the 1600's. Explores formative creative events in history and their relationships to modern issues. Presents perspectives of traditional humanitstic values of arts and ideas. Investigates how others have dealt with problems that humans face in the past, and possible strategies for problem solving that might aid students today.

**HUM 203G** **HH**
**Art Form Focus I**
**3**

Surveys the nature, history, and possibilities of one specific art form, such as painting, sculpture, theater, architecture, dance, music, or literature, in the context of the influence that art forms exert on each other. Deals with characteristics of a chosen art form prior to 1500 in more depth than Hum 1010 or 2010 can, while highlighting how creative events in human history always are in dialogue both with the social discourses of their times and with each other.

**HUM 204G** **HH**
**Art Form Focus II**
**3**

Surveys the nature, history, and possibilities of one specific art form, such as painting, sculpture, theater, architecture, dance, music, or literature, in the context of the influence that art forms exert on each other. Deals with characteristics of a chosen art form after 1500 in more depth than Hum 1010 or 2020 can, while highlighting how creative events in human history always are in dialogue both with the social discourses of their times and with each other.

**HUM 2100** **HH**
**Adventures of Ideas Through 1500**
**3**

Studies great written or visual texts in the Western or Eastern history of ideas--artistic, literary, philosophical, religious, political, technological, or scientific--from Antiquity through1500. Readings and thematic focus vary by instructor, but all courses interrelate texts from different disciplines and world regions under one broad topic relating to the human condition, such as love, death, war and peace, family, justice, the state etc.

**HUM 210H** **HH**
**Adventures of Ideas Through 1500**
**3**
* Prerequisite(s): Enrollment in the UVU Honors program or approval by the instructor.

Studies great written or visual texts in the history of ideas--artistic, literary, philosophical, religious, political, technological, or scientific--from Antiquity through1500. Readings and thematic focus vary by instructor, but all courses interrelate texts from different disciplines and world regions under one broad topic relating to the human condition, such as love, death, war and peace, family, justice, the state etc. This Honors version of HUM 2100 requires more rigorous reading and writing assignments and is open to students in the Honors program or students with special approval from the instructor only.

**HUM 2200** **HH**
**Adventures of Ideas After 1500**
**3**

Studies great written or visual texts in the Eastern or Western history of ideas--artistic, literary, philosophical, religious, political, technological, or scientific--from the Renaissance through the present. Readings and thematic focus vary by instructor, but all courses interrelate readings from different disciplines and world regions under one broad topic relating to the human condition, such as individuality, power, health, freedom, violence, the natural environment, etc.

**HUM 220H** **HH**
**Adventures of Ideas After 1500**
**3**
* Prerequisite(s): Enrollment in the Honors Program or instructor's approval

Studies great written and visual texts in the Eastern or Western history of ideas--artistic, literary, philosophical, religious, political, technological, or scientific--from the Renaissance through the present. Readings and thematic focus vary by instructor, but all courses interrelate readings from different disciplines and world regions under one broad topic relating to the human condition, such as individuality, power, health, freedom, violence, the natural environment, etc. This Honors version of HUM 2200 requires more rigorous reading and writing assignments and is open to students in the Honors program or students with special approval from the instructor only.

**HUM 2500**
**Introduction to Ancient Greek I**
**6**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Allows students the opportunity to intensively study the Ancient Greek language at the introductory level. Focuses primarily on Attic Greek. Focuses primarily on grammer and textbook exercises with some analysis of literary and/or philosophical selections in Ancient Greek. Relates particularly to students interested in studying Ancient Greek philosophy or Ancient Greek literature, and offers an important grounding for students interested in studying the New Testament.

**HUM 2510**
**Introduction to Ancient Greek II**
**6**
* Prerequisite(s): HUM 2500

Allows students to continue intensive study of the Ancient Greek language at the introductory level. Focuses primarily on Attic Greek. Focuses primarily on grammer and textbook exercises with some analysis of literary and/or philosophical selections in Ancient Greek. Relates particularly to students interested in studying Ancient Greek philosophy or Ancient Greek literature and an important grounding for students interested in studying the New Testament.

**HUM 281R**
**Internship**
**1 to 6**
* Prerequisite(s): Approval of Cooperative Coordinator
* Prerequisite(s) or Corequisite(s): Completion of at least nine credits of class work in Humanities.

Allows pre-advanced Humanities students to receive credit for Humanities-related service as a paid or unpaid intern in a governmental, not-for-profit, or private agency. Provides practical and research development in the selected areas of service so as to further students' academic and professional interests and goals. Internship must be supervised by agency representative. Must be approved by Humanities internship advisor and department chair and written contracts must be completed and signed. Credit is determined by the number of hours a student works during the semester. May be repeated for a maximum of 9 credits toward graduation. May be graded credit/no credit.

**HUM 290R**
**Independent Study**
**1 to 3**

Provides independent study as directed in reading and individual projects. Request must be submitted for approval by the department. Students may do independent study for one, two or three credits with a limit of three credits applying toward graduation with an AA/AS degree.

**HUM 295R**
**Directed Readings**
**1 to 3**

Provides an opportunity for second year students to do in-depth research within the Humanities. Study is limited to advanced work beyond that which can be completed in existing, available classes. A proposal must be submitted and approved by the department prior to enrollment.

**HUM 3060 (Cross-listed with: ENGL 3060)**
**Visual Rhetoric**
**3**
* Prerequisite(s): ENGL 2010 with a grade of C- or higher and University Advanced Standing

Investigates the growing academic and cultural interest in the rhetorical nature of visual texts. Teaches critical thinking about the consumption and productions of images and multimodal texts. Explores visual grammars and other theories of visual rhetoric as articulated by contemporary image, language, and scholars of rhetoric. Encourages the development of theoretical and practical knowledge through reading, discussion, and analysis as well as through the production of visual texts and written work.

**HUM 320R**
**Topics in Humanities**
**1 to 3**
* Prerequisite(s): (ENGL 2010 or at least sophomore status) and University Advanced Standing

Studies varying topics such as a theme (e.g., death or story-telling), figure (e.g., John Cage or Michelangelo), or movement (e.g., DaDa or Pragmatism) in humanities. Involves study of more than one art form (e.g., film, literature, and music) or discipline (e.g., art, history, and biology). May be repeated for a maximum of 6 credits toward graduation with different topics.

**HUM 325R**
**Area Studies in Humanities**
**3**
* Prerequisite(s): (ENGL 2010 or at least sophomore status) and University Advanced Standing

Studies the literature, philosophy, and arts of a particular geographical area. Topics vary. May be repeated for a maximum of 6 credits toward graduation with different topics.

**HUM 330R**
**Period Studies in Humanities**
**3**
* Prerequisite(s): (ENGL 2010 or at least sophomore status) and University Advanced Standing

Studies a particular period within the humanities (such as the medieval world, Romanticism, or Modernism). Involves study of more than one art form (e.g., music, art, and literature) or discipline (such as literature and philosophy) from during the chosen period. Topics vary. Repeatable, with different topics, toward graduation.

**HUM 3500**
**Approaches to Humanities WE**
**3**
* Prerequisite(s): University Advanced Standing

Surveys recent critical and aesthetic theory for each art form and teaches students how to apply theoretical approaches to the interpretation of individual texts, films, artworks, buildings, performances, etc. Includes readings of seminal works by philosophers, academic or professional critics, and practicing artists. Studies examples where the apparent divide between theory and practice is collapsed, where, for instance, an artistic product in itself may have provided a new approach for future artistic productivity and interpretation, or where a theoretical contribution has been made in such a way as immediately to demonstrate a certain creative practice.

**HUM 3800 (Cross-listed with: PHIL 3800)**
**Aesthetics**
**3**
* Prerequisite(s): University Advanced Standing

Studies aesthetics as perceived by the disciplines of philosophy, psychology, sociology, anthropology, history, and others. Analyzes art forms, including the visual arts, literature, music, and theater from the perspectives of philosophers such as Plato, Aristotle, Kant, Hume, Dewey, Danto, Bell, Collingwood, Thoreau, and Dickie.

**HUM 3820 (Cross-listed with: PHIL 3820)**
**Philosophy Through Literature**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Provides students with an interdisciplinary approach to the study of philosophy through literature. Gives students the opportunity to read some of the most engaging thinkers and how they offer differing perspectives through a variety of texts. Breaks down some of the strict divisions placed between philosophical and literary texts.

**HUM 400R**
**Humanism and Posthumanism**
**3**
* Prerequisite(s): At least junior standing and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENG 2010

Explores Humanism or Posthumanism across the arts and their diverse cultural history. Defines humanism as varieties of the traditional view that Man is the measure of all things, and Posthumanism as an umbrella term for recent theoretical approaches within the humanities that challenge this view, for instance by placing humanity in the context of global or universal, intrinsically diverse and self-generating, scientific, technological, or ecological systems. May compare aspects of humanism throughout space and time, in its diverse cultural manifestations, or may focus on a twenty-first-century view of these long traditions. May also choose the example of the humanistic or posthumanistic aspects of a single time period, culture, or interdisciplinary oeuvre. Offers an opportunity to advanced students to synthesize, critique, and strengthen their own viewpoints, and to expand their interdisciplinary understanding of human expression, in response to the most fundamental or recent currents within intellectual history. May be repeated for a maximum of 6 credits toward graduation.

**HUM 401R**
**Forms and Genres Across the Arts**
**3**
* Prerequisite(s): At least junior standing and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 2010

Explores forms and genres of imagery, narrative, drama, composition, or performance, across all art forms. Fosters analytical and interpretative skills in reading all kinds of texts. Highlights the inextricable interrelations among all realms of sensual, intellectual, aesthetic, and cultural experience. Illuminates the polar dynamics of tradition and innovation, continuity and change, and departure and return throughout the history of human creativity. May be repeated for a maximum of 6 credits toward graduation.

**HUM 414R**
**Advanced Topics in Humanities**
**3**
* Prerequisite(s): At least junior standing and University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 2010

Studies a topic relevant to cross-disciplinary humanities at an advanced level of critical engagement. Involves more than one art form or discipline of humanistic inquiry. Requires study of secondary literature and theoretical texts. May be repeated, with different topics, for a maximum of 6 credits toward graduation.

**HUM 4300 (Cross-listed with: PHIL 4300)**
**Environmental Aesthetics**
**3**
* Prerequisite(s): (PHIL 000, PHIL 100H, PHIL 2050, PHIL 205H, PHIL 205G, ENST 3000, HUM 1010, HUM 101H, HUM 101G, or HUM 3500) and University Advanced Standing

Introduces students to emerging themes in environmental aesthetics. Evaluates concepts and attitudes toward nature including, but not limited to, the concept of beauty in natural and human-made environments from a cross-cultural perspective. Studies environmental formalism, cognitivism and non-cognitivism, as well as divergent spiritual, ecological, religious, and moral approaches to the appreciation of nature.

**HUM 481R**
**Internship**
**1 to 6**
* Prerequisite(s): Departmental chair approval and University Advanced Standing

Allows advanced Humanities students to receive credit for Humanities-related service as a paid or unpaid intern in a governmental, not-for-profit, or private agency. Provides practical and research development in the selected areas of service so as to further students' academic or professional interests or goals. Internship must be supervised by agency representative. Must be approved by Humanities internship advisor and department chair and written contracts must be completed and signed. Credit is determined by the number of hours a student works during the semester. May be repeated for a maximum of 9 credits toward graduation. May be graded credit/no credit.

**HUM 490R**
**Directed Readings**
**1 to 3**
* Prerequisite(s): Department Chair Approval, Instructor Approval, and University Advanced Standing

Designs reading and writing assignments in consultation with a faculty member to meet special needs or interests not available through regular course work. May be repeated for a maximum of 6 credits toward graduation.

**HUM 4910**
**Humanities Capstone WE**
**3**
* Prerequisite(s): Senior Standing and University Advanced Standing
* Prerequisite(s) or Corequisite(s): HUM 3500

Instructs Humanities majors in their last year of the program on how to conduct research, develop a complex critical argument, and write and defend a senior thesis. Encourages students to explore their desired professional or graduate research interests.

# Interdisciplinary Studies Prog (IDST)

**IDST 281R**
**Interdisciplinary Studies Internship**
**1 to 8**
* Prerequisite(s): Department Approval

Provides supervised, practical, and professional experience for lower division students. May be repeated for a maximum of 8 credits toward graduation. May be graded Credit/No Credit.

**IDST 481R**
**Interdisciplinary Studies Internship**
**1 to 8**
* Prerequisite(s): Junior standing, department approval, and University Advanced Standing

Provides supervised, practical, and professional experience for upper division students preparing for a variety of careers associated with interdisciplinary studies. May be repeated for a maximum of 8 credit hours. May be graded credit/no credit.

**IDST 4900**
**Interdisciplinary Studies Capstone**
**3**
* Prerequisite(s): Senior status and University Advanced Standing

For students nearing completion of an Interdisciplinary Studies minor. Provides an opportunity for students to synthesize their interdisciplinary course work. Requires and facilitates a major research project. Addresses the theoretical and practical problems of interdisciplinary research and writing. Requires participation in peer review groups and in-class presentations.

# Information Management (IM)

**IM 1010**
**Basic Computer Applications**
**3**
* Prerequisite(s): Basic keyboarding skill

Prepares students for the IC3 certification exam. Teaches basic computer fundamentals, digital living concepts, and key applications. Includes PC computer system concepts, basics of the Windows operating system, software licensing and installation, electronic communication, Internet and research fluency, and ethical computer usage. Provides hand-on experience in the basic features of Microsoft Word, PowerPoint, Excel, and Access as common business problem solving and communication tools. May be delivered hybrid and/or online. Lab access fee of $45 for computers applies. Canvas Course Mats $78/ Cengage applies. Software fee of $10 applies.

**IM 101A**
**Word Processing Applications**
**1**

Introduces word processing software. Emphasizes commands needed to create, format, revise, save, and print documents. Includes inserting and formatting graphics, tables, and tabs into a text document. Lab access fee of $45 for computers applies.

**IM 101B**
**Presentations Applications**
**.5**

Introduces presentation software. Emphasizes process of creating, formatting, revising, saving, print, and showing presentations. Includes planning a slide show, choosing appropriate designs, and using templates. Lab access fee of $45 for computers applies.

**IM 183R**
**IM Student Chapter**
**1**

Develops insights regarding lifetime careers and advancement opportunities in business, education, and industry through participation in a student organization. Helps students develop professionally through opportunities to use and apply, human relations, management, social, communicative, and organizational skills. Provides opportunities for leadership positions, committee assignments, participation in school and community activities, and competition in state and national competitive events. Requires payment of local, state, and national dues. Students may choose membership in Phi Beta Lambda, the collegiate division of FBLA (Future Business Leaders of America), or IAAP (International Association of Administrative Professionals). Designed for information management and education-oriented students but open to all students interested in lifetime business skills. Graded credit/no credit. May be repeated for a maximum of 4 credits toward graduation. Lab access fee of $45 for computers applies.

**IM 184R**
**IM Student Leadership**
**1**
* Prerequisite(s): Instructor Approval

For Phi Beta Lambda officers and International Association of Administrative Professionals. Includes development, organization, and direction of the Program of Work for student chapters. Graded on a credit/no credit basis. May be repeated for a maximum of 4 credits toward graduation.

**IM 2010**
**Business Computer Proficiency**
**3**
* Prerequisite(s): (IM 1010 recommended) or (Basic Computer Applications Challenge Exam with a minimum score of 80% recommended)

Encompasses two software applications, Microsoft Excel and Microsoft Access, from a business perspective. Covers intermediate level problem solving and production skills. Uses business applications in case study settings to solve problems and accomplish tasks. In company with IM 1010, meets/ exceeds the Board of Regent's Business Core Advisory Committee's requirement and the Business Computer Proficiency required by the Woodbury School of Business. May be delivered online. Lab access fee of $45 for computers applies. Canvas Course Mats $96/ Pearson applies. Software fee of $18 applies.

**IM 201A**
**Spreadsheet Applications**
**2**
* Prerequisite(s): (IM 1010 with a grade of B- or higher) or (Basic Computer Applications Exam with a score of 80% or higher) or Instructor Approval

Introduces spreadsheet software. Emphasizes process of creating, formatting, enhancing, revising, saving, and printing spreadsheets. Stresses use of formulas and functions to solve problems. Includes creating charts using spreadsheet data. Lab access fee of $45 for computers applies.

**IM 201B**
**Database Applications**
**1**
* Prerequisite(s): (IM 1010 with a grade of B- or higher) or (Basic Computer Applications Exam with a score of 80% or higher) or Instructor Approval

Introduces database software. Emphasizes process of designing, modifying, and creating related tables. Includes creating forms, generating reports and labels and constructing queries. Lab access fee of $45 for computers applies.

**IM 2100**
**Document Processing Applications**
**3**
* Prerequisite(s): Basic keyboarding skills

Teaches intermediate word processing features in a Windows environment for the production of business letters, envelopes, multiple-page documents, reports, newsletters, tables, and other specialized business documents. Emphasizes identification and troubleshooting problems associated with soft copy document production. Stresses proper formatting. Software fee of $16 applies. Lab access fee of $45 for computers applies. Canvas Course Mats $78/Cengage applies.

**IM 2300**
**Information Management Principles**
**3**
* Prerequisite(s): IM 1010 or IM 2010 or IM 2100

Includes storage and retrieval systems, managing manual and electronic files, cross referencing, automated records systems, safety, security, and disaster recovery. Discusses the records cycle, equipment, supplies, retention schedules, and micrographics and image technology. Explores legal and ethical concerns. Lab access fee of $45 for software applies. Canvas Course Mats $78/Cengage applies.

**IM 2400**
**Presentation Applications**
**3**
* Prerequisite(s): IM 1010 or IM 2010 or IM 2100 or Instructor Approval

Uses a presentation software tool to create computer slide presentations, business charts and graphs, illustrations for desktop publishing, text charts, and other business-oriented publications. Incorporates presentation templates, clip art, charts and graphs, scanned images, sound, animations, video, and hyperlinks to create projects. Software fee of $8 applies. Lab access fee of $45 for computers applies.

**IM 2500**
**Graphic Applications**
**3**
* Prerequisite(s): IM 1010 or IM 2100 or Instructor Approval

Explores digital image editing using Adobe Photoshop and Adobe Illustrator. Provides an overview of image optimization processes for the web. Lab access fee of $45 for computers applies.

**IM 2600**
**Spreadsheet Applications**
**3**
* Prerequisite(s): MAT 0990 or equivalent business math knowledge; basic keyboarding skill

Provides an extensive study and hands-on examination of practical business applications using electronic spreadsheets. Provides comprehensive coverage of features available in the current Windows version of spreadsheet software. Software fee of $18 applies Lab access fee of $45 for computers applies. Canvas Course Mats $78/Cengage applies.

**IM 2800**
**Integrated Software Projects**
**3**
* Prerequisite(s) or Corequisite(s): IM 2100 and IM 2600 or Instructor Approval

Emphasizes organizing projects, prioritizing tasks, working under time pressures, and dealing with stressful situations. Requires completion of advanced document production in an automated environment using current versions of suite software packages. Course projects stress self-motivation, acceptance of responsibility, critical thinking, and effective decision making. Designed to prepare students majoring in administrative information management to enter the work force, and should be taken at the end of a program in order to grasp the concepts presented and, with little supervision, produce material acceptable on the job. Software fee of $18 applies. Lab access fee of $45 for computers applies. Software fee of $8 applies.

**IM 281R**
**Internship**
**1 to 8**
* Prerequisite(s): Departmental Approval

For Information Management majors only. Provides a transition from school to-work where learned theory is applied to actual practice through a meaningful on-the-job experience. Includes student, employer and coordinator evaluations, on-site work visits, and written assignments. Completers should obtain experience in establishing and accomplishing individualized work objectives that improve work performance. Internship is intended for entry level IM students who are working at that level. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May be repeated for a maximum of 9 credits towards graduation. May be graded credit/no credit.

**IM 290R**
**Current Topics in Information Management**
**1 to 3**
* Prerequisite(s): Departmental Approval

Designed for students interested in specific information management tools and concepts. Includes relevant and changing topics and tools used by business and industry. Emphasizes hands-on experience along with lectures and demonstrations. May be taken for a total of 9 credits toward graduation. Lab access fee of $45 for computers applies.

**IM 3500**
**Desktop Publishing Applications**
**3**
* Prerequisite(s): (IM 2100 or Instructor approval) and University Advanced Standing

For administrative information management or administrative information support majors and others interested in learning desktop publishing features. Teaches the use of current desktop publishing software in a Windows environment. Emphasizes production of complex documents for the purpose of publication. Teaches formatting and design principles through the use of theory instruction, demonstration, and hands-on experience. Lab access fee of $45 for computers applies.

**IM 3600**
**Advanced Excel for Decision Making**
**3**
* Prerequisite(s): IM 2010 or IM 2600 and University Advanced Standing

Uses Microsoft Excel as a reporting tool and as a modeling tool for solving business problems. Focuses on reporting, analyzing data, and building analytic models to improve operations, increase profits, or reduce costs. Builds models to help make business decisions including advanced functions, dashboards, forecasting, optimization, and simulation. Lab access fee of $45 applies.

**IM 3700**
**Database Applications**
**3**
* Prerequisite(s): Basic keyboarding skill and University Advanced Standing

Explores creating and utilizing database files using database management software. Covers basic concepts of database management emphasizing commonly used applications. Teaches use of reports, letters, labels, custom screens, and queries in a business setting. Software fee of $10 applies. Lab access fee of $45 for computers applies.

**IM 4300**
**Information Workflow Management**
**3**
* Prerequisite(s): (TECH 3400 or Instructor approval) and University Advanced Standing

Emphasizes leadership, organization, problem-solving, and critical thinking skills in directing the completion of documents and projects in an automated and integrated environment. Covers a variety of leadership activities including planning and organizing new projects; directing new and ongoing operations; and using available technology to process, analyze, manage, and communicate information. Stresses leadership, self-motivation, effective decision making, and critical- and creative-thinking skills. Teaches the role of a project manager or business manager. Lab access fee of $45 for software applies.

**IM 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Instructor approval and University Advanced Standing

For Information Management majors only. Provides a transition from school to-work where learned theory is applied to actual practice through a meaningful on-the-job experience. Includes student, employer and coordinator evaluations, on-site work visits, and written assignments. Provides experience in establishing and accomplishing individualized work objectives that improve work performance. Internship is intended for senior IM students who are working at that level. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May be repeated for a maximum of 9 credits towards graduation. May be graded credit/no credit.

**IM 490R**
**Advanced Topics in Information Management**
**1 to 3**
* Prerequisite(s): Departmental Approval and University Advanced Standing

Includes relevant and changing topics and tools used by business and industry. Emphasizes hands-on experience. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of $45 for computers applies.

**IM 496R**
**Information Management Seminar**
**1 to 3**
* Prerequisite(s): IM 2300 and University Advanced Standing

Provides short courses, workshops, and special programs in information management or current business topics. May be repeated for up to 6 credits toward graduation.

**IM 497R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Instructor Approval and University Advanced Standing

For bachelor's degree students and other interested persons. Offers independent study as directed in reading or in individual projects; offered at the discretion and approval of the department chairperson. May be repeated for a maximum of 9 credits toward graduation.

# Information Systems and Technology (INFO)

**INFO 1000**
**E-Commerce Techniques for Small Business**
**3**
* Prerequisite(s)or-Corequisite(s): Basic Computer Proficiency or IM 1010 strongly recommended

Introduces strategies and best practices for analyzing a target market, designing an online business, and implementing an e-Commerce solution. Discusses online marketing, branding, usability, search engine optimization, personalization, rapid development, theming, and security. Requires implementation of an online small business individually or with a group. Lab access fee of $45 for computers applies.

**INFO 1120**
**Information Systems and Technology Fundamentals**
**3**
* Prerequisite(s): IM 1010 recommended

Explores the fundamental concepts of information technology and the role played by enterprise systems in business and organizational strategy. Introduces types of systems, computer organization and hardware, operating systems and networking, project planning, software development, computer ethics, and career paths for enterprise developers and IT professionals. Lab access fee of $45 for computers applies.

**INFO 1200**
**Computer Programming I for IS IT**
**3**
* Prerequisite(s): MAT 1010 or higher; INFO 1120 recommended

Presents concepts of modern computer programming. Emphasizes problem-solving, algorithm development, and programming desgin. Stresses constructs, data representation, fundamental types and data structures, decision structures, repetition structures, methods, arrays, classes, and objects. Includes testing, debugging, and documentation. Introduces object-oriented, event-driven programming models. Lab access fee of $45 for computers applies.

**INFO 2100**
**Computer Proficiency for Technology Professionals**
**3**
* Prerequisite(s): (ENGL 1010, ENGH 1005, or higher) and (MAT 1030 or higher)

For Technology Management and Construction Management students. Provides opportunities for students to gain proficiency in using Microsoft Office (Word, PowerPoint, Excel, and Access) to enhance their business productivity and problem-solving skills. Teaches students to apply information technologies to problem situations. Meets computer proficiency requirement for Technology Management degree. Lab access fee of $45 for computers applies.

**INFO 2200**
**Computer Programming II for IS IT**
**3**
* Prerequisite(s): (INFO 1200 or CS 1400 with a grade of C- or better within the past seven years) or Departmental Approval
* Prerequisite(s) or Corequisite(s): MATH 1050 or higher

Focuses on object-oriented design and programming methodologies. Teaches inheritance, polymorphism, and encapsulation. Develops knowledge to abstract functionality by using interfaces. Covers collection classes, generics, exception handling, file handling, and more advanced topics such as accessing databases via LINQ, socket/network programming, and multi-threading. Lab access fee of $45 for computers applies.

**INFO 2410**
**Database Fundamentals**
**3**
* Prerequisite(s): (INFO 1120 recommended) or (IM 2010 recommended)

Introduces concepts and use of database management systems. Presents the relational model, Structured Query Language, database design including normalization theory, and application development tools using an enterprise-level relational database management system. Lab access fee of $45 for computers applies.

**INFO 2420**
**Web Application Design**
**3**
* Prerequisite(s): INFO 1120 recommended or IM 1010 recommended

Focuses on the design and construction of Web pages and maintenance of Web sites. Includes foundations in standards-based HTML and CSS. Covers code markup, design concepts and web graphics manipulation, page layout, form development, and usability and accessibility issues. Teaches use of Web authoring tools for code development and site management. Requires individual projects. May be delivered hybrid and/or online. Lab access fee of $45 for computers applies.

**INFO 281R**
**Internship**
**1 to 8**
* Prerequisite(s): Department Approval

Provides opportunities to apply classroom theory on the job. Requires work as paid employees in a job that relates to their careers while enrolled at the College. Students meet at least monthly with the Departmental Internship Coordinator. Completers meet individually set goals. Six credits may be applied toward graduation with an AAS degree and three credits toward certificate programs. May be graded credit/no credit.

**INFO 297R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Department Approval

Offers independent study as directed in reading in individual projects. Approval for this course is at the discretion of the department chairperson. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of $45 for computers applies.

**INFO 3120**
**Management Information Systems**
**3**
* Prerequisite(s): [(MKTG 220G or ENGL 2010) and (Computer Proficiency or INFO 1120 or IM 2010 or IM 2600 with a grade of C- or better within the past five years) or departmental approval] and University Advanced Standing

Introduces the field of information systems and technology. Discusses how to use and manage the most current information technologies (IT) from the perspective of a general business manager. Studies the Internet, Intranets, and Extranets for electronic commerce and enterprise collaboration. Examines business cases demonstrating IT contributions to competitive advantage, reengineering business processes, and decision making. Lab access fee of $45 for computers applies.

**INFO 3130**
**Introduction to Applied Data Analytics**
**3**
* Prerequisite(s): Basic statistics course (MGMT 2340 or STAT 1040 or STAT 1045 or STAT 2040 or STAT 2050 or PSY 3110), and basic knowledge of Microsoft Excel, or Departmental Approval and University Advanced Standing

Intended for people who will be working with data analysts and data scientists, managing analytics projects, or investing in analytics ventures, and aspiring data scientists. Provides opportunities for students to gain skills in data-analytic thinking required to succeed in today's analytical and data-driven economy. Introduces the basics of data management and data analytics. Covers core analytic techniques: data exploration and visualization, pattern discovery (segmentation and association), predictive modeling (decision tree, logistic regression, neural network), and forecasting. Lab access fee of $45 for computers applies.

**INFO 3300**
**Web Systems Development**
**3**
* Prerequisite(s): [(INFO 1200 or IT 1200 or CS 1400) and (INFO 2410 or CS 3520) both with a grade of C- or higher within the past seven years] and University Advanced Standing; INFO 2420 recommended

Emphasizes interpretation of business processes, process modeling, and implementation of the models as web applications. Instructs how to implement web solutions that use a relational database backend to manage site data using an industry-standard programming language to interact with the database to produce dynamic web content. Covers parameter passing, cookie storage, and session variables. Introduces application platforms that can be customized to new business requirements. Highlights how to use content management systems (CMS) and how to customize such systems to quickly produce web applications to meet business needs. Lab access fee of $45 applies.

**INFO 3330**
**Client-Side Web Development**
**3**
* Prerequisite(s): [(INFO 1200 or IT 1200 or CS 1400) and (INFO 2410 or CS 3520) both with a grade of C- or higher within the past seven years] and University Advanced Standing; INFO 2420 recommended

Teaches how to create high performance and scalable web sites using JavaScript across the client and server (full development stack). Instructs how to program directly in JavaScript as well as how to utilize JavaScript libraries and frameworks. Introduces popular JavaScript libraries to perform client-side form validation, make AJAX server calls, and deploy mobile apps based on web standards. Covers web application development using client-side frameworks that implement model view controller design patterns. Introduces server-side JavaScript tools and the NoSQL database to manage application data. Lab access fee of $45 applies.

**INFO 3360**
**Server-Side Web Frameworks**
**3**
* Prerequisite(s): [(INFO 1200 or IT 1200 or CS 1400) and (INFO 2410 or CS 3520) both with a grade of C- or higher within the past seven years] and University Advanced Standing; INFO 2200 recommended
* Prerequisite(s) or Corequisite(s): INFO 3300

Emphasizes web application development using modern server-side frameworks for web site architecture as well as data integration technologies. Covers server-side architectural design patterns in depth using Model View Controller (MVC) frameworks. Covers Object Relational Mapping (ORM) tools for database integration as well as techniques to secure a website from common attacks. Teaches how to implement web site authentication and authorization, form validation, web services, and introduces unit testing and test-driven development. Instructs how to package and deploy applications to a web server. Lab access fee of $45 applies.

**INFO 3410**
**Database Systems and Warehousing**
**3**
* Prerequisite(s): (INFO 2410 or CS 3520 with a grade of C- or higher within the past seven years) and University Advanced Standing

Covers advanced database development topics and introduces a data warehouse model designed especially to support analytics and reporting needs. Database development topics covered include transaction management, performance optimization, data loading, and the development of stored procedures, triggers, and functions. Presents the data warehouse model in contrast to existing operational transaction systems. Analyzes business reporting needs, creates models for data warehouses based on the reporting needs, and uses SQL to create and populate tables based on dimensional models. Lab access fee of $45 for computers applies.

**INFO 3430**
**Systems Analysis and Design WE**
**3**
* Prerequisite(s): [INFO 2410 and (INFO 2420 or IT 2700)] or [IM 2600 and IM 2800] each with a grade of C- or higher within the past seven years] and (MKTG 220G or ENGL 2310) and University Advanced Standing

Introduces the systems development life cycle with a focus on systematic planning; requirements, process, and data analysis; and an overview of the design phase. Covers fundamental principles, effective processes, and techniques of project management, including scheduling and project control. Covers appropriate methodologies, tools, diagrams, and techniques for systems analysis, design, and project management. Requires working in teams to complete and present the first planning and analysis phases of a project for a client. Should be taken in the end of the junior year or first semester of the senior year. Should be taken in sequence with INFO 4430 immediately following this course. Lab access fee of $45 for computers applies.

**INFO 3700**
**Health Informatics Fundamentals**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): INFO 2410 or ZOOL 1090 or HLTH 3200

Introduces the concepts, practices and ethics of health informatics. Includes a survey of current health care information systems, such as electronic health records, practice management systems, patient portals, consumer health informatics, disease registries, e-prescribing, telemedicine, and public health informatics. Surveys health care information exchange and related standards and classification systems used to implement interoperable computer-based patient records. Examines privacy and security measures, such as HIPAA, HITECH Act, and Meaningful Use and how they are related to data security, privacy and public perception. Lab access fee of $45 for computers applies.

**INFO 3750**
**Healthcare Information Systems Applications**
**3**
* Prerequisite(s): [(INFO 1200 or IT 1200 or CS 1400) and (INFO 2410 or CS 3520) both with a grade of C- or higher within the past seven years] and University Advanced Standing
* Prerequisite(s) or Corequisite(s): INFO 3700

Provides pragmatic coverage of the topics and resources relevant to health informatics. Exposes students to real-world examples and skills related to the acquisition, representation, management, analysis, and use of different types of HIS data. Emphasizes issues such as standardization, security, and handling unstructured data. Includes assignments, a course project, and hands-on experience in applying informatics solutions in health care settings. May be delivered hybrid. Lab access fee of $45 for computers applies.

**INFO 405G**
**Global Ethical and Professional Perspectives in IS and IT**
**3**
* Prerequisite(s): INFO 3430 and University Advanced Standing

Examines professional and ethical issues within the information systems and information technology fields with a global perspective. Covers ethical and legal issues IT professionals face dealing with computer and cybercrimes, privacy issues, freedom of expression, intellectual property, software development including risk analysis, and social networking. Includes career professional development through resumes, cover letters, and job interviews specific to information systems and technology. Focuses on global networked readiness, digital highways, and challenges that information technology organizations face. May be delivered hybrid. Lab access fee of $45 for computers applies. Canvas Course Mats $76/ Cengage applies.

**INFO 4120**
**Business Intelligence Systems**
**3**
* Prerequisite(s): INFO 2410 and University Advanced Standing; INFO 3130 recommended

Focuses on extracting business intelligence from data sets for various applications including reporting and visual analytics in multiple domains including web analytics and business analytics to aid decision-making processes. Provides hands-on experience with a variety of business intelligence software for reporting and building visualizations and dashboards. Emphasizes how to extract, present and apply business intelligence to improve business decision making. Lab access fee of $45 for computers applies.

**INFO 4130**
**Data Science and Big Data Analytics**
**3**
* Prerequisite(s): (STAT 2050 or MGMT 2340), INFO 3130, and University Advanced Standing

Capstone course extends the concepts of analytics to the analysis of large data-sets, and preparation of analysis reports and presentations describing implications of findings. Uses modern tools such as SAS and R for advanced analytics and Hadoop for big data. Covers the theory and methods of advanced data analytics such as clustering, association, decision trees, time series, and text analysis. Hands-on application using a big data lifecyle lab. Lab access fee of $45 for computers applies.

**INFO 4135**
**Data Security Analytics**
**3**
* Prerequisite(s): IT 2700 and INFO 2410 and University Advanced Standing; (INFO 3130 and INFO 3410 recommended)

Introduces students to the concept of data analytics as applied to cyber security. Includes collection, aggregation, data mining, and analysis of various data sources. Utilizes data analytics tools that correlate data in order to identify security events that may go undiscovered by traditional detection and log analysis methods. Lab access fee of $45 for computers applies.

**INFO 4300**
**Enterprise Web Development**
**3**
* Prerequisite(s): INFO 3300 and University Advanced Standing

Addresses the challenges of developing software applications in a corporate environment. Covers methods to interact with code repositories and commit developed code. Teaches how to create web applications using test-driven development and how to write unit tests for applications. Teaches how to create and group unit tests together and how to trigger the tests automatically when code changes are made. Implements cloud deployments of web applications and teaches how to manage cloud resource usage. Lab access fee of $45 for computers applies.

**INFO 4410**
**Database Administration**
**3**
* Prerequisite(s): (INFO 2410 or CS 3520 within the past five years) and University Advanced Standing

Introduces students to the database administration tasks and tools of a Relational Database Management System (DBMS). Includes the core areas of installation and configuration, maintaining instances and databases, optimizing and troubleshooting, managing data, implementing security, and implementing high availability. Also, introduces NoSQL database solutions and their administration and configuration. Hands-on assignments provide students with opportunities to apply the knowledge gained in the course to a popular commercial database management system. Lab access fee of $45 for computers applies.

**INFO 4415**
**Database Security and Auditing**
**3**
* Prerequisite(s): (INFO 3410 or IT 3700) and University Advanced Standing

Utilizing theory, scenarios, and step-by-step examples, this course provides a strong foundation in database security and auditing. Covers the following topics in depth: the importance of database security in contemporary business environments; Security; Profiles; Password policies, privileges and roles; Virtual Private Databases; Auditing; SQL injection; Database management security issues. Lab access fee of $45 for computers applies.

**INFO 4420**
**Mobile Application Development**
**3**
* Prerequisite(s): (INFO 1200 or CS 1400) and (INFO 2410 or CS 3520) and University Advanced Standing; (INFO 2200 recommended or CS 1410 recommended)

Focuses on the design and development of native mobile device applications. Covers mobile interface design and development using the navigation controls specific to a popular mobile development platform. Teaches methods for integrating various device capabilities such as the accelerometer, touch interface, contacts app, image displaying capabilities, and the device's storage. Introduces apps that store and retrieve data from popular cloud data stores.Lab access fee of $45 for computers applies.

**INFO 4425**
**Web Application Security**
**3**
* Prerequisite(s): IT 2700 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): INFO 3300

Examines web application vulnerabilities and remediation techniques. Explores various tools and techniques for mapping web applications and assessing their vulnerabilities. Includes authentication management, session management, cross-site scripting, SQL injection, and web server configuration. Emphasizes practical skills developed through extensive hands-on exercises. Lab access fee of $45 for computers applies.

**INFO 4430**
**Systems Design and Implementation**
**3**
* Prerequisite(s): INFO 3430 and University Advanced Standing

Continuation of INFO 3430. Focuses on the design and implementation of an information system using an agile, iterative development approach. Utilizes self-organizing teams that will deliver working software with ongoing customer collaboration. Introduces use of a source control system to manage code base, an agile project management tool, and encourages continuous integration practices. Requires that students work in teams to complete and present a working system of a project for a client. Lab access fee of $45 for computers applies.

**INFO 4440**
**Enterprise Computing Environments**
**3**
* Prerequisite(s): (ACC 2020 or INFO 3120 or TECH 4420) and University Advanced Standing

Introduces students to Enterprise Computing Environments. Focuses particularly on the configuration and information processing capabilities of ecommerce systems and Enterprise Resource Planning (ERP) systems. Requires students to install, configure, and customize the Magento ecommerce system, and to manage master data. Introduces both Microsoft Dynamics and the SAP ERP system. Uses SAP and Dynamics to demonstrate how enterprise software supports business processes such as order processing, materials requirements management, shipping, invoicing, and purchasing. Requires students to configure a fictional business using the SAP ERP system. May be delivered hybrid. Lab access fee of $45 for computers applies.

**INFO 4550**
**Senior Project**
**3**
* Prerequisite(s): INFO 3430 and University Advanced Standing

Involves the implementation of a significant information system or information technology project. Requires students to work in teams to design and develop a working information system or information technology solution for a community client. Culminates in a presentation of the completed project by project developers to project stakeholders, interested faculty, and administration. Lab access fee of $45 for computers applies.

**INFO 459R**
**Current Topics in Information Systems**
**3**
* Prerequisite(s): (Junior Standing or Department Approval) and University Advanced Standing

Provides exposure to emerging technologies and topics of current interest in information systems. Varies each semester depending upon the changes in the information systems discipline or to address a focused area within the information systems discipline. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of $45 for computers applies.

**INFO 4700**
**Healthcare Information Systems Management**
**3**
* Prerequisite(s): University Advanced Standing

Overviews business practices related to health care information systems. Augments the study of the science of health information with an exposure to the practices whereby health care organizations set goals and objectives, design and implement IT solutions, manage the IT function and organization, and develop technology capital and operating budgets. Presents current best practices of the business of health informatics, drawn from industry journals and business analysis consultants. Covers the management aspects of the legal and ethical issues related to HIS including applying laws related to confidentiality and data security. Lab access fee of $45 for computers applies.

**INFO 481R**
**Internship**
**1 to 3**
* Prerequisite(s): INFO 3300, INFO 3410, INFO 3430, (INFO 3130 or INFO 3330 or INFO 3700 or IT 2700, depending on emphasis), Department Approval, and University Advanced Standing

For upper-division students in information systems. Provides an opportunity to apply classroom theory while students work as employees in a job that relates to their careers in information systems. A maximum of 3 credit hours may be counted towards graduation without prior written IS&T Department approval. May be graded credit/no credit.

**INFO 489R**
**Undergraduate Research in Information Systems**
**1 to 4**
* Prerequisite(s): Department approval and University Advanced Standing

Provides the opportunity to conduct research under the mentorship of a faculty member. Practices the theoretical knowledge gained in prior major courses. Creates a significant intellectual or creative product that is characteristic of the Information Systems discipline and worthy of communication to a broader audience. May be repeated for a maximum of 6 credits toward graduation.

**INFO 497R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Department chair approval and University Advanced Standing

For bachelor's degree students and other interested persons. Offers independent study as directed in reading, in individual projects, at the discretion and approval of the department chairperson. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of $45 for computers applies.

**INFO 6420**
**Web and Mobile Application Security**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approvall
* Prerequisite(s) or Corequisite(s): IT 6300

Examines Web application vulnerabilities and remediation techniques. Explores various tools and techniques used to perform Web application assessments. Includes cross-site scripting, SQL injection, session management, and Web server configuration. Emphasizes practical skills developed through extensive hands-on exercises.

# Intelligence Studies (INTS)

**INTS 1000**
**Introduction to Intelligence Operations Studies**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Introduces the basic elements of intelligence: collection, analysis, dissemination, counterintelligence, and covert action. Examines the difference between intelligence and information. Describes the structure, functions, capabilities, and contributions of the national intelligence community, including Congress, the military, joint and unified commands, and law enforcement agencies. Identifies the various steps of the intelligence cycle and their purposes. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1010**
**Counterintelligence Investigations**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Introduces the principles, objectives, procedures, and reports used to conduct counterintelligence investigations within various investigational contexts. Assesses the planning, communicating, operating, credentialing, and investigating processes associated with counterintelligence investigations. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1020**
**Security Programs**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Introduces the principles, objectives, and basic procedures used to develop, account for, control, protect, and arrange for the eventual destruction of sensitive information and material. Prepares students for the investigation of security crimes and the protection of classified information and material in the custody of counterintelligence agents. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1030**
**Intelligence Law and Administration of Justice**
**1**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Introduces the legal principles of intelligence law as those principles apply to counterintelligence investigations and operations. Prepares students to use the principles of intelligence law and the administration of justice in the performance of their duties as counterintelligence agents. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1040**
**Analytical Process and Product**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Introduces the three analytical processes in the intelligence cycle: intelligence preparation of the battlefield, intelligence surveillance and reconnaissance, and targeting. Leverages analytical products associated with these processes such as PMESII, ASCOPE, Link-Pattern-Nodal analysis, threat characteristics, threat objectives, threat templates, the oil spot, and the situation template. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1050**
**Interrogation Operations**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Introduces the basic skills and knowledge to support the collection, dissemination, and protection of intelligence information during human intelligence operations. Applies conventional and unconventional sources with students performing as members of an interrogation team during simulated operations at both tactical and strategic levels. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1060**
**Map Reading and Analysis**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Applies map reading and analysis including marginal data, identification of terrain features, and calculation of azimuths. Teaches analytical skills essential to information gathering, collection capabilities, and interpretation of assets. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1080**
**Signal Theory**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Identifies the basic skills to intercept, analyze, and report non-communication signals. Includes the handling of classified material. Examines signal and wavelength theory, radar theory, electronic intelligence parameters, and basic collection operations. Assesses worldwide non-communications threats to include weapons systems operations, message information extraction, opposing forces operations, and situation analysis. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1090**
**Signal Analysis and Security**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Operates the applicable software. Displays automated situation map updates. Applies electronic messaging as part of an analysis control element team. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1100**
**Remote Sensing**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Analyzes hardcopy and softcopy imagery collected from the electronic magnetic spectrum. Utilizes intelligence databases as well as automated processing and dissemination systems to provide valid, accurate, and timely intelligence to appropriate agencies. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1110**
**Information Security for Intelligence Operations**
**1**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Assesses information security as it applies to intelligence operations in the military (INFOSEC). Examines specific INFOSEC issues, to include safekeeping and storage of classified materials, application of classification markings to appropriate documents, and proper destruction of classified materials. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1120**
**Imagery Analysis Techniques**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Develops the basic skills to successfully employ and analyze imagery in an operational environment. Introduces basic analytical techniques, sensor capabilities and limitations, characteristics of observed operational activity, spectral and stereoscopic imagery, and full motion video. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1130**
**Terrorism and Counterterrorism**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Examines the history of terrorism and the tactics and technologies used by terrorist groups. Assesses the nature of the terrorist threat and countermeasures to combat terrorism. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1140**
**Reporting of Intelligence Data**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Identifies the essential elements of information, selection of reporting vehicle, and production of concise and timely technical summaries. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 115R**
**Briefing Skills**
**1**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Produces the skills required to perform the duties and operations necessary to conduct briefings in the intelligence operations field. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah. May be repeated for a total of four credits toward graduation.

**INTS 1160**
**Imagery Identification**
**6**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches how to use aerial images to identify threat and operational equipment, including: naval vessels; fixed, swing, and rotary wing aircraft; engineer and decontamination equipment; truck models and functions; armored personnel carriers (APCs); missiles, rockets, and launch sites; communication and radar sites; artillery and artillery related equipment; and tanks and armored recovery vehicles (ARVs). Teaches how to identify from aerial imagery organizations and activity in relation to the Ground Order of Battle (GOB). This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1170**
**Symbology**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches the skills necessary to translate incoming message traffic into military symbols. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1180**
**Intelligence Preparation of the Battlefield**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Identifies characteristics of the modern battlefield. Analyzes how the operational environment of the battlefield can affect friendly and threat operations. Defines the operational environment, considers the effects of weather and terrain, evaluates threat, and determines potential threat courses of action. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1190**
**Introduction to Communications for Intelligence Operations**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Tests basic oral communication in English for non-native speakers. Practices the fundamentals of oral communications in interpersonal, small-group, and large-group situations in the field of intelligence operations. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1200**
**Records Management**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Introduces the procedures, regulations, and forms used to accurately account for and manage an organization's records and funds. Provides an opportunity to practice skills as custodians in a simulated large agency operating environment. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1210**
**Counterintelligence Investigations II**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Analyzes the collection, evaluation, and use of information to produce justifiable conclusions in support of the counterintelligence mission. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1220**
**Intelligence Surveillance and Reconnaissance (ISR)**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches the Intelligence, Surveillance, and Reconnaissance (ISR) process across the scope of military operations from Joint Task Force level to Battalion level. Identifies the functions of the ISR process and its relationship to decision making. Requires development of an ISR plan, dissemination of information, and implementation of the plan. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1230**
**Targeting**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Examines the targeting process across the scope of intelligence operations. Introduces the Decide, Detect, Deliver, and Assess (D3A) methodology of targeting. Assesses the functions associated with the D3A methodology and how these functions interact with the decision-making process. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1240**
**Cellular Communication Fundamentals**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches cellular technologies used around the world to deploy enhanced wireless capabilities. Covers the evolution of cellular capabilities to current protocols and standards. Provides a comprehensive overview of the options available in handling voice and data transmitted through wireless technologies. Explores variations among Frequency Division Multiple Access (FDMA), Time Division Multiple Access (TDMA), Code Division Multiple Access (CDMA), and Global System for Mobile communications (GSM). This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1310**
**Personal Identification methods in Battlefield Forensics**
**2**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Explores the methods used to identify individuals based on evidence collected at an incident scene in a battlefield environment. Emphasizes the identification, collection, and preservation of biological evidence for criminal investigations and legal procedures. Examines specific topics including: fingerprints, facial recognition, bloodstain analysis, and biometrics. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1410**
**Battlefield Forensic Investigations I**
**4**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Examines battlefield forensic investigation procedures and techniques. Emphasizes incident scene management and the identification, collection, and preservation of material evidence related to the manufacture and use of improvised explosive devices (IEDs). This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 1420**
**Battlefield Forensic Investigations II**
**4**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Explores the technical aspects of the collection and preservation of physical evidence from a battlefield environment. Emphasizes the processes involved in identifying persons assembling improvised explosive devices (IEDs), and the tactics and techniques used in the employment of those devices. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2000**
**Collection Operations**
**4**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches source collection operations in the operational cycle, including: collection planning, identifying, assessing, recruiting, training, tasking, interviewing, and providing source operations support. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2020**
**Force Protection Operations and Support**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches how to assimilate, analyze, and distribute multidiscipline counterintelligence products in support of tactical force protection. Explores specific areas of interest, to include counterintelligence operations in a deployed environment and current threat assessment technology. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2030**
**Combating Terrorism**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches the history and development of terrorism. Includes recognizing the phases of a terrorist incident and how to understand a terrorist group's structure, degree of support, and scope of operations. Teaches use of basic analytical tools available to combat terrorism. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2040**
**Interrogation and Interview Techniques**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Describes how to prepare for and question a source, collect all information of intelligence value, and report this information in the proper format. Identifies appropriate approach and questioning techniques, effective listening and note-taking methods, source screening procedures, and proper exploitation phases to collect intelligence information. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2090**
**Automated Intelligence Systems**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Explores the use of automated intelligence systems in the field of intelligence operations. Assesses the basic system operations and conventions. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2100**
**Intermediate Remote Sensing**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Applies knowledge of intelligence operations and how they use observed activity in the analysis of hardcopy and softcopy imagery. Utilizes imagery databases to provide organizations with accurate and timely reports, intelligence briefs, and assessments based on given scenarios and Priority Intelligence Requirements (PIRs). This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 211R**
**Military Decision Making Process**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Assesses the mission analysis and the military decision-making process. Reviews situation analysis, problem analysis, and decision analysis. Examines the relationship between the decision maker and the decision environment. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah. May be repeated for a total of nine credits toward graduation.

**INTS 2120**
**Intermediate Imagery Analysis Techniques**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Develops ability to apply photogrammetry techniques, equipment identification techniques, and softcopy and hardcopy imagery manipulation techniques to produce accurate imagery analyses and activity assessments. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2140**
**Reporting of Intelligence Data II**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches skills for the preparation of intelligence reports using pertinent information to satisfy the appropriate requirements. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 215R**
**Briefing Skills II**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Demonstrates advanced preparation and delivery of briefings in the intelligence operations field. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah. May be repeated for a total of nine credits toward graduation.

**INTS 2200**
**Reporting of Intelligence Data III**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Examines tactical human intelligence (HUMINT) issues for the advanced intelligence operations practitioner maintaining a HUMINT-specific occupational specialty. Teaches how to plan and prepare timely and effective intelligence reports in both urban and rural environments. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2210**
**Counterintelligence Investigations III**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Focuses on how to understand the objectives, apply the procedures, and produce the reports used in advanced counterintelligence investigations. Expands knowledge and abilities in the planning, communicating, operating, credentialing, and investigating processes related to advanced counterintelligence investigations. Designed for the tactical human intelligence (HUMINT) practitioner. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2230**
**Intelligence Law and Administration of Justice II**
**1**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Examines the legal principles and regulations of intelligence law as they apply to counterintelligence investigations and operations. Teaches the application of principles of intelligence law and of the administration of justice in the performance of duties as tactical human intelligence (HUMINT) practitioners. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2240**
**Force Protection Operations and Support II**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Teaches the human intelligence (HUMINT) practitioner improved methods to assimilate, analyze, and distribute multidiscipline human products in support of tactical force protection operations. Focuses on human intelligence operations in a tactically deployed environment. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2250**
**Analytical Process and Product II**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Explores the tactical human intelligence (HUMINT) field. Teaches the preparation of analytical tools to assess a combat environment. Analyzes conventional and unconventional threat forces, various types of organizations, and associated weapons and equipment, as well as the tactics, techniques, and procedures of groups or forces identified as posing a threat to U.S. interests. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2260**
**Interrogation and Interviewing Techniques II**
**3**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Provides advanced preparation for questioning a human intelligence source and to collect and report information that is of intelligence value. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2410**
**Management of Intelligence and Counterintelligence Operations I**
**4**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Studies the organizational management of intelligence and counterintelligence operations. Examines the theoretical and practical perspectives of managing increasing levels of responsibility, with emphasis on problem-solving and decision-making processes and on the role of the leader. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

**INTS 2420**
**Management of Intelligence and Counterintelligence Operations II**
**4**
* Prerequisite(s): Acceptance into the Intelligence Studies Program

Explores the managerial challenges related to the multidiscipline roles in intelligence and counterintelligence operations. Emphasizes the assessment of external and internal environments, strategic initiatives, and communication techniques, and the allocation and coordination of personnel and resources. This course is limited to students participating in the Utah National Guard's (UNG) Military Intelligence Education Program at Camp Williams in Bluffdale, Utah.

# Integrated Studies (IS)

**IS 2000**
**Knowledge Integrated**
**3**

Introduces questions or problems whose answers or solutions require the integration of ideas and disciplines. Focuses on ideas from a variety of cultural perspectives. Covers how important thinkers through history have approached difficult questions in ways that integrated disciplines. Provides the opportunity to complete written assignments based on research.

**IS 300R**
**Introductory Topics in Integrated Studies**
**3**
* Prerequisite(s): (PHIL 2050 or 205H or 205G) and (ENGL 2010 or 201H) and University Advanced Standing

Introduces a variety of topics crossing disciplines in science, religion, philosophy, history, literature, business, technology and the arts. Topics vary from semester to semester, but course remains modular in structure. Research and writing intensive. Requires final research paper. Involves writing across the curriculum. May be repeated for a maximum of 12 credits toward graduation.

**IS 350R**
**Topics in Integrated Studies**
**3**
* Prerequisite(s): (PHIL 2050 or 205H or 205G) and (ENGL 2010 or 201H) and University Advanced Standing

Examines a particular interdisciplinary topic; topics vary from semester to semester. Presents topics that cross one or more fields of academic specialty from the arts and sciences. Includes lecture, reading, discussion and research. Research and writing intensive, requires final research paper. May be repeated for a maximum of 12 credits toward graduation.

**IS 481R**
**Internship**
**1 to 9**

Provides supervised, practical, and professional experience at the upper-division level in preparation for a variety of careers. Develops skills relevant to the professional workforce and presents interdisciplinary evaluative and reflective exercises of the experience. Content will vary from internship to internship. May be repeated for a maximum of 9 credits toward graduation.

**IS 495R**
**Interdisciplinary Lecture Series**
**1**
* Prerequisite(s): University Advanced Standing

Explores connections between various academic disciplines. Provides a broadly based look at a range of disciplines. May be repeated for a maximum of 3 credits towards graduation.

**IS 4980**
**Integrated Studies Capstone I**
**3**
* Prerequisite(s): IS 300R or IS 350R; Junior or Senior Standing in the Integrated Studies bachelor degree; and University Advanced Standing

Focuses on a major research paper integrating the student's two emphases. Addresses theoretical and practical problems associated with research and writing that combine disciplines. Includes work with a committee throughout the semester. Taken first semester in the two-semester capstone sequence.

**IS 4990**
**Integrated Studies Capstone II WE**
**3**
* Prerequisite(s): IS 4980 and University Advanced Standing

Focuses on a major research paper (senior thesis) integrating the student's two or more emphases. Addresses theoretical and practical problems associated with research and writing that combine disciplines. Includes work with a committee throughout the semester, which must approve the written thesis. Requires the student to orally present the thesis in a formal defense. Taken second semester in a two-semester capstone sequence.

# Information Technology (IT)

**IT 1200**
**Scripting for Administrators**
**3**
* Prerequisite(s): MAT 1010 or higher; INFO 1120 recommended

Introduces the fundamentals of script design and implementation with an emphasis on the automation of administrative tasks. Covers modular script design and the use of file input and output. Emphasizes interaction of a script with other scripts, utilities, and the operating system to form more complex systems. Manipulates values of variables (both numbers and strings). Introduces simple GUI interfaces. Lab access fee of $45 applies.

**IT 1510**
**Introduction to System Administration--Linux/UNIX**
**3**
* Prerequisite(s): INFO 1120 recommended

Introduces the UNIX Operating System using the popular Linux OS. Explores the Linux file system, Linux administration, OS utilities, and program features and uses. Aids the student in the development, understanding, and working knowledge of the details of the Linux Operating System, memory organization, disk architectures, and demand paged virtual memory. Includes OS installation, user creation, rights management, loading daemons, and server best practices. Lab access fee of $45 for computers applies.

**IT 1600**
**Computer Architecture and Systems Software**
**3**
* Prerequisite(s): INFO 1120 recommended

Provides a thorough grounding in computer hardware, system software, and contemporary information system architecture. Examines hardware structure, operating systems theory, and systems software as part of a technical foundation for enterprise systems development and IT infrastructure procurement and management. Lab access fee of $45 for computers applies. Canvas Course Mats $153/ TstOut applies.

**IT 1700**
**Cybersecurity Essentials**
**3**

For non-Information Technology and non-Information Systems majors. Introduces cybersecurity and its role in society in a nontechnical way. Explores cybersecurity topics, including protecting accounts, securing data, and avoiding phishing scams. Discusses current hacking and cybersecurity events. Identifies best practices for personal cybersecurity. Provides basic introduction to cybersecurity tools. Lab access fee of $45 applies.

**IT 2400**
**Voice and Data Cabling Fundamentals**
**3**
* Prerequisite(s): INFO 1120 or INFO 1200 or CS 1030 or CS 1400

For students interested in the physical aspects of voice and data network cabling and installation. Focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards. Covers types of media and cabling, physical and logical networks, as well as signal transmission. Focuses on best practices and safety using copper and fiber-optic cabling. Requires students to install a complete cable infrastructure for a simulated telecommunications room. Enforces industry and worldwide standards. Requires a community project and portfolio based on voice/ data cabling skills. Lab access fee of $45 for computers applies.

**IT 2530**
**Introduction to System Administration--WIndows Client**
**3**
* Prerequisite(s): IT 1600

Introduces operation management of operating systems using Microsoft Windows. Introduces installation methods and troubleshooting, hardware device installation and management, storage management, disaster recovery planning and management. Aids the student in the development, understanding, and working knowledge of the Windows networking framework including peer-to-peer, workgroups, user profiles, domains, NTFS, and share-level permissions. Lab access fee of $45 for computers applies.

**IT 2600**
**Data Communication Fundamentals**
**3**
* Prerequisite(s): INFO 1120 recommended or IT 1600 recommended or CS 1400 recommended

Provides an in-depth knowledge of data communications and enterprise networking including networking and telecommunications technologies, hardware, and software. Emphasizes underlying technologies and protocols. Design topics include wired and wireless architectures; topologies, models, standards and protocols; and operation of bridges, routers, switches, and gateways. Includes lab assignments covering TCP/IP implementations. May be delivered hybrid. Lab access fee of $45 for computers applies.

**IT 2700**
**Information Security Fundamentals**
**3**
* Prerequisite(s): IT 2600 or CS 2600; (IT 1600 recommended)

Explores introductory information and cybersecurity concepts: security technologies, methodologies, and tools. Topics include security models, risk assessment, threat analysis, attack types, encryption technologies, security implementation, access controls, business continuity, and security policies. Discusses current topics, trends, and career opportunities in information security. Includes lab assignments covering information security principles. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**IT 2800**
**Computer Forensic Fundamentals**
**3**
* Prerequisite(s): INFO 1120 or IT 1600 or CS 1400 or CJ 1010

Explores procedures for identification, preservation, and extraction of electronic evidence. Emphasizes auditing and investigation of network and host system intrusions, analysis and documentation of information gathered, and preparation of expert testimonial evidence. Examines forensic tools and resources for system administrators and information system security officers. Includes ethics, law, policy, and standards concerning digital evidence. Requires lab experience and a research paper or project. Lab access fee of $45 for computers applies.

**IT 281R**
**Internship**
**1 to 4**
* Prerequisite(s): Department Approval

Provides opportunities to apply classroom theory on the job. Requires work as paid employees in a job that relates to their careers while enrolled at the university. Requires students to meet at least monthly with the Departmental Internship Coordinator. Requires completers to meet individually set goals. May be repeated for a maximum of three credits toward graduation. May be graded credit/no credit.

**IT 290R**
**Current Topics in Information Technology**
**1 to 3**
* Prerequisite(s): Departmental Approval

Provides exposure to current and emerging information technologies. May be used to provide content to prepare students to take industry-recognized IT certification exams, such as CompTIA Linux+, CompTIA A+, Apple Certificated Professional, Certified Fiber Optic Technician, IC3, CompTIA Network+, CompTIA CTP+, Access Data Certified Examiner, MCSA, Cisco CompTIA Security+, Certified Ethical Hacker, etc. Varies each semester. May be repeated for a maximum of 6 credits toward graduation. Lab access fee of $45 for computers applies.

**IT 3350**
**Intellectual Property and Cyber Law**
**3**
* Prerequisite(s): ENGL 2010 and (PRLG 1000 or CS 1030 or INFO 1120 or LEGL 3000) and University Advanced Standing

Explores the legal and policy issues associated with the Internet and cyberspace. Studies case law, statutes, regulations, and constitutional provisions that affect people and businesses interacting through computers and the Internet. Covers intellectual property (trademarks, copyrights, patents, trade secrets, and unfair competition) and examines legal requirements to create, register and protect intellectual property rights. Focuses on e-commerce, online contracts, cybercrimes, torts, and privacy issues pertaining to technology. Lab access fee of $45 for computers applies.

**IT 3400**
**Data Cabling Signal Characteristics**
**3**
* Prerequisite(s): INFO 1120 or INFO 1200 or CS 1030 or CS 1400 or MECH 1200

For EART/Mechatronics majors or students interested in the physical aspects of data network signal characteristics, cabling and installation for those signals. Focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards. Covers types of media and cabling, physical and logical networks, as well as signal transmission. Focuses on best practices and safety using copper and fiber-optic cabling. Requires students to install a complete cable infrastructure for a simulated telecommunications room. Enforces industry and worldwide standards. Requires a community project and portfolio based on voice/ data cabling skills. Requires a research paper.

**IT 3510**
**Advanced System Administration--Linux/ UNIX**
**3**
* Prerequisite(s): [INFO 1200 and IT 1510 and (IT 2600 or CS 2600) all with a grade of C- or higher within the past five years] and University Advanced Standing

Explores enterprise systems administration using the UNIX/Linux operating system. Students learn advanced administrative tasks including server installation, network configuration and user management, file management, network services deployment, server security, back up and recovery, Shell scripting, source compilation, performance monitoring and tuning, troubleshooting, and managing hardware and component changes. Requires a community project and portfolio based on advanced server management skills. Lab access fee of $45 for computers applies.

**IT 3530**
**Advanced System Administration--Windows Server**
**3**
* Prerequisite(s): [INFO 1200 and IT 2530 and (IT 2600 or CS 2600) all with a grade of C- or higher within the past five years] and University Advanced Standing

Explores enterprise systems administration using the Microsoft Windows Server operating system. Students learn advanced administrative tasks including server installation; hardware change management; software application management; network configuration and user management; file management; printing; network services deployment; server security; back up and recovery; scripting; performance monitoring, tuning, and troubleshooting. Lab access fee of $45 for computers applies.

**IT 3540**
**Mac OS and Server Support**
**3**
* Prerequisite(s): [INFO 1200 and IT 1510 and (IT 2600 or CS 2600) all with a grade of C- or higher within the past five years] and University Advanced Standing

Provides an in-depth exploration of the Mac OS X, and provides the skills to troubleshoot and correct problems that may arise by users. Teaches installation and configuration of a Mac OS X Server. Involves implementing and maintaining a Mac server in a network, including file sharing, mail, web, and wikis. Software fee of $14 applies. Lab access fee of $45 for computers applies.

**IT 3600**
**Internetworking and Router Management**
**3**
* Prerequisite(s): [(INFO 1200 or CS 1400) and (IT 2600 or CS 2600) all with a grade of C- or higher within the past five years] and University Advanced Standing

Teaches the theory and implementation skills and techniques needed to configure, troubleshoot and support reliable TCP/IP internetworks. Discusses security and management issues. Offers the opportunity to build an internetwork with cables, network cards, and routers. Emphasizes the analysis and design of networks in organizations. Includes lab assignments covering TCP/IP implementations and router configurations. Lab access fee of $45 for computers applies.

**IT 3650**
**Information Storage and Management**
**3**
* Prerequisite(s): IT 1600, IT 2600, and University Advanced Standing

Presents concepts, principles, and deployment considerations across all technologies that are used for storing and managing information. Describes challenges and solutions for data storage and data management, intelligent storage systems, and storage networking. Studies backup, recovery, and archive processes. Discusses business continuity, disaster recovery, storage security and virtualization, and managing and monitoring the storage infrastructure. Software fee of $192 applies. Lab access fee of $45 for computers applies.

**IT 3700**
**Information Security--Network Defense and Countermeasures**
**3**
* Prerequisite(s): IT 1510, IT 2700, (IT 3510 or IT 3530), and University Advanced Standing
* Prerequisite(s) or Corequisite(s): IT 3600

Examines advanced information security concepts through an applied viewpoint. Extends the student's understanding of security issues through hands-on application of real-world techniques and use of current security software. Topics include legal/ethical issues, use of security tools, network reconnaissance, password/brute-force attacks, firewall configuration, Honeypot deployment, intrusion analysis/detection, server hardening, and penetration testing. Guest lecturers provide insight into current trends in advanced security issues. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**IT 459R**
**Current Topics in Information Technology**
**3**
* Prerequisite(s): (Junior Standing or Department Approval) and University Advanced Standing

Provides exposure to emerging technologies and topics of current interest in information technology. Varies each semester depending upon the changes in the information technology discipline or to address a focused area within the information technology discipline. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of $45 for computers applies.

**IT 4600**
**Enterprise Network Architectures and Administration**
**3**
* Prerequisite(s): IT 3600 and University Advanced Standing

Examines management of resources used in enterprise computing environments from a practical, applied viewpoint. Extends the student's understanding of these concepts through hands-on application of real-world network, server, and software management techniques and addresses the problems associated with providing a secure, stable, reliable enterprise computing infrastructure. Includes principles of IT enterprise infrastructure management; configuration, analysis, and troubleshooting of virtual servers; redundancy and failover; directory service integration, access control and security; uptime monitoring and notification; backup and recovery; Storage Area Networking; Cloud computing platform choices, functionality, cost, deployment, flexibility, and adaptability. Lab access fee of $45 for computers applies. Software fee of $118 applies.

**IT 4700**
**Enterprise Cybersecurity Management**
**3**
* Prerequisite(s): IT 2700 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): INFO 3430

Provides perspective of key issues involved in IT activities across the organizational and technical security landscape. Examines management methodologies, staffing, and operational issues. Teaches use of financial analysis and decision-making methodologies to aid investment decisions at the operational, functional, and strategic levels. Illustrates use of risk assessment and contingency planning as applied to business continuity and disaster recovery strategies. Includes the use of Service Level Agreement for managing both internal and external relationships. Lab access fee of $45 for computers applies.

**IT 4750**
**Network Security and Operations Capstone**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): IT 4700

Senior-level, capstone experience course. Enhances student cyber security knowledge with operational and business applications. Focuses on integrating cyber security principles as an organic part of an organization's processes. Covers barriers to implementing security policy, building a business case for cyber security, and incorporating cyber security into project management and software life cycles. Requires student project presentations. Lab access fee of $45 for computers applies.

**IT 4760**
**Case Studies in Cyber Security**
**3**
* Prerequisite(s): IT 2700 and University Advanced Standing

Discusses current trends and issues in cyber security. Updated regularly to reflect global events related to cyber security. Topics include data breaches, cyber warfare, emerging threats. Emphasis on the changing and transformative nature of cyber security threats, including geographical, institutional, and cultural evolution. Guest lecturers from industry will provide students with perspectives on the state of cyber security. Examines real-world examples of the application of cyber security principles and requires critical analysis of each case. Lab access fee of $45 for computers applies.

**IT 4800**
**Advanced Mobile Devices Forensics**
**3**
* Prerequisite(s): IT 2800 and University Advanced Standing

Discusses devices that can store digital information such as cell phones, tablets, digital camera/camcorders, thumb drives and memory cards. Focuses on lab investigations of one or more digital media through image acquisition, data analysis, and assembly of a final written report of findings. Provides opportunities to use multiple software tools in device acquisition and analysis. Covers processes and procedures through mock investigations. Lab access fee of $45 for computers applies.

**IT 481R**
**Internship**
**1 to 8**
* Prerequisite(s): (IT 3510 or IT 3530 or IT 3540 or IT 3600 or IT 3700 or department approval) and University Advanced Standing

For Information Technology bachelor's degree students. Provides opportunities to apply upper-division classroom theory while students work as employees in a job that relates to their careers. Meet periodically with a Departmental Internship Coordinator. Credit is determined by the number of hours a student works during the semester and completion of individually set goals that relate to the student's selected emphasis. Prior written department chair approval is required to apply more than three credits toward a Bachelor of Science Degree in Information Technology. May be graded credit/no credit.

**IT 4850**
**Digital Forensics Investigations**
**3**
* Prerequisite(s): IT 2800 and University Advanced Standing

Is a senior capstone course for students in the Computer Forensics emphasis. Covers one or more investigations from start to finish. Integrates knowledge and skills from previous CJ, FSCI, and IT courses in this culminating experience. Lab access fee of $45 for computers applies.

**IT 489R**
**Undergraduate Research in Information Technology**
**1 to 4**
* Prerequisite(s): Department approval and University Advanced Standing

Provides the opportunity to conduct research under the mentorship of a faculty member. Practices the theoretical knowledge gained in prior major courses. Creates a significant intellectual or creative product that is characteristic of the Information Technology discipline and worthy of communication to a broader audience. May be repeated for a maximum of 6 credits toward graduation.

**IT 497R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Department chair approval and University Advanced Standing

For bachelor degree students and other interested persons. Offers independent study as directed in reading, in individual projects, at the discretion and approval of the department chairperson. May be repeated for a maximum of 9 credits toward graduation.

**IT 6300**
**Principles of Cybersecurity**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approval

Provides foundational knowledge of cybersecurity for graduate-level studies. Covers information security theories, terminology, and implementation. Includes networking and system fundamentals, cryptography, malware, authentication, authorization, access control, physical security, attacker profiles, appropriate threat responses, and the human elements of cybersecurity. Introduces multiple aspects of cybersecurity and various career paths within the field.

**IT 6330**
**Cybersecurity Operations**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approval

Focuses on operational aspects of cybersecurity. Includes incident response, network monitoring, change management, configuration management, and resource protection. Emphasizes the role of cybersecurity in the enterprise. Integrates sound cybersecurity principles into various aspects of IT operations. Includes information on secure server administration and open source security software. Teaches cybersecurity standards for government and industry sources and the application of those standards.

**IT 6350**
**Law/Ethics/Privacy in Cybersecurity**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approval

Explores legal, ethical, and privacy issues as they apply to cybersecurity. Includes the legalities and ethics of hacking, corporate information security and use policies, and the government's role in cybersecurity. Emphasizes the roles and responsibilities of individual cybersecurity practitioners as well as corporate entities, including vulnerability disclosure and correcting software defects. Teaches privacy policies and regulations as they relate to cybersecurity and information systems.

**IT 6370**
**Penetration Testing and Vulnerability Assessment**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approval
* Prerequisite(s) or Corequisite(s): IT 6300

Explores advanced topics in ethical hacking, penetration testing, vulnerability assessment, and other offensive network and system techniques. Teaches network scanning, target identification, application exploitation, antivirus evasion, physical security, social engineering, phishing, and privilege escalation. Contains hands-on labs providing experience from the perspective of an attacker.

**IT 6660**
**Advanced Network Forensics**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approval
* Prerequisite(s) or Corequisite(s): IT 6300

Provides a standard methodology for conducting digital forensic analysis in a network environment. Teaches the importance of network forensic principles and development of an understanding of the technologies, protocols, laws, regulations, ethics, and procedures for network forensics. Incorporates demonstrations and laboratory exercises covering the identification, acquisition, authentication, preservation, analysis, and reporting of evidence for prosecution purposes.

**IT 6740**
**Advanced Network Defense and Countermeasures**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approval
* Prerequisite(s) or Corequisite(s): IT 6300

Explores advanced topics in network defense, server hardening, vulnerability assessment, and mitigation scanning. Teaches students about network scanning, asset identification, Linux and Windows server hardening, anti-malware tools, intrusion detection, physical security, perimeter security, and cybersecurity awareness training. Contains hands-on labs providing experience from the perspective of a defender.

**IT 6750**
**Reverse Engineering and Malware Analysis**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approval
* Prerequisite(s) or Corequisite(s): IT 6300

Explores the analysis tools and techniques for identifying malicious programs and recovering compromised operating systems. Provides a standard methodology for reverse engineering and eradicating malware. Includes setting up isolated malware labs and utilizing a selected set of forensic tools, such as system and network monitoring utilities, disassemblers, and debuggers for analyzing malware characteristics and the impact that malware may have on compromised systems.

**IT 6760**
**Case Studies in Cybersecurity**
**3**
* Prerequisite(s): Acceptance into Graduate Certificate or Master of Science in Cybersecurity or Departmental Approvall
* Prerequisite(s) or Corequisite(s): IT 6300

Discusses current trends and issues in cybersecurity. Reflects current global events related to cybersecurity. Includes data breaches, cyber warfare, and emerging threats. Emphasizes the changing and transformative nature of cybersecurity threats, including geographical, institutional, and cultural evolution. Provides guest lecturers from industry with perspectives on the state of cybersecurity. Examines real-world examples of the application of cybersecurity principles and requires critical analysis of each case.

**IT 6770**
**Cybersecurity Management**
**3**
* Prerequisite(s): IT 6300 or Departmental approval

Teaches management skills applicable to cybersecurity. Includes governance models, business continuity, disaster recovery, risk management, organizational security, cybersecurity life cycle management, and interactions between information technology and business units. Focuses on policies, procedures, and guidelines based on industry and government standards to fulfill legal, regulatory, and operational requirements.

**IT 6780**
**Secure Coding**
**3**
* Prerequisite(s): IT 6300 or departmental approvall

Focuses on fundamentals of secure coding and current topics in application security. Includes the implementation of secure development lifecycle principles, identifying and mitigating issues in existing applications, and common security issues. Covers the most frequently encountered application security risks and how to address each of them. Includes web applications, mobile applications, and traditional desktop applications.

**IT 6900**
**Cybersecurity Capstone**
**3**
* Prerequisite(s): IT 6330, IT 6350, IT 6370, IT 6740, and IT 6770

Provides culmination of cybersecurity in a self-directed research or practical project that showcases student's mastery of cybersecurity topics. Provides an opportunity to conduct research and/or implement systems that incorporate topics from previous courses. Requires students to present their work at the end of the semester.

# Japanese (JPNS)

**JPNS 1010** **LH**
**Beginning Japanese I**
**4**

Writing and reading Hiragana and Katakana, listening, speaking in the basic grammar structure, expressing opinions and describing things in a limited situation. Lab access fee of $10 applies.

**JPNS 1020** **LH**
**Beginning Japanese II**
**4**
* Prerequisite(s): Students need equivalent knowledge of JPNS 1010

Reviews and builds further language skills upon the grammar, reading, writing, and conversation skills learned in the first year courses. Lab access fee of $10 applies.

**JPNS 115R**
**Japanese Conversation I**
**1**

Offers novice Japanese speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen listening comprehension for natural conversational flow. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**JPNS 1500**
**The Art of Japanese Calligraphy**
**2**

Introduces the origin of the art of calligraphy, the reasons why calligraphy developed and became so popular in Japan, works done by famous calligraphers, how to handle a brush and India ink, and how to write letters with a brush. Demonstrates the proper usage of the brush, correct stroke orders, and develops the skills of writing letters (start from level 1- easy to level 8- difficult) with a brush.

**JPNS 2010** **LH**
**Intermediate Japanese I**
**4**

* Prerequisite(s): Students need equivalent knowledge of JPNS 1020

Reviews and builds further language skills upon the grammar, reading, writing, and conversation skills learned in the first year courses. Lab access fee of $10 applies.

**JPNS 202G** **HH**
**Intermediate Japanese II**
**4**

* Prerequisite(s): Students need equivalent knowledge of JPNS 2010

Reviews and builds further language skills upon the grammar, reading, writing (including Kanji knowledge), and conversation skills learned in the previous JPNS 1010, 1020, and 2010. Introduces reading of a variety of texts in Japanese. Lab access fee of $10 applies.

**JPNS 2110**
**Conversational Japanese**
**3**

* Prerequisite(s): Students need equivalent knowledge of JPNS 1020

Emphasizes conversation in real-life situations that may be encountered in Japan. Focuses on vocabulary and structures. Introduces a variety of readings and multimedia materials and promotes oral proficiency.

**JPNS 215R**
**Japanese Conversation II**
**1**

* Prerequisite(s): Students should have equivalent knowledge of JPNS 1020

Offers lower division / novice Japanese speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, sharpen listening comprehension, and develop conversational strategies such as circumlocution and managing a conversation with useful expressions for starting a conversation, gaining time to think, helping the other speaker, seeking agreement, etc. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**JPNS 251G**
**Introduction to Japanese Culture and Society**
**3**

Introduces Japanese culture and society by exploring its history, religion, government, customs and traditions. Analyzes and evaluates the differences and similarities between Japanese and American cultures. Taught in English and little or no Japanese language skill required. Fulfills the requirements for a G/I course.

**JPNS 3050**
**Advanced Japanese**
**3**

* Prerequisite(s): It is recommended that students have passed JPNS 202G, have had one year residency in Japan, or instructor approval

For non-native Japanese speakers who have attained basic mastery of Japanese and some Kanji reading skills. Focuses on the development of Japanese language skills with emphasis on grammar review, reading, and writing. Introduces Japanese culture and literature. Lab access fee of $10 applies.

**JPNS 315R**
**Advanced Japanese Conversation**
**1**

* Prerequisite(s): JPNS 202G or one year residency in a Japanese-speaking country, or instructor approval. University Advanced Standing.

Offers speaking opportunities to middle or upper division Japanese learners to enhance their speaking proficiency in high level language by focusing on oral and verbal production. Improves authentic pronunciation, reduces grammatical and structural errors, and aids student progression beyond translation to natural production. May be repeated for a maximum of 3 credits toward graduation.

**JPNS 3200**
**Business Japanese**
**3**

* Prerequisite(s): JPNS 3050 and University Advanced Standing

For those who plan to pursue careers in international business or related fields, learn the business language for Japanese, and understand related cultural protocol in Japanese society. Prepares students to take the Business Japanese Proficiency Tests sponsored by the Japan External Trade Organization (JETRO). Explores how students can effectively and respectfully pursue business activities with Japanese companies within the framework of Japanese culture. Taught predominantly in Japanese.

**JPNS 351G**
**Japanese Culture and Civilization**
**3**

* Prerequisite(s): JPNS 3050 and University Advanced Standing

Explores chronologically the cultural formation and development of Japan. Examines and discusses the ethnic development and linguistic history from ancient to modern Japanese society. Analyzes and evaluates the differences and similarities between the Japanese and American cultures. Class instruction and presentations in Japanese. Fulfills the requirements for a G/I course.

**JPNS 3520**
**Society and Business in Japan**
**3**

* Prerequisite(s): JPNS 3050 and University Advanced Standing

Builds upon the knowledge acquired in JPNS 3200, explores a multitude of aspects that contribute to Japanese national identity, focuses on Japan's complex vertical society, considers the intricacies of Japanese expressions and meanings relative to business and social applications, and studies the Japanese values and priority system. Also references Japan's national and global economic involvement and ways students can interface with it.

# Languages (LANG)

**LANG 1000** **LH**
**English Literacy for Deaf Students**
**5**
* Prerequisite(s): Deaf students fluent in American Sign Language

Individually tailored English course taught entirely in ASL. Covers a variety of topics to prepare Deaf students for entrance to courses satisfying college English requirements. Topics of study, which vary by semester and by student need, include grammar, usage, reading comprehension and analysis, sentence construction, paragraph composition, and thematic approaches to writing. Uses students' experience with American Sign Language and Deaf culture as the basis for instruction in English as a Second Language.

**LANG 281R**
**Language Internship**
**1 to 8**
* Prerequisite(s): Department approval

Provides supervised, practical, and professional experience for students preparing for careers related to languages. May be repeated for a maximum of eight credit hours. May be graded credit/no credit.

**LANG 291R**
**Independent Study**
**1 to 3**

Designed primarily for students who will travel or live in a foreign country for a period of time and want to participate in an instructor-directed academic experience worthy of one to three hours of credit. May also be used similarly for directed studies, either on or off campus, dealing with a foreign language or culture.

**LANG 3000 (Cross-listed with: ANTH 3000)** **LH**
**Language and Culture**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005, (ANTH 101G or any foreign language 2010 course), Sophomore status, and University Advanced Standing

Introduces cultural linguistics. Analyzes features of human languages that make possible semantic universality. Examines distinction between phonetic and phonemic units. Explores relationship between language and culture. Studies how language shapes culture and how culture shapes language.

**LANG 3010**
**Introduction to Linguistics**
**3**
* Prerequisite(s): University Advanced Standing

Focuses on achieving an understanding of language as a group of distinct yet complementary systems which interact to enable human communication, e.g., phonology, morphology, syntax, semantics, and pragmatics. Introduces implications of how languages reflect the cultures in which they are used, and discusses how language is learned, processed and interpreted and how languages change over time.

**LANG 312R (Cross-listed with: CINE 312R)**
**National Cinema History**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Covers a single national cinema tradition from the early days of film to the present. Explores representative films from a nation's cinematic chronology, considering major themes, movements, controversies, and artists. Considers social and political contexts as related to the national film output. May be repeated for a maximum of 9 credits toward graduation.

**LANG 4200**
**Methods of Teaching a Foreign Language**
**3**
* Prerequisite(s): (Matriculation into any secondary education bachelor degree program or departmental approval) and University Advanced Standing

For those who plan to certify to teach a foreign language. Addresses learning approaches, methods, evaluation procedures, text analysis, and other techniques for teaching and evaluating language learning. Includes discussion about professional organizations and other resources in the field. Taught entirely in English.

**LANG 450R**
**Translation Technology**
**3**
* Prerequisite(s): (CHIN 3050 or FREN 3050 or GER 3050 or JPNS 3050 or PORT 3050 or RUS 3050 or SPAN 3050) and University Advanced Standing

Provides the environment for students to acquire speed and proficiency in translation. Allows students to become proficient in the use of CAT (Computer Assisted Translation) tools. Prepares students and translators of any language to obtain an SDL Trados Certification. Includes class discussion, translation practice, analysis of translation practice and a student portfolio. May be repeated for a maximum of 9 credits toward graduation.

**LANG 481R**
**Language Internship**
**1 to 8**
* Prerequisite(s): Departmental Approval and University Advanced Standing

Provides students real-world, closely-supervised work experiences in positions directly related to their language studies. Includes a theoretical component such as, but not limited to, papers, projects, completion of reading assignments, tests, journaling, field studies, etc. Students desiring to do language internships must get department approval and must meet with a faculty sponsor to determine individual credit hours and requirements. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**LANG 490R**
**Special Topics in Languages**
**1 to 3**
* Prerequisite(s): Department Approval and University Advanced Standing

Provides an opportunity to undertake a well-defined project or academically rigorous independent research in languages. May include formal instruction and collaboration with faculty and other students. May be repeated for a total of 6 credits toward graduation.

# Latin (LATN)

**LATN 1010** **LH**
**Beginning Latin I**
**4**

Allows students the opportunity to study Latin at the introductory level. Focuses primarily on Ancient Latin. Develops basic Latin reading skills with the help of grammar and translation exercises. Profoundly strengthens students' general understanding of grammar, syntax, and word formation in any language, particularly Romance and Germanic languages (including English).

**LATN 1020** **LH**
**Beginning Latin II**
**4**
* Prerequisite(s): LATN 1010 or equivalent

Allows students the opportunity to continue to study Latin at the introductory level. Focuses primarily on Ancient Latin. Develops more advanced Latin reading skills, with the help of grammar and translation exercises. Study of Latin profoundly strengthens students' general understanding of grammar, syntax, and word formation in any language, particularly Romance and Germanic languages (including English).

**LATN 2010** **LH**
**Intermediate Latin I**
**4**
* Prerequisite(s): LATN 1020 or equivalent

Studies Latin at the intermediate level. Develops more advanced reading skills through the translation of selected Classical Latin texts.

**LATN 2020** **HH**
**Intermediate Latin II**
**4**
* Prerequisite(s): LATN 2010 or equivalent

Continues study of Latin at the intermediate level. Develops more advanced reading skills through the translation of selected Classical Latin texts.

**LATN 3010**
**Readings in Latin**
**3**
* Prerequisite(s): (LATN 2020 or equivalent) and University Advanced Standing

Studies Latin beyond the intermediate level through translation of original Classical or Medieval Latin texts.

# Legal Studies (LEGL)

**LEGL 1010**
**Survey of Law**
**3**

Covers the history and development of present-day law practice, including specialized areas of practice. Completers should be able to describe the American court system, know and use legal vocabulary, have a basic understanding of different substantive areas of law. Lab access fee of $25 for computers applies.

**LEGL 1110**
**Civil Litigation**
**4**
* Prerequisite(s): PRLG 1000 and (ENGL 1010 or ENGH 1005)

Overviews court system, emphasizing the Utah State Courts, civil procedural and evidentiary rules, and stages of civil litigation. Emphasizes the paralegal's role in investigation, preparation, and resolution of lawsuits. Lab access fee of $25 for computers applies.

**LEGL 2000**
**Culture of Law**
**2**

Survey course that discusses the impact of earning a law degree; professional options open to a JD; and how to manage one's career; through lectures on pertinent issues, opportunities to interview lawyers, by film, speakers sharing their experience about different aspects of their career, opportunities to read and write on legal issues.

**LEGL 2350**
**Evidence**
**3**
* Prerequisite(s): PRLG 1000

Examines the admissibility of evidence in both a civil and criminal trial context. Studies the Federal Rules of Evidence, and the privileges, challenges, advancements in technology and emerging issues in the use of evidence in American courts.

**LEGL 258R**
**Special Topics in Legal Studies**
**3**
* Prerequisite(s): PRLG 1000

Provides exposure to emerging topics of current interest in the Legal field. Topics vary each semester. May be repeated for a maximum of 6 credits toward graduation.

**LEGL 2830**
**Legal Studies Capstone**
**3**
* Prerequisite(s): LEGL 1110, LEGL 3000

A capstone course for the Associate's Degree in Legal Studies. Provides integration of all functional paralegal skills via mock trials. Requires the student to write a legal memorandum analyzing a particular case and to present a legal issue to the class.

**LEGL 290R**
**Law Society**
**1**

Elective credit for students interested in law or law-related professions. Provides a program of activity relating to current legal issues, encouraging social awareness and developing law and civic consciousness. Students arrange for guest speakers from the legal and criminal justice professions to present information concerning their professions. Teaches leadership skills by serving on committees. Pass/Fail grade issued. Paralegal majors and criminal justice majors may repeat this course for a total of three elective credits towards graduation. Each student must participate in the service project and fundraiser for a passing grade.

**LEGL 3000**
**Business Law**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005 or appropriate test scores) and University Advanced Standing

For School of Business students and others desiring a more complete understanding of business law. Presents the American legal system, constitutional law, statutory law, common law, and administrative law and alternatives to courts. Discusses crimes, torts, negligence, contracts, negotiable instruments, and contractual relationships. May be delivered online. Lab access fee of $25 for computers applies.

**LEGL 300H**
**Business Law**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005 or appropriate test scores) and University Advanced Standing

For School of Business students and others desiring a more complete understanding of business law at an honors level. Presents the American legal system, constitutional law, statutory law, common law, and administrative law and alternatives to courts. Discusses crimes, torts, negligence, contracts, negotiable instruments, and contractual relationships. Lab access fee of $25 applies.

**LEGL 3130**
**Real Estate Principles and Finance**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 or equivalent.

Includes the nature of real property, estates in land, transfer of real property rights, encumbrances, public restrictions, and contracts. Discusses ownership in real estate, settlement, taxation, real estate finance, math in real estate applications, and real estate valuation and appraisal. Lab access fee of $25 for computers applies.

**LEGL 3140**
**Real Estate Law**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 or equivalent.

Explores the legal implications of ownership of real property, including property management and new construction. Also covers federal and Utah-specific law, and Utah licensing testing and review. Lab access fee of $25 for computers applies.

**LEGL 3150**
**Survey of Dispute Resolution**
**3**
* Prerequisite(s): (PRLG 1000 or LEGL 3000 or PSY 1010 or SOC 1010 or SW 1010) and University Advanced Standing

Offers an introduction to the most commonly practiced dispute resolution processes, including negotiation, mediation, arbitration, and litigation. Studies conflict resolution theory and explores contemporary dispute resolution policy issues. Involves participation in simulations of various dispute resolution processes, including interviewing and counseling, negotiation, mediation, and arbitration.

**LEGL 3170**
**Real Estate Contracts and Agency**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 or equivalent

Explores the intricacies of contracts and agency relationships in real estate transactions, including uniform real estate contracts, agency agreements and principles, the Utah standard Real Estate Purchase Contract, and other related issues.

**LEGL 3210**
**Interviewing and Investigations**
**3**
* Prerequisite(s): University Advanced Standing

Overview of how to conduct a factual investigation in various contexts, including criminal and civil cases, with particular emphasis on interviewing witnesses. Includes technology-driven investigative tools, social media, the Freedom of Information Act and other resources, and the ethical and legal limitations on investigative techniques.

**LEGL 3310**
**Marketing Law**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

For School of Business marketing students and others desiring a more complete understanding of marketing law. Broadly presents the American legal system, with special attention to issues in constitutional law, statutory law, common law, and administrative law and alternatives to courts with respect to marketing. Discusses crimes, torts, negligence, contracts, negotiable instruments, intellectual property, and contractual relationships.

**LEGL 3410 (Cross-listed with: COMM 3410, PSY 3410, SW 3410)**
**Mediation and Negotiation**
**3**
* Prerequisite(s): PRLG 1000 or LEGL 3000) and University Advanced Standing

Prepares students to knowledgeably understand and participate on a basic level in the process of mediation and negotiation in a legal context. Focuses on conceptual knowledge of both process and practical skills and effectiveness as a mediator and negotiator.

**LEGL 3530**
**Employment and Labor Law**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Covers employment and labor law, cases, and policy. Includes employment discrimination along with labor relations statues exploring the link between employment discrimination and traditional labor relations law. Presents tools necessary to formulate and write policy for profit and non-profit organizations. Includes lecture, class discussions, case studies, a service learning project, and guest speakers. Lab access fee of $25 for computers applies.

**LEGL 3650**
**Tort Law**
**3**
* Prerequisite(s): PRLG 1000, ENGL 2010, and University Advanced Standing

Provides instruction in theory and practice of tort and injury law. Successful completers should know and use legal vocabulary and demonstrate an understanding of tort and injury law. Lab access fee of $25 course for computers applies.

**LEGL 3760**
**Law Practice Management**
**3**
* Prerequisite(s): Matriculation into any Legal Studies Program and University Advanced Standing

Covers management principles applicable in modern law practice from solo practice to large mega firms. Provides students with parameters and policies of the business of law to understand why law firms conduct business differently from other industries. Introduces students to administrative and substantive functions and procedures common to a law office that make the student's transition into legal employment easier. Encourages ethical considerations and acquisition of skills required by law firms that use efficient systems and procedures.

**LEGL 3890**
**Certified Legal Assistant Preparation**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Acquaints students with Certified Legal Assistant exam prerequisite and preparation strategies. Reviews all required sections of the exam which include legal terminology, communications, legal ethics, judgment and analytical ability, legal research, human relations and interviewing techniques, and general law. Also covers some elective law portions of the exam which might include administrative law, bankruptcy law, business organizations, contract law, criminal law, estate planning and probate, family law, litigation, real estate law. Successful completers should be prepared to sit for the CLA Exam.

**LEGL 4000**
**Advanced Business Law and E-Commerce**
**3**
* Prerequisite(s): LEGL 3000 and University Advanced Standing

Examines contemporary issues in business law, with an emphasis in e-commerce and business in a digital environment. Studies secured transactions, business associations, investor protection, consumer protection and government regulation in an increasingly global and interconnected business environment. Recommended for students interested in graduate school, especially in law or business.

**LEGL 4100**
**Advanced Mediation**
**3**
* Prerequisite(s): LEGL 3410 and University Advanced Standing

Prepares students to perform at an advanced level in the mediation process. Builds on the fundamentals learned in the basic course, improves knowledge, and sharpens practical skills and effectiveness as a mediator. Uses an interactive-workshop format that blends theory with simulated class role-play.

**LEGL 4130**
**Bankruptcy and Collections**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): LEGL 3000

Covers collection of debts and the discharge of certain financial obligations in bankruptcy, including Chapter 7, 11, and 13 filings. Utilizes lecture and practical experience in the preparation of collection and bankruptcy documents. Teaches basic collections, bankruptcy law, drafting collections, bankruptcy pleadings, and schedules. Lab access fee of $25 for computers applies.

**LEGL 4150**
**Will Trusts and Probates**
**3**
* Prerequisite(s): Matriculation into any Woodbury School of Business program and University Advanced Standing

Examines purpose and methods of estate planning, emphasizing the drafting of simple wills, trusts, and other estate planning documents. Covers testamentary and non-testamentary disposition of property, taxation, intestate succession, medical directives, power of attorney and probate and estate administration processes. Lab access fee of $25 for computers applies.

**LEGL 4160**
**Contract Law**
**3**
* Prerequisite(s): LEGL 3000, ENGL 2010, and University Advanced Standing

Provides a functional approach to the Law of Contracts. Teaches contract problems and defenses through case study method. Lab access fee of $25 for computers applies.

**LEGL 418G**
**International Law**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Examines the emergence of International Law as a reflection of changing social, cultural, religious perspectives in an increasingly global community. Studies the global relationships between states, businesses, and individuals, and the resolution of disputes on an international level, including special problems in international crime, jurisdiction, courts, contracts and trade, intellectual property, and other current issues.

**LEGL 4190**
**Constitutional Law**
**3**
* Prerequisite(s): Matriculation into any Legal Studies major and University Advanced Standing

Examines the relationships between individual liberty and the government, including the separation of powers, federalism and limits on the government's ability to restrict individual freedom. Studies the Bill of Rights, with emphasis on the first, fourth, and fourteenth amendments, and their practical effect in civil and criminal cases.

**LEGL 4200**
**Domestic Mediation**
**3**
* Prerequisite(s): (LEGL 3410 or instructor approval) and University Advanced Standing

Prepares students to understand and participate knowledgeably and effectively in the process of domestic mediation. Improves conceptual knowledge about and understanding of the domestic mediation process as well as improving practical negotiation and mediation skills. Utilizes a highly interactive workshop format that blends theory with practice.

**LEGL 430G**
**International Business Law**
**3**
* Prerequisite(s): ENGL 2010, Junior Standing, and University Advanced Standing

Examines current issues in international and comparative business law, including environmental protections, multinational enterprises, foreign investment, banking, labor, financing and taxation. Studies how culture, values, religion, and other factors affect law in a global business context. Recommended for students graduate work, especially in business or law. Fulfills Global/Intercultural Requirement.

**LEGL 4830**
**Legal Capstone Course**
**3**
* Prerequisite(s): LEGL 1110, LEGL 3000, and University Advanced Standing

A capstone course for the Bachelor's Degree in Legal Studies. Provides integration of all functional paralegal skills via mock trials. Requires the student to write a legal memorandum analyzing a particular case and to present a legal issue to the class.

**LEGL 498R**
**Directed Research**
**1 to 3**
* Prerequisite(s): ENGL 2010, Department Approval, and University Advanced Standing

Studies the process of researching and writing for scholarly publication. Includes understanding the concepts of scholarly conversation, managing scholarship, choosing a topic, identifying appropriate journals, using exemplars, creating a title and abstract, making an outline, developing an introduction and conclusion, writing the body of the paper, and then revising, submitting, and finally publishing in a scholarly journal. May be repeated for a maximum of 6 credits toward graduation.

**LEGL 6000**
**Legal Challenges in Modern Business**
**1.5**
* Prerequisite(s): Acceptance into the Woodbury School of Business MBA program

Examines contemporary issues in business law, with an emphasis in e-commerce and business in a digital environment. Studies secured transactions, business associations, investor protection, consumer protection and government regulation in an increasingly global and interconnected business environment. Recommended for business executives and managers.

# Mathematics (MATH)

**MATH 100R**
**Math Leap**
**1**

Is part of UVU's math placement process; for students who desire to review math topics in order to improve placement level before beginning a math course. Addresses unique strengths and weaknesses of students, by providing group problem solving activities along with an individual assessment and study plan for mastering target material. Requires mandatory class attendance and a minimum number of hours per week logged into a preparation module, with progress monitored by a mentor. May be repeated for a maximum of 4 credits toward graduation. May be graded credit/no credit.

**MATH 1050** **QL**
**College Algebra**
**4**
* Prerequisite(s): Within the past two years one of the following: MAT 1000 or MAT 1010 with a grade of C or better or appropriate math placement score.

Includes inequalities, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, systems of linear and nonlinear equations, matrices and determinants, arithmetic and geometric sequences, and the Binomial Theorem. May be delivered hybrid and/or online.

**MATH 1055** **QL**
**College Algebra with Preliminaries**
**5**
* Prerequisite(s): Within the past two years one of the following: MAT 1000 or MAT 1010 with a grade of C or better or appropriate math placement score.

Includes inequalities, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, systems of linear and nonlinear equations, matrices and determinants, arithmetic and geometric sequences, and the Binomial Theorem. May be delivered hybrid and/or online. Lab access fee of $30 applies. Canvas Course Mats $90/ McGraw applies.

**MATH 1060**
**Trigonometry**
**3**
* Prerequisite(s): Within the past two years: MATH 1050 or MATH 1055 with a grade of C or higher or appropriate math placement score.

Includes the unit circle and right triangle definitions of the trigonometric functions, graphing trigonometric functions, trigonometric identities, trigonometric equations, inverse trigonometric functions, the Law of Sines and the Law of Cosines, vectors, complex numbers, polar coordinates, and rotation of axes.

**MATH 1080** **QL**
**Precalculus**
**5**
* Prerequisite(s): Within the past two years, one of the following: MAT 1000 or MAT 1010 with a grade of B or better or an appropriate math placement score.

Is an accelerated version of MATH 1050 and MATH 1060. Includes functions and their graphs including polynomial, rational, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Covers inequalities, systems of linear and nonlinear equations, matrices, determinants, arithmetic and geometric sequences, the Binomial Theorem, the unit circle, right triangle trigonometry, trigonometric equations, trigonometric identities, the Law of Sines, the Law of Cosines, vectors, complex numbers, polar coordinates, and conic sections.

**MATH 1090** **QL**
**College Algebra for Business**
**3**
* Prerequisite(s): Within the past two years one of the following: MAT 1000 or MAT 1010 with a grade of C or better or appropriate math placement score.

Uses linear, quadratic, power, polynomial, rational, exponential, logarithmic, and logistic functions to analyze business applications such as market equilibrium, rates of change, cost-benefit analysis, and inflation. Includes systems of linear and non-linear equations and inequalities, matrices and matrix equations, sequences and series, and financial mathematics. Canvas Course Mats $90/McGraw applies.

**MATH 1100** **QL**
**Introduction to Calculus**
**4**
* Prerequisite(s): Within the past two years: MATH 1050 or MATH 1055 or MATH 1080 with a grade of C or better or appropriate math placement score.

Provides an overview of the basic concepts and techniques of differential and integral calculus. Features applications in business, economics, and the life, social, and physical sciences. Includes optimization techniques in multivariable differential calculus.

**MATH 1210** **QL**
**Calculus I**
**5**
* Prerequisite(s): One of the following within the past two years: (MATH 1050 or MATH 1055) and MATH 1060, each with a grade of C or higher; OR MATH 1080 with a grade of C or higher; OR appropriate placement by math placement test.

Covers limits, continuity, differentiation, applications of differentiation, integration, and applications of integration, including derivatives and integrals of polynomial functions, rational functions, exponential functions, logarithmic functions, trigonometric functions, inverse trigonometric functions, and hyperbolic functions. Is a prerequisite for calculus-based sciences.

**MATH 121H** **QL**
**Calculus I**
**5**
* Prerequisite(s): One of the following within the past two years: (MATH 1050 or MATH 1055) and MATH 1060, each with a grade of C or higher; OR MATH 1080 with a grade of C or higher; OR appropriate placement by math placement test.

Covers limits, continuity, differentiation, applications of differentiation, integration, and applications of integration, including derivatives and integrals of polynomial functions, rational functions, exponential functions, logarithmic functions, trigonometric functions, inverse trigonometric functions, and hyperbolic functions. Is a prerequisite for calculus-based sciences. Is an honors course with student projects.

**MATH 1220**
**Calculus II**
**5**
* Prerequisite(s): MATH 1210 or MATH 121H with a grade of C or higher

Includes integration techniques, arc length, area of a surface of revolution, moments and centers of mass, sequences and series, parametrization of curves and polar coordinates, vectors in 3-space, and quadric surfaces.

**MATH 122H**
**Calculus II**
**5**
* Prerequisite(s): MATH 1210 or MATH 121H with a grade of C or higher

Includes integration techniques, arc length, area of a surface of revolution, moments and centers of mass, sequences and series, parametrization of curves and polar coordinates, vectors in 3-space, and quadric surfaces. Honors course which requires a student project.

**MATH 2000** **QL**
**Algebraic Reasoning with Modeling**
**3**
* Prerequisite(s): Within the past two years, one of the following: MAT 1000 or MAT 1010 with a grade of C or better or an appropriate math placement score.

Presents the basic ideas of sets and functions in the context of and motivated by modeling bivariate data. Includes basic set theory such as unions, intersections, Venn diagrams, etc. Includes the basic ideas and the algebra of functions including polynomial, exponential, and logarithmic functions. Also includes some basic combinatorics and counting principles as well as arithmetic and geometric sequences. Culminates in a pictorial introduction to the basic ideas of calculus presented with minimal computation.

**MATH 2010**
**Mathematics for Elementary Teachers I**
**3**
* Prerequisite(s): Within the past two years: MATH 1050 or MATH 1055 or MATH 2000 with a grade of C or better or appropriate math placement score.

Is for pre-elementary education majors. Includes problem solving, sets, numeration systems, arithmetic of whole numbers, integers, rational numbers, real numbers, elementary number theory, ratios, proportions, decimals, and percents.

**MATH 2020**
**Mathematics for Elementary Teachers II**
**3**
* Prerequisite(s): MATH 2010 with a grade of C or higher

Is for pre-elementary education majors. Includes topics on probability, statistics, geometry and measurement.

**MATH 2210**
**Calculus III**
**3**
* Prerequisite(s): MATH 1220 or MATH 122H with a grade of C or higher

Includes partial derivatives, gradient, Lagrange multipliers, multiple integrals, line integrals, Green's Theorem, surface integrals, the Divergence Theorem, and Stokes' Theorem.

**MATH 221H**
**Calculus III**
**3**
* Prerequisite(s): MATH 1220 or MATH 122H with a grade of C or higher

Includes partial derivatives, gradient vectors, Lagrange multipliers, multiple integrals, line integrals, Green's Theorem, surface integrals, the Divergence Theorem, and Stokes' Theorem. Is an honors course which includes a student project.

**MATH 2250**
**Differential Equations and Linear Algebra**
**4**
* Prerequisite(s): MATH 1220 or MATH 122H with a grade of C or higher

Is for engineering students. Includes separable equations, linear differential equations, differential operators and annihilators, variation of parameters, Laplace transforms, and systems of linear differential equations. Introduces basic concepts of linear algebra including matrices, Gaussian elimination, determinants, linear independence, and eigenvalues and eigenvectors.

**MATH 2270**
**Linear Algebra**
**3**
* Prerequisite(s): MATH 1220 or MATH 122H with a grade of C or higher

Includes matrices and systems of equations, determinants, vector spaces, linear transformations, orthogonality, and eigenvalues and eigenvectors.

**MATH 2280**
**Ordinary Differential Equations**
**3**
* Prerequisite(s): MATH 2210 or MATH 221H with a grade of C or higher

Includes separable equations, linear differential equations, differential operators and annihilators, variation of parameters, power series solutions of differential equations, Laplace transforms, systems of linear differential equations, and numerical methods.

**MATH 281R**
**Cooperative Work Experience**
**2 to 9**
* Prerequisite(s): Approval of Cooperative Coordinator

Designed for mathematics majors. Provides paid work experiences in the student's major. Course content is individualized, with the student setting the objectives by consulting with a faculty coordinator and the on-the-job supervisor. Credit is determined by the number of hours the student works during the semester. Repeatable for a maximum of 16 credits toward graduation. May be graded credit/no credit.

**MATH 290R**
**Topics in Mathematics**
**3 to 5**
* Prerequisite(s): Departmental approval

Studies a chosen topic in mathematics; topic will vary depending upon student demand and course development needs. May be taken more than once for different topics and for a maximum of 6 credit hours counted toward graduation.

**MATH 3000**
**History of Mathematics WE**
**3**
* Prerequisite(s): MATH 2210 or MATH 221H with a grade of C or higher and University Advanced Standing

Provides a survey of the history of mathematics with a focus on the development of mathematical ideas in their historical context. Includes numeration systems, the mathematics of the ancient world, the development of algebra, geometry, and calculus, and the work of pivotal mathematicians.

**MATH 3010**
**Methods of Secondary School Mathematics Teaching**
**3**
* Prerequisite(s): MATH 2210 or MATH 221H with a grade of C or higher and EDSC 455G with a grade of B- or higher and University Advanced Standing

Is for Mathematics Education majors. Presents different methods of teaching mathematical ideas at the secondary school level. Includes classroom instruction, student presentations, and field experiences. Studies various techniques of assessment and classroom management.

**MATH 3020**
**Computer Based Mathematics for Secondary School Mathematics Teachers**
**3**
* Prerequisite(s): (MATH 2210 and MATH 2270 each with a grade of C or higher) and University Advanced Standing; MATH 2280 with a grade of C or higher is recommended

For Mathematics Education majors. Presents one or more popular mathematical computer software packages. Includes mathematical problem solving and presentations of mathematical concepts using a computer as an aid. Introduces appropriate programming language.

**MATH 3030**
**Algebra for Secondary Mathematics Teaching**
**3**
* Prerequisite(s): Math 1210 with a grade B- or higher and University Advanced Standing and Mathematics Department Adviser Approval

For Mathematics Education Majors: Includes the exploration of important conceptual underpinnings, common misconceptions and students' ways of thinking, appropriate use of technology, and instructional practices to support and assess the learning of algebra. Teaches algebra as an extension of number, operation, and quantity; various ideas of equivalence as it pertains to algebraic structures; patterns of change as covariation between quantities; connections between representations (tables, graphs, equations, geometric models, context); and the historical development of content and perspectives from diverse cultures. Focuses on deeper understanding of rational numbers, ratios and proportions, meaning and use of variables, functions (e.g., exponential, logarithmic, polynomials, rational, quadratic), and inverses.

**MATH 3100**
**Foundations of Geometry**
**3**
* Prerequisite(s): MATH 2270 with a grade of C or higher and MATH 2210 with a grade of C or higher and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MATH 2280

Introduces logic and mathematical proof. Offers an axiomatic development of Euclidean and non-Euclidean geometries.

**MATH 3200**
**Foundations of Analysis**
**3**
* Prerequisite(s): MATH 3100 with a grade of C or higher and MATH 2280 with a grade of C or higher and University Advanced Standing

Covers material from beginning analysis including the axioms of the real numbers, sequences, mathematical induction, limits, topology of the real line, continuity, differentiation, and integration.

**MATH 3210**
**Complex Variables**
**3**
* Prerequisite(s): MATH 2210 or MATH 221H with a grade of C or higher and University Advanced Standing

Introduces complex analysis. Includes algebra of complex numbers, analytic functions, mapping properties of elementary functions, the Cauchy integral formula, complex series, residues, and comformal mapping.

**MATH 3250**
**Introduction to Advanced Calculus WE**
**3**
* Prerequisite(s):(MATH 2210 or MATH 221H) with a grade of C or higher and MATH 2270 with a grade of C or higher and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MATH 2280

Introduces mathematical logic and proof. Covers the first topics of advanced calculus including the axioms of the real numbers, sequences, mathematical induction, limits, topology of the real numbers, continuity, differentiation, and integration.

**MATH 3300**
**Foundations of Abstract Algebra**
**3**
* Prerequisite(s): MATH 3100 or MATH 3250 with a grade of C or higher and University Advanced Standing

Provides an introduction to algebraic structures. Covers the theory of groups including modular arithmetic, normal subgroups, factor groups, and cyclic groups. Introduces rings, integral domains, and fields.

**MATH 3310**
**Discrete Mathematics**
**3**
* Prerequisite(s): MATH 1220 with a grade of C or higher and University Advanced Standing

Includes logic, sets, functions, elementary number theory, mathematical induction, equivalence relations, and cardinality. Emphasizes the writing of proofs.

**MATH 3320**
**Graph Theory and its Applications**
**3**
* Prerequisite(s): MATH 2270 with a grade of C or higher and University Advanced Standing

Introduces the most important topics of graph theory including graphs and modeling, trees, paths, circuits, and connectivity, matching, planar graphs and coloring, and applications.

**MATH 3400**
**Partial Differential Equations**
**3**
* Prerequisite(s): MATH 2280 with a grade of C or higher and University Advanced Standing

Introduction to partial differential equations. Topics include Bessel functions, Legendre polynomials, Fourier analysis, partial differential equations, and boundary value problems.

**MATH 3640**
**Introduction to Optimization**
**3**
* Prerequisite(s):(MATH 2210 or MATH 221H) and MATH 2270 with a grade of C or higher and University Advanced Standing; CS 1400 with a grade of C or higher is recommended.

Includes linear, quadratic, and nonlinear programming, network problems, convexity, necessary and sufficient optimality conditions, numerical algorithms, and special topics.

**MATH 3750**
**Financial Mathematics**
**3**
* Prerequisite(s): (MATH 1220 or FIN 3100 each with a grade of C or higher) and University Advanced Standing

Prepares students to take Exam FM/Exam 2 given by the Society of Actuaries/ Casualty Actuarial Society. Trains students to answer complex questions under significant time pressure. Teaches the principles and mathematics of interest, annuities, amortization, investments, financial economics, derivative investment contracts and financial risk management.

**MATH 4015**
**Actuarial Problems Laboratory**
**1**
* Prerequisite(s): STAT 4710 and University Advanced Standing

Provides preparation for the first actuarial examination by linking concepts of probability and mathematical statistics to actuarial applications.

**MATH 4025**
**Actuarial Problems Finance Laboratory**
**1**
* Prerequisite(s): (MATH 3750 or Departmental Approval) and University Advanced Standing

Provides preparation for the second actuarial examination by linking concepts of finance and derivative markets to actuarial applications frequently found on Exam FM/2.

**MATH 4030**
**Geometry for Secondary Mathematics Teaching**
**3**
* Prerequisite(s): Math 3100 with a grade C or higher and University Advanced Standing

For Mathematics Education Majors. Includes the exploration of important conceptual underpinnings, common misconceptions and students' ways of thinking, appropriate use of technology, and instructional practices to support and assess the learning of geometry. Teaches constructions and transformations, congruence and similarity, analytic geometry, solid geometry, conics, trigonometry, and the historical development of content and perspectives from diverse cultures. Makes explicit connections to various mathematical content strands (modeling, complex numbers, function, and algebra).

**MATH 4040**
**Statistics and Probability for Secondary Mathematics Teaching**
**3**
* Prerequisite(s): Math 1210 with a grade B- or higher and STAT 2040 with a grade C or higher and University Advanced Standing

For Mathematics Education Majors. Includes the exploration of important conceptual underpinnings, common misconceptions and students' ways of thinking, appropriate use of technology, and instructional practices to support and assess the learning of statistics and probability. Focuses on summarizing and representing data, study design and sampling, probability, testing claims and drawing conclusions, and the historical development of content and perspectives from diverse cultures.

**MATH 4100**
**Differential Geometry of Curves and Surfaces**
**3**
* Prerequisite(s): MATH 3250 with a grade of C or higher and University Advanced Standing

Presents the differential geometry of curves and surfaces. Includes parametrized curves, arc length, surfaces, tangent planes, area, curvature, the Gauss map, vector fields, isometries, geodesics, the Gauss-Bonnet theorem, and other curves and surfaces topics selected by the instructor.

**MATH 4210**
**Advanced Calculus I**
**3**
* Prerequisite(s): MATH 3250 with a grade of C or higher and MATH 2280 with a grade of C or higher and University Advanced Standing

Covers limit and differentiation theorems, L'Hopital's rule, integration, the Fundamental Theorem of Calculus, series convergence, Taylor series, compactness, and an introduction to the geometry and topology of Euclidean spaces.

**MATH 4220**
**Advanced Calculus II**
**3**
* Prerequisite(s): MATH 4210 with a grade of C or higher, and University Advanced Standing

Covers the topology of Euclidean spaces, vectors and linear transformations, multivariable limits and continuity, multivariable differentiation, Jordan regions, multivariable Riemann integration, and Taylor series in multiple variables.

**MATH 4250**
**Introduction to Dynamical Systems**
**3**
* Prerequisite(s): MATH 3250 with a grade of C or better, and University Advanced Standing.

Provides a foundation in dynamical systems. Discusses fundamental topics of dynamics, including graphical analysis, orbits, periodic and fixed points, convergence, bifurcations, symbolic dynamics, chaos, and Sarkovskii's Theorem. May include fractals, complex functions, and fractal dimension.

**MATH 4310**
**Introduction to Modern Algebra I**
**3**
* Prerequisite(s): MATH 3300 with a grade of C or higher and University Advanced Standing

Provides a deeper treatment of topics in modern algebra. Covers direct products of groups and the classification of finite Abelian groups. Covers the theory of rings including ideals, factor rings, various kinds of integral domains, fields, and polynomial rings.

**MATH 4320**
**Introduction to Modern Algebra II**
**3**
* Prerequisite(s): MATH 4310 with a grade of C or higher and University Advanced Standing

Provides a deeper treatment of topics in the theory of groups, rings, and fields. Covers field extensions, algebraic extensions, finite fields, and Kronecker's Theorem. Includes applications to straightedge and compass geometric constructions. Covers other topics at the instructor's discretion which may include the Sylow Theorems, symmetry groups, and Galois Theory.

**MATH 4330**
**Theory of Linear Algebra**
**3**
* Prerequisite(s): MATH 3250 with a grade of C or higher and University Advanced Standing

Covers vector spaces, linear transformations and matrices, dual spaces, inner product spaces, orthogonality, bilinear forms, eigenvalues, eigenvectors and generalized eigenvectors, diagonalization, and Jordan and other canonical forms.

**MATH 4340**
**Introduction to Number Theory**
**3**
* Prerequisite(s): MATH 3250 with a grade of C or higher and University Advanced Standing

Covers divisibility, irreducibility and primality, linear Diophantine equations, Pell's equation, continued fractions, congruences, Euler's theorem, arithmetic functions, primitive roots, quadratic reciprocity.

**MATH 4510**
**Foundations of Topology**
**3**
* Prerequisite(s): MATH 3250 with a grade of C or higher and University Advanced Standing

Introduces the ideas of topologies, compactness, connectedness, countability, separability, separation axioms, homeomorphisms, and the Baire Category Theorem.

**MATH 4610**
**Introduction to Numerical Analysis I**
**3**
* Prerequisite(s): MATH 2270 and MATH 2280, each with a grade of C or higher, an approved programming language, and University Advanced Standing

Includes numerical solutions of equations in one variable, numerical solutions of linear and nonlinear system of equations, interpolations and polynomial approximation, and approximating eigenvalues and eigenvectors.

**MATH 4620**
**Introduction to Numerical Analysis II**
**3**
* Prerequisite(s): MATH 4610 with a grade of C or higher and University Advanced Standing

Introduction to numerical analysis II. Topics will include numerical differentiation and integration, numerical solutions of initial-value problems and boundary-value problems for ordinary differential equations, numerical.

**MATH 4750**
**Life Contingencies**
**3**
* Prerequisite(s): STAT 4710 with a grade of C or higher and University Advanced Standing

Includes survival models, Markov Chains, life insurance and annuities, and Poisson processes. Prepares students for the life contingencies portion of Exam M of the Society of Actuaries.

**MATH 481R**
**Internship in Mathematics**
**1 to 4**
* Prerequisite(s): Instructor Approval and University Advanced Standing

For mathematics majors. Provides mathematics-related work experience in an industrial, commercial, or research environment. Internship credit may not be used in fulfilling the mathematics major course requirements. May be taken two times for a maximum of 6 credits toward graduation. May be graded credit/no credit.

**MATH 489R**
**Undergraduate Research in Mathematics**
**1 to 3**
* Prerequisite(s): MATH 3250 with a grade of C or better, Departmental Approval, and University Advanced Standing

Allows research on a project determined by a faculty member and approved by the department chair. Emphasizes proof, modeling, or other activities associated with mathematical research. May be used as part of a senior project. May be Graded Credit/No Credit. May be repeated for a maximum of 3 credits toward graduation.

**MATH 490R**
**Topics in Mathematics**
**2 to 3**
* Prerequisite(s): Departmental approval and University Advanced Standing

Studies a chosen topic in mathematics. The topic will vary depending upon student demand. Course may be taken more than once for different topics and for a maximum of 6 credit hours counted toward graduation.

**MATH 4999**
**Mathematics Capstone WE**
**2**
* Prerequisite(s): Instructor approval, departmental approval, and University Advanced Standing

Is for mathematics majors and is to be taken during the last semester before graduation. Reviews topics learned in the core undergraduate mathematics courses. Assesses student understanding through the Major Field Test. Provides an opportunity for senior mathematics majors to participate in mathematical research under the supervision of a faculty member. Offers a setting in which students prepare a research paper and give oral presentations that describe their research.

**MATH 5510**
**General Topology**
**3**
* Prerequisite(s): MATH 4510 or MATH 4210 with a grade of C or higher

Introduces the fundamentals of general topology, including topological spaces, separation axioms, continuity, compactness, connectedness, metric spaces, product spaces, metrization and ordinals.

**MATH 6000**
**Mathematics Core Review**
**3**
* Prerequisite(s): Department Approval

Reviews essential undergraduate mathematics for students seeking admission to the MS-Mathematics Education program. Reviews Calculus, Linear Algebra, Differential Equations, Geometry, Advanced Calculus, and Modern Algebra. May be graded credit/no credit.

**MATH 6100**
**Topics in Geometry and Topology**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director.

Includes manifolds, fundamental group, classification of surfaces, covering spaces, homotopy types, differential geometry, Riemannian geometry, algebraic geometry, projective geometry, and algebraic topology.

**MATH 6210**
**Real Analysis**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director.

Introduces students to fundamental analytic tools used across all of mathematics. Presents a proof based approach to analysis in Euclidean space and analysis in the general setting of metric spaces. Includes sequences, series, limits in Rn, metric spaces, topology, differentiation, and integration.

**MATH 6310**
**Modern Algebra**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director.

Covers advanced topics from group, ring, and field theory.

**MATH 6330**
**Advanced Linear Algebra**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director.

Presents a proof and computation based approach to the theory of vector spaces, including bases, dimension, linear transformations, rank-nullity theorem, dual spaces, inner products, and canonical forms.

**MATH 6350**
**Introduction to Combinatorics**
**3**
* Prerequisite(s): Mathematics Endorsement 4, or instructor approval

Enumerates permutations and combinations of sets and multi-sets, inclusion-exclusion, recurrence relations, generating functions, Polya theory, and combinatorial structures.

**MATH 6410**
**Topics in Ordinary Differential Equations**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director.

Includes the theory of linear and nonlinear ordinary differential equations and dynamical systems; the initial-value problems and behavior of solutions; the existence, uniqueness, perturbations, continuous dependence of solution on initial conditions, and introduction of nonlinear dynamical systems with applications.

**MATH 6610**
**Numerical Methods and Modeling**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director.

Investigates modelling and numerical topics. Investigates topics from college algebra, calculus, linear algebra, and differential equations from a theoretical as well as numerical perspective. Expounds on algorithms and modelling through software packages in a hands-on approach.

**MATH 6620**
**Topics in Numerical Analysis**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director.

Develops a deeper practical and theoretical understanding of methods used to find approximate solutions to a variety of mathematical problems and of the relationships between these algorithms. Compares accuracy, efficiency, and stability of methods used to solve nonlinear equations and large systems of linear and nonlinear algebraic equations; ordinary and partial differential equations; and to perform numerical differentiation, integration, interpolation and more general approximation of functions. Provides experience programming and applying many of the central algorithms that have powered modern advances in math and the sciences.

**MATH 6700**
**Applications of Mathematics**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director.

Introduces various areas of mathematics that can be applied to other fields such as the sciences, arts, industry, etc. Includes topics such as game theory, graph theory, knot theory, number theory, etc.

# Mathematics Developmental (MAT)

**MAT 0920**
**Math Fundamentals**
**3**
* Prerequisite(s): Appropriate placement by a placement exam (within two years).

Designed for students requiring basic math review. Reviews basic operations with whole numbers and fractions. Includes basic operations involving decimals, percents, ratios, rates, and basic operations involving physical measurements.Lab access fee of $3 applies.

**MAT 0950**
**Foundations for Algebra**
**4**
* Prerequisite(s): One of the following (within two years): MAT 0920 with a grade of C- or higher; or appropriate placement by a placement exam.

Designed for students requiring basic math and pre algebra instruction. Covers basic operations for number systems up to and including real numbers. Includes fractions, ratios, proportions, decimals, exponents, roots, linear equations, and polynomial expressions. May be delivered online. Lab access fee of $3 applies.

**MAT 0980 (Cross-listed with: MAT 0990)**
**Integrated Pre Algebra and Beginning Algebra**
**5**
* Prerequisite(s): Appropriate placement (within two years) by a placement exam.

An accelerated preparatory class for MAT 1010, Intermediate Algebra, covering Pre-Algebra and Beginning Algebra in one semester. Includes real numbers, algebraic expressions, polynomials, solving and graphing linear equations and inequalities, factoring, quadratic equations, rational expressions and equations, ratios, percents, systems of linear equations, roots and radicals, and an introduction to complex numbers. May be delivered online. Lab access fee of $3 applies.

**MAT 0990 (Cross-listed with: MAT 0980)**
**Introductory Algebra**
**4**
* Prerequisite(s): One of the following (within two years): MAT 0950 or MAT 0980 with a C- or higher; or appropriate placement by a placement exam.

For students who have completed a minimum of one year of high school algebra or who lack a thorough understanding of basic algebra principles. Teaches integers, solving equations, polynomial operations, factoring polynomials, systems of equations and graphs, rational expressions, roots, radicals, complex numbers, quadratic equations and the quadratic formula. Prepares students for MAT 1010, Intermediate Algebra. May be delivered hybrid and/or online Lab access fee of $3 applies.

**MAT 1000**
**Integrated Beginning and Intermediate Algebra**
**5**
* Prerequisite(s): One of the following (within department time limits): MAT 0950 or MAT 0980 with a C or higher; or appropriate placement by a placement exam.

Teaches Beginning and Intermediate Algebra in one semester. Covers linear, quadratic, and rational expressions, equations, and functions; systems of equations; logarithms; exponents; graphing; and problem solving. Prepares students for MAT 1030, STAT 1040, MATH 1050, and MATH 1090. May be delivered hybrid and/or online.

**MAT 1010**
**Intermediate Algebra**
**4**
* Prerequisite(s): One of the following (within two years): MAT 0980 or MAT 0990 with a grade of C- or higher; or appropriate placement by a placement exam.

Expands and covers in more depth basic algebra concepts introduced in Beginning Algebra. Includes linear and quadratic equations and inequalities, polynomials and rational expressions, radical and exponential expressions and equations, complex numbers, systems of linear and nonlinear equations, functions, conic sections, and real world applications of algebra. May be delivered hybrid and/or online.

**MAT 101R**
**Individualized Mathematics Review**
**1**
* Prerequisite(s): Any MAT or MATH course

Designed as a follow-up to MATH 100R for students who desire to make further progress in their math placement through individualized instruction. Includes a diagnostic test of mathematical knowledge base which is used to develop an individualized learning plan. Provides targeted intervention to increase foundational mathematics knowledge. May be Graded Credit/No Credit. May be repeated for a maximum of 3 credits. Lab access fee of $3 applies. Canvas Course Mats $74/McGraw

**MAT 1030** **QL**
**Quantitative Reasoning**
**3**
* Prerequisite(s): One of the following (within department time limits): MAT 1000 or MAT 1010 with a grade of C or higher; or appropriate placement by a placement exam.

Teaches how to communicate, interpret, and analyze quantitative information found in the media and in everyday life to make sound personal, professional, and civic decisions. May be delivered online.

**MAT 1035** **QL**
**Quantitative Reasoning with Integrated Algebra**
**6**
* Prerequisite(s): One of the following (within department time limits): MAT 0950 with a grade of C or higher; appropriate placement by a placement exam

Teaches students to communicate, interpret, and analyze quantitative information found in the media and in everyday life to make sound personal, professional, and civic decisions. Provides the necessary algebraic content taught in context.

**MAT 103H** **QL**
**Quantitative Reasoning**
**3**
* Prerequisite(s): One of the following (within department time limits): MAT 1000 or MAT 1010 with a grade of C or higher; or appropriate placement by a placement exam.

Teaches how to communicate, interpret, and analyze quantitative information found in the media and in everyday life to make sound personal, professional, and civic decisions. Covers the material at an honors level. May be delivered online.

**MAT 1110**
**Foundations of Mathematical Thinking and Reasoning**
**3**
* Prerequisite(s): One of the following (within two years): MAT 1000 or MAT 1010 with a grade of C- or higher; or appropriate placement by a placement exam.

Reviews and reflects on mathematics taught in K-12 to learn mathematical thinking and reasoning. Includes six topics: (1) Early mathematics experiences and mathematics anxiety (2) Why and how mathematics is as important as language literacy (3) The language features of mathematics, and mathematics as a way of thinking (4) Making mathematical arguments: mathematical structure and reasoning (5) Different ways of working with mathematics: mathematical cognition and methodology (6) Mathematical problem solving.

**MAT 240R**
**Math Mentor Leadership Practicum**
**2**
* Prerequisite(s): MAT 1000, MAT 1010, MAT 1030, or MAT 1035 with a B+ or higher.

Provides the theoretical base and hands-on training in leadership and math mentoring techniques as well as an understanding of and ability to apply listening, teaching, and leadership competencies. Assists student leaders in further developing their own self-awareness, learning skills and strategies, and explores methods for facilitating these in others. Provides an avenue for goal development, fulfillment and performance among student leaders and the individuals they serve. Emphasizes building relationships with students, teaching life skills and learning strategies, and guiding students through the college experience. May be repeated for a maximum of 8 credits towards graduation.

# Mechatronics Engineering Tech (MECH)

**MECH 1010**
**Fundamentals of Mechatronics**
**3**

Covers the fundamental skills and theory of the Mechatronics discipline. Covers integrated system design which includes electrical, mechanical, and microprocessor programming theory. Discusses the fundamentals of materials science, manufacturing processes, and the application of automation systems in a production environment. Course fee of $20 for materials applies. Lab access fee of $45 applies.

**MECH 1200**
**Electronics in Automation Design**
**3**
* Corequisite(s): MECH 1205
* Prerequisite(s) or Corequisite(s): MAT 1010

Teaches basic DC and AC electronics theory including voltage, current, resistance, reactance, and complex impedance as well as basic electronic components such as resistors, capacitors, and inductors. Includes the analysis of series, parallel, and complex circuits as well as troubleshooting and measurement techniques. Teaches principles of algebra and trigonometry which will be utilized for circuit analysis. Emphasizes the application of electronic theory and analysis in the design of automation systems. Course Lab fee of $40 for materials, lab applies.

**MECH 1205**
**Electronics in Automation Design Laboratory**
**2**
* Corequisite(s): MECH 1200

Applies basic DC and AC electronics theory including voltage, current, resistance, reactance, and impedance as well as basic electronic components such as resistors, capacitors, and inductors. Includes the analysis of series, parallel, and complex circuits as well as troubleshooting and measurement techniques. Presents the fundamentals of digital logic using combinational and sequential logic. Teaches number systems, binary arithmetic, logic gates, Boolean algebra, truth tables and logic simplification. Introduces computer architecture. Emphasizes the application of electronic theory and analysis in the design of automation systems. Lab access fee of $45 applies.

**MECH 1300**
**Industrial Wiring for Mechatronic Systems**
**1**
* Corequisite(s): MECH 1305
* Prerequisite(s) or Corequisite(s): MECH 1010

Covers National Electrical Code and International Electrical Code using electrical prints, installation methods, and system requirements in mechatronic systems. Covers the creation and use of electrical diagrams for design and troubleshooting. Lab access fee of $45 applies.

**MECH 1305**
**Industrial Wiring for Mechatronic Systems Laboratory**
**2**
* Corequisite(s): MECH 1300
* Prerequisite(s) or Corequisite(s): MECH 1010

Applies the use of National Electrical Code and International Electrical Code using electrical prints, installation methods, and system requirements in mechatronic systems. Explains how to create and use electrical diagrams for design and troubleshooting.

**MECH 2200**
**Semiconductors in Mechatronic Systems**
**3**
* Prerequisite(s): MECH 1200
* Corequisite(s): MECH 2205

Teaches the theory of semiconductor PN junctions and discrete semiconductors such as diodes, bipolar junction transistors, and MOSFET's applied to automation control. Also introduces the utilization of opto-isolators, triacs, and SCR's in controlling automation power devices. Course Lab fee of $25 for materials, lab applies.

**MECH 2205**
**Semiconductors in Mechatronic Systems Lab**
**1**
* Prerequisite(s): MECH 1200
* Corequisite(s): MECH 2200

Applies the theory of semiconductor PN junctions and discrete semiconductors such as diodes, bipolar junction transistors, and MOSFET's applied to automation control. Introduces the utilization of opto-isolators, triacs, and SCR's in controlling automation power devices. Lab access fee of $45 applies.

**MECH 2300**
**Microcontroller Architecture and Programming**
**4**
* Corequisite(s): MECH 2305
* Prerequisite(s) or Corequisite(s): MECH 2200

Teaches computer architecture and the fundamentals of computer programming in C language. Uses an IDE to develop, compile and debug C code. Introduces structured top down design and program documentation. Teaches the organization of I/O ports including alternate functions. Utilizes microcontroller communications, functions and I/O methods to interface to sensors and actuators. Course Lab fee of $50 for materials, lab applies.

**MECH 2305**
**Microcontroller Architecture and Programming Lab**
**1**
* Corequisite(s): MECH 2300

Applies computer architecture and the fundamentals of computer programming in C language. Uses an IDE to develop, compile and debug C code. Introduces structured top down design and program documentation. Teaches the organization of I/O ports including alternate functions. Utilizes microcontroller communications, functions and I/O methods to interface to sensors and actuators. Lab access fee of $45 applies.

**MECH 2400**
**Mechanical Components**
**4**
* Prerequisite(s): MECH 1010

Teaches students how to select, design, and analyze mechanical components that are used in manufacturing automation systems. Reviews and reinforces the concepts of the structure of metals, metals selection, and mechanical properties. Focuses on the selection of belt and chain drives, gear and gearbox selection, design of shafts, specification of rolling element bearings, and the use of threaded fasteners. Integrates the selection and design of mechanical components into a design project. Lab access fee of $45 applies

**MECH 2500**
**Introduction to PLCs in Mechatronic Design**
**2**
* Prerequisite(s): MECH 1200, MECH 2300
* Corequisite(s): MECH 2505

Covers the theory and programming of industrial control systems and programmable logic controllers (PLC). Introduces PLC programming stressing Ladder Logic and PLC programming, troubleshooting, and maintenance. Covers connection of PLCs to external components. Presents the fundamentals of digital logic using ladder logic. Covers number systems and Boolean algebra. Course Lab fee of $15 for materials, lab applies. Software fee of $29 applies.

**MECH 2505**
**Introduction to PLCs in Mechatronic Design Laboratory**
**2**
* Prerequisite(s): MECH 1200, MECH 2300
* Corequisite(s): MECH 2500

Applies the theory and programming of industrial control systems and programmable logic controllers (PLC). Applies PLC programming stressing Ladder Logic and PLC programming, troubleshooting, and maintenance. Applies connection of PLCs to external components. Lab access fee of $45 applies.

**MECH 2510**
**Fundamentals of Automation Controls**
**2**
* Corequisite(s): MECH 2515
* Prerequisite(s) or Corequisite(s): MECH 2500

Covers how to select, install, and troubleshoot sensors in a manufacturing environment. Emphasizes the application of proximity sensors in automation equipment as well as the use of encoders to measure speed and position, pressure transducers, and the use of thermocouples and thermistors to measure temperature. Covers signal conditioning methods to interface sensors to microprocessors and PLC's. Course Lab fee of $20 for lab notebook, lab applies.

**MECH 2515**
**Fundamentals of Automation Controls Laboratory**
**1**
* Corequisite(s): MECH 2510
* Prerequisite(s) or Corequisite(s): MECH 2500

Applies methods for proper selection, installion, and troubleshooting of sensors in a manufacturing environment. Emphasizes the application of proximity sensors in automation equipment as well as the use of encoders to measure speed and position, pressure transducers, and the use of thermocouples and thermistors to measure temperature. Utilizes signal conditioning methods to interface sensors to microprocessors and PLC's. Lab access fee of $45 applies.

**MECH 2550**
**Advanced PLC Programming and Applications**
**2**
* Prerequisite(s): MECH 2500
* Corequisite(s): MECH 2555

Covers the principles of program structure, subroutines, interrupts, debugging, and simplifying. Illustrates the measurement and scaling of analog signals. Covers networking principles such as Ethernet and serial. Course Lab fee of $15 for materials, lab applies. Software fee of $29 applies.

**MECH 2555**
**Advanced PLC Programming and Applications Laboratory**
**2**
* Prerequisite(s): MECH 2500
* Corequisite(s): MECH 2550

Applies the principles of program structure, subroutines, interrupts, debugging, and simplifying using a PLC. Applies the use of PLCs in the measurement and scaling of analog signals. Applies networking principles such as Ethernet and serial to communicate with a PLC. Lab access fee of $45 applies.

**MECH 2600**
**Introduction to Fluid Power Systems**
**2**
* Prerequisite(s): MECH 2400
* Corequisite(s): MECH 2605

Develops the concepts used to design, build, and control a fluid power system that is used in an industrial automation process. Covers the the fundamental principles of fluid power. Course Lab fee of $15 for materials, lab applies. Lab access fee of $45 applies. Software fee of $50 applies.

**MECH 2605**
**Introduction to Fluid Power Systems Laboratory**
**1**
* Prerequisite(s): MECH 2400
* Corequisite(s): MECH 2600

Applies the concepts used to design, build, and control a fluid power system that is used in an industrial automation process. Employs laboratory exercises to illustrate the selection and use of actuators, valves, and controls to sequentially control a process.

**MECH 2700**
**Industrial Motor Control Mechatronic Systems**
**2**
* Prerequisite(s): MECH 1300, MECH 1305
* Corequisite(s): MECH 2705

Covers installation, troubleshooting, preventive maintenance, and theory on DC/AC motors, generators, and associated industrial control circuitry. Discusses ladder logic, controls, sensors, motor starters, overloads, and electronic devices used to control and protect DC/AC Machines. Describes three phase systems, transformers, and delta-wye connections. Introduces AC variable speed drives.

**MECH 2705**
**Industrial Motor Control Mechatronic Systems Laboratory**
**2**
* Prerequisite(s): MECH 1300, MECH 1305
* Corequisite(s): MECH 2700

Applies the principles of Installation, troubleshooting, preventive maintenance, and theory on DC/AC motors, generators, and associated industrial control circuitry. Uses ladder logic, controls, sensors, motor starters, overloads, and electronic devices used to control and protect DC/AC Machines. Lab activities include the wiring of transformers, and three phase systems in both delta and wye configurations.

**MECH 3060**
**Mechatronics Management**
**3**
* Prerequisite(s): MECH 2550 and University Advanced Standing

Provides management principles, processes, and standards commonly used in manufacturing and other industries. Covers basic concepts in project management, operations management, quality management, and safety management. Familiarizes students with applicable software tools. Lab access fee of $45 applies.

**MECH 3220**
**Motion Control for Mechatronic Systems**
**3**
* Prerequisite(s): (MECH 2550 or AET 2270 or Department Approval) and University Advanced Standing
* Corequisite(s): MECH 3225

Presents the selection and application of AC and DC servo motors and how to control the speed and position in automation systems. Covers variable frequency drives and servo drives in automation system design. Applies algebra, trigonometry, integrals, and derivatives.Course Lab fee of $15 for materials, lab applies.

**MECH 3225**
**Motion Control for Mechatronic Systems Laboratory**
**1**
* Prerequisite(s): (MECH 2550 or AET 2270 or Department Approval) and University Advanced Standing
* Corequisite(s): MECH 3220

Applies the standards for the selection of AC and DC servo motors and the use of programming to control speed and position in automation systems. Implements variable frequency drives and servo drives in automation system design. Lab access fee of $45 applies.

**MECH 3300**
**Industrial Networks**
**2**
* Prerequisite(s): MECH 3220, University Advanced Standing
* Corequisite(s): MECH 3305

Covers the principles of designing, configuring, integrating, and maintaining an industrial network. Covers the use of software to integrate PLC's, sensors, HMI's, computers, and smart devices into a manufacturing data management network. Course Lab fee of $25 for materials, lab applies. Software fee of $29 applies.

**MECH 3305**
**Industrial Networks Laboratory**
**1**
* Prerequisite(s): MECH 3220 and University Advanced Standing
* Corequisite(s): MECH 3300

Applies the principles of designing, configuring, and integrating in maintaining an industrial network. Applies the use of software to integrate PLC's, sensors, HMI's, computers, and smart devices into a manufacturing data management network. Lab access fee of $45 applies.

**MECH 3400**
**Statics and Material Properties for Mechatronics**
**4**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): MECH 3405

Teaches the concept of forces as vectors, the equations of equilibrium, calculation of internal forces, and the calculation of centroids and area moments of inertia. Teaches how to calculate tensile and shear stress in machine components and compare the resultant forces to standard theories of failure using the principles of statics. Teaches algebra, trigonometry, and elementary calculus in terms of the application of statics.

**MECH 3405**
**Statics and Material Properties for Mechatronics Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): MECH 3400

Applies the concept of forces as vectors, the equations of equilibrium, calculation of internal forces, and the calculation of centroids and area moments of inertia. Covers how to calculate tensile and shear stress in machine components and compare the resultant forces to standard theories of failure by using the principles of statics. Lab access fee of $45 applies.

**MECH 3500**
**Industrial Robots**
**2**
* Prerequisite(s): MECH 2550, University Advanced Standing
* Corequisite(s): MECH 3505

Covers the principles of industrial robotics, programming, and the application of vision systems using industry created curriculum. Course Lab fee of $11 for flat ribbon cable, lab applies. Lab access fee of $45 applies Software fee of $50 applies.

**MECH 3505**
**Industrial Robots Laboratory**
**1**
* Prerequisite(s): MECH 2550, University Advanced Standing
* Corequisite(s): MECH 3500

Applies the principles of industrial robotics, programming, and the application of vision systems using industrial robots. Lab access fee of $45 applies.

**MECH 3570**
**Design Analysis and Rapid Prototyping WE**
**3**
* Prerequisite(s): University Advanced Standing

Covers the fundamentals of geometric dimensioning and tolerancing based on the ASME Y14.5 standard. Explores how a design is affected by manufacturing tolerances and how to specify the fit of parts on a detail print. Emphasizes assembly analysis using SolidWorks Motion and rapid prototyping to verify the form, fit, and function of a design. Lab access fee of $45 applies.

**MECH 3700**
**CNC Machines in Mechatronic Design**
**2**
* Prerequisite(s): MECH 3220, University Advanced Standing
* Corequisite(s): MECH 3705

Covers the application, programming, and maintenance of CNC machines. Emphasizes the integration of CNC machines into automation systems. Covers specifications, performance, interfacing with industrial robots, tooling, programming, and integrating the CNC machine into factory system. Course lab fee of $35 for materials applies. Software fee of $29 applies

**MECH 3705**
**CNC Machines in Mechatronic Design Laboratory**
**1**
* Prerequisite(s): MECH 3220, University Advanced Standing
* Corequisite(s): MECH 3700

Applies the application, programming, and maintenance of CNC machines. Emphasizes the integration of CNC machines into automation systems. Applies specifications, performance, interfacing with industrial robots, tooling, programming, and integrating the CNC machine into a factory system. Lab access fee of $45 applies.

**MECH 4300**
**Advanced Design in Mechatronic Systems**
**2**
* Prerequisite(s): MECH 2600 and MECH 2550, University Advanced Standing
* Corequisite(s): MECH 4305

Expands on the principles taught in the AAS degree covering the use of advanced systems and emerging technologies. Course lab fee of $15 for equipment applies.

**MECH 4305**
**Advanced Design in Mechatronic Systems Laboratory**
**1**
* Prerequisite(s): MECH 2600 and MECH 2550, University Advanced Standing
* Corequisite(s): MECH 4300

Applies the principles taught in AAS degree by implementing the use of advanced systems and emerging technologies in an expanded format. Lab access fee of $45 applies.

**MECH 4400**
**Polymers/Composites and Processes**
**3**
* Prerequisite(s): MECH 3400, University Advanced Standing.

Teaches students the selection of polymers, design of polymer products and manufacturing processes associated with polymer based products. Also teaches types of composites and design of composite products. Course lab fee of $18 for supplies applies. Lab access fee of $45 applies.

**MECH 4500**
**Advanced Automation Controls**
**3**
* Prerequisite(s): MECH 4300, University Advanced Standing
* Corequisite(s): MECH 4505

Introduces methods of advanced control of high speed components, analog controls, temperature, pressure, and time delay processes using digital and analog methods of control. Covers algebra, trigonometry, and basic applied calculus in the context of complex control systems. Course lab fee of $45 for equipment applies. Lab access fee of $45 applies.

**MECH 4505**
**Advanced Automation Controls Laboratory**
**1**
* Prerequisite(s): MECH 4300, University Advanced Standing
* Corequisite(s): MECH 4500

Integrates methods of advanced control of high speed components, analog controls, temperature, pressure, and time delay processes using digital and analog methods of control. Implements practical applications of the concepts discussed in the lecture portion of the class. Lab access fee of $45 applies.

**MECH 4800**
**Capstone Project WE**
**3**
* Prerequisite(s): MECH 3570, University Advanced Standing.

Integrates the concepts of the Mechatronics Engineering Technology curriculum into a semester-long design project. Requires students to conceive, define, design, document, and prototype a mechatronic project. Lab access fee of $45 applies. Software fee of $29 applies.

**MECH 481R**
**Mechatronics Internship**
**1 to 3**
* Prerequisite(s): Matriculation into Mechatronics Engineering Technology, Instructor Approval, and University Advanced Standing

Provides opportunity to use work experience to add to educational background and academic experience. A maximum of 6 credit hours may be counted towards graduation. May be graded credit/no credit.

**MECH 490R**
**Topics in Mechatronics**
**3**
* Prerequisite(s): University Advanced Standing

Covers a chosen topic in the mechatronics discipline. May be taken more than once for different topics and for a maximum of 6 credit hours toward graduation. Lab access fee of $45 applies.

# Mechanical Engineering (ME)

**ME 3010**
**Linear Systems**
**3**
* Prerequisite(s): ENGR 2030, MATH 2250, University Advanced Standing, and (Formal Acceptance into the Mechanical Engineering Program or Departmental Approval)

Covers analysis of linear systems in the time and frequency domains. Focuses on modeling and analysis of physical systems. Introduces Fourier and Laplace transforms. Includes a design component. Lab access fee of $45 for computers applies.

**ME 3130**
**Kinematics**
**3**
* Prerequisite(s): ENGR 2030, University Advanced Standing, and (Formal Acceptance into the Mechanical Engineering Program or Departmental Approval)

Covers the analysis of dynamic mechanisms including: relative motion of links in mechanisms; velocities and accelerations of machine parts; rolling contact; cams; and synthesis of mechanisms. Introduces computer-aided engineering techniques for mechanism analysis. Includes a design component. Lab access fee of $45 for computers applies.

**ME 3140**
**Machine Design**
**3**
* Prerequisite(s): ENGR 2140, ENGR 2160, University Advanced Standing, and (Formal Acceptance into the Mechanical Engineering Program or Departmental Approval)

Presents methods for static and dynamic stress and failure analysis for mechanical systems. Teaches how to create machine design models and free-body diagrams, calculate stress, estimate deflection, select an appropriate failure theory, and design to prevent failure. Gives experience using commercial FEA software to create models of simple structures and machine components. Includes a design component. Lab access fee of $45 for computers applies.

**ME 3160**
**Intermediate Materials**
**3**
* Prerequisite(s): ENGR 2140, ENGR 2160, University Advanced Standing, and (Formal Acceptance into the Mechanical Engineering Program or Departmental Approval)

Teaches in further depth the mechanical behavior of engineering materials including metals, woods, plastics, ceramics and composites. Looks at characteristics, failure mechanisms, and designing with various engineering materials. Lab access fee of $45 for computers applies.

**ME 3170**
**Introduction to Plastics and Composites**
**3**
* Prerequisite(s): ENGR 2140, ENGR 2160, CHEM 1210, MATH 2250, University Advanced Standing, and (Formal Acceptance into the Mechanical Engineering Program or Departmental Approval)

Introduces the structure, processing, properties and uses of plastic and composite materials. Surveys manufacturing methods. Teaches the use of plastic and composite materials in various products. Lab access fee of $45 for computers applies.

**ME 3210**
**Manufacturing Processes for Engineers**
**3**
* Prerequisite(s): ENGR 2140, ENGR 2160, University Advanced Standing, and (Formal Acceptance into the Mechanical Engineering Program or Departmental Approval)

Introduces manufacturing processes, including machining, injection molding, casting, 3D printing, and forming. Introduces Computer Numeric Control (CNC) machining and Computer Aided Manufacturing (CAM). Lab access fee of $45 for computers applies.

**ME 3300**
**Applied Thermodynamics**
**3**
* Prerequisite(s): ENGR 2300, University Advanced Standing, and (Formal Acceptance into the Mechanical Engineering Program or Departmental Approval)

Introduces thermodynamic analysis and design of vapor, gas, refrigeration and heat pump systems, along with exergy analysis. Covers thermodynamic relations, ideal gas mixture and psychometric applications, reacting mixtures, and combustion. Includes a design component. Lab access fee of $45 for computers applies.

**ME 3310**
**Fluid Mechanics**
**3**
* Prerequisite(s): ENGR 2030, University Advanced Standing, and (Formal Acceptance into the Mechanical Engineering Program or Departmental Approval)

Covers the fundamentals of fluid mechanics including fluid properties, fluid statics, the Bernoulli equation, fluid kinematics, the integral and differential analyses of fluid flow. Introduces dimensional analysis, similitude, and modeling. Covers viscous internal and external flows, and turbomachines. Includes a design component. Lab access fee of $45 for computers applies.

**ME 3320**
**Heat Transfer**
**3**
* Prerequisite(s): (ENGR 2300, ME 3310, or Departmental Approval) and University Advanced Standing

Focuses on the three modes of heat transfer: conduction, convection, and radiation. Introduces steady and unsteady heat conduction, convection heat transfer principles, forced and free internal and external convection flows. Covers radiation heat transfer, combined modes of heat transfer, and analysis and design of heat exchangers. Includes a design component. Lab access fee of $45 for computers applies.

**ME 3335**
**Thermal/Fluid Experimentation WE**
**2**
* Prerequisite(s): (ENGR 2300 or Departmental Approval) and University Advanced Standing
* Corequisite(s): ME 3320

Covers temperature, pressure, and flow measurement, along with calibration of thermal/fluid sensors in a lab setting. Focuses on experiments to investigate various phenomena in fluid flow, thermodynamics, and heat transfer. Investigates the performance of pumps, fans, and heat exchangers. Includes substantial amount of writing and satisfies WE requirements. Course Lab access fee of $45 applies.

**ME 4010**
**Automatic Controls**
**3**
* Prerequisite(s): ME 3010 and University Advanced Standing

Covers analysis of control systems using Evans, Nyquist and Bodes methods. Introduces digital control and feedback compensation concepts for system performance improvement. Includes a design component. Lab access fee of $45 for computers applies.

**ME 4015**
**Control and Vibration Experimentation**
**2**
* Prerequisite(s): ME 4010 and University Advanced Standing

Introduces system modelling and characterization in the time and frequency domains, feedback and compensation, Proportional Integral Derivative (PID) control, control of velocity and position in a lab setting. Covers motion measurement, force measurement, free vibration, frequency response, impact response, noise, and signal processing. Includes a writing component. Lab access fee of $45 for computers applies.

**ME 4180**
**Compliant Mechanisms**
**3**
* Prerequisite(s): ME 3130, ME 3140, and University Advanced Standing

Covers the design and analysis of compliant mechanisms and compliant structures. Includes large-deflection analysis/force displacement relationships, prediction of failure of compliant members, and synthesis of compliant mechanisms. Includes a design component. Lab access fee of $45 for computers applies.

**ME 4380**
**Design of Thermal/Fluid Systems**
**3**
* Prerequisite(s): ENGR 2300, ME 3320, and University Advanced Standing

Applies the principles of thermodynamics, fluid mechanics, and heat transfer to the design of conventional and emerging thermal/fluid systems. Includes lectures and design projects. Lab access fee of $45 for computers applies.

**ME 4390**
**Heating Ventilating and Air Conditioning Design**
**3**
* Prerequisite(s): ENGR 2300, ME 3320, and University Advanced Standing

Covers air conditioning components and systems, moist air properties and conditioning processes. Covers indoor environmental quality indicators, space heating and cooling load calculations, and building energy consumption estimation. Focuses on water- and air-system design, refrigerants and refrigeration systems. Includes lectures and design projects. Lab access fee of $45 for computers applies.

**ME 4410**
**Computer Aided Engineering**
**3**
* Prerequisite(s): ME 3140, ME 3320 and University Advanced Standing

Covers the application of computer-aided engineering tools in design; 3-D geometry and solid modeling; finite element analysis, kinematic analysis, and other software in engineering analysis. Includes a design component. Lab access fee of $45 for computers applies.

**ME 4420**
**Finite Element Methods**
**3**
* Prerequisite(s): ENGR 2140, ME 3320 and University Advanced Standing

Covers discrete approximation of engineering problems, energy and weighted residual methods, and coordinate systems and mapping. Focuses on one-, two-, and three-dimensional formulation of problems in solid and fluid mechanics and heat transfer, time-dependent problems, and optimization techniques. Lab access fee of $45 for computers applies.

**ME 4510**
**Mechanical Engineering Seminar**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ME 4810

Introduces various mechanical engineering careers and related industries. Emphasizes importance of life-long learning and active participation in professional societies and communities through lectures given by practicing engineers using their own experiences. Introduces various engineering codes of ethics. Intended as a culminating seminar for graduating seniors to prepare for their engineering careers. Lab access fee of $45 for computers applies.

**ME 4550**
**Global Engineering**
**3**
* Prerequisite(s): University Advanced Standing and Formal Acceptance into the Mechanical Engineering Program or Department Approval

Focuses on importance of issues associated with global product development including product development needs in unfamiliar cultures, managing distributed design teams and manufacturing at remote and/or distributed sites. Introduces first-hand how global companies approach these issues. Lab access fee of $45 for computers applies.

**ME 4810**
**Mechanical Engineering Capstone I**
**3**
* Prerequisite(s): University Advanced Standing, Formal Acceptance into the Mechanical Engineering Program, and Departmental Approval

Serves as a comprehensive two-semester design experience from conception to modeling or prototype. Uses, where possible, multidisciplinary team application of the engineering design process along with project management, manufacturing methods and economic analysis. Culminates in a design review based on formal presentations of fully documented, detailed proposed designs. Capstone I and II must be taken in consecutive semesters. Lab access fee of $45 for computers applies.

**ME 481R**
**Mechanical Engineering Internship**
**1 to 3**
* Prerequisite(s): University advanced standing. Admission into the Mechanical Engineering program and instructor approval.

Provides opportunities to apply classroom theory while students work as employees in a job that relates to their careers. Includes regular communication between students and the course coordinator. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May apply for up to 3 credits; may be graded as credit/no credit.

**ME 4820**
**Mechanical Engineering Capstone II**
**3**
* Prerequisite(s): ME 4810 and University Advanced Standing

Serves as a second semester of the two-semester design experience from conception to modeling or prototype. Uses, where possible, multidisciplinary team application of the engineering design process along with project management, manufacturing methods and economic analysis. Culminates in a demonstration of a final product (model or working prototype) with verification and documentation of how final product meets customer needs. Capstone I and II must be taken in consecutive semesters. Lab access fee of $45 for computers applies.

**ME 490R**
**Advanced Current Topics in Mechanical Engineering**
**1 to 3**
* Prerequisite(s): University Advanced Standing and Formal Acceptance into the Mechanical Engineering Program or Department Approval

Provides exposure to emerging topics and technologies of current interest in mechanical engineering. Varies each semester depending upon the state of technology. May be repeated for a maximum of 6 credits toward graduation without prior written department approval. Lab access fee of $45 for computers applies.

# Meteorology (METO)

**METO 1010** **PP**
**Introduction to Meteorology**
**3**

Introduces the study of our atmosphere. Studies the Earth's dynamic weather systems. Covers structure and compositions of the atmosphere; weather patterns; air masses; and types of weather fronts, weather forecasting, and climates.

**METO 1020**
**Introduction to Meteorology Laboratory**
**1**

Provides hands-on experience for students investigating various meteorologic phenomena discussed in METO 1010. Students desiring credit for a science major should take METO 1010 and METO 1020. Course lab fee of $10 applies.

**METO 1060** **PP**
**Fundamentals of Weather Forecasting**
**3**
* Prerequisite(s) or Corequisite(s): METO 1010

Introduces the fundamental principles of meteorological processes and mid-latitude weather forecasting. Focuses on the analysis of surface and upper-air weather maps, of soundings, of satellite and radar imagery to analyze current meteorological conditions. Explores the application of techniques to perform forecasts for basic weather variables such as temperature and precipitation. Course lab fee of $10 applies.

**METO 3100**
**Climate and the Earth System**
**3**
* Prerequisite(s): (CHEM 1110 or CHEM 1210), (MATH 1050 or MATH 1055), (PHYS 2010 or PHYS 2210), METO 1010, GEO 1010, and University Advanced Standing

Studies the six major components of the Earth system (i.e., the atmosphere, the hydrosphere, the cryosphere, the geosphere, the exosphere, and the biosphere) and investigates the interdependency and connections of these components, with particular emphasis on the effects on the climate system. Discusses the Earth's energy balance, the greenhouse effect, and the biogeochemical cycles of some elements and provides an overview of the most important climatic events that occurred during the history of the Earth. Course lab fee of $10 applies.

# Marriage and Family Therapy (MFT)

**MFT 6000**
**Systemic Foundations of Marriage and Family Therapy**
**3**
* Prerequisite(s): Admission to the Master of Marriage and Family Therapy, M.A. program

Introduces students to the historical development of the relational/systemic perspective. Emphasizes a systemic paradigm for clinical intervention. Includes instruction on founders of MFT and conceptual foundations.

**MFT 6010**
**Contemporary Approaches to MFT**
**3**
* Prerequisite(s): Admission to the Master of Marriage and Family Therapy, M.A. program

Introduces students to contemporary models of MFT. Compares post-modern models of MFT. Includes evidence-based practice and the biopsychosocial perspective.

**MFT 6100**
**Ethical Issues in Marriage and Family Therapy**
**3**
* Prerequisite(s): Admission to the Master of Marriage and Family Therapy, M.A. program

Promotes MFT identity. Develops student competence in ethical decision making. Includes application of the American Association for Marriage and Family Therapy Code of Ethics and relevant Utah law to clinical scenarios.

**MFT 6200**
**Systemic Assessment and Diagnosis**
**3**
* Prerequisite(s): Admission to the Master of Marriage and Family Therapy, M.A. program

Develops student competence in treatment approaches specifically designed for use with families. Introduces students to crisis intervention with families. Includes evidence-based practice for clinical work with young children, adolescents, families in mid-life, and elderly families.

**MFT 6210**
**Couples Therapy**
**3**
* Prerequisite(s): MFT 6200 and admission to the Marriage and Family Therapy, M.A. program

Develops student competence in treatment approaches specifically designed for use with a range of diverse couples, including sex therapy, same-sex couples, elderly, and interfaith couples. Includes evidence-based practice and crisis intervention with couples.

**MFT 6220**
**Group Therapy**
**2**
* Prerequisite(s): MFT 6200 and admission to the Marriage and Family Therapy, M.A. program

Develops student competence in treatment approaches specifically designed for use with groups. Evaluates group work with addiction, abuse and trauma. Includes evidence-based practice and crisis intervention with groups.

**MFT 6230**
**Family Therapy**
**3**
* Prerequisite(s): MFT 6000 and admission to the Marriage and Family Therapy, M.A. program

Develops student competence in treatment approaches specifically designed for use with families. Introduces students to crisis intervention with families as well as assessment and treatment of addiction and family violence. Includes evidence-based practice for clinical work with adult children, adolescents, families in mid-life, and elderly families.

**MFT 6240**
**Individual Therapy**
**2**
* Prerequisite(s): MFT 6200 and admission to the Marriage and Family Therapy, M.A. program

Introduces students to a variety of common presenting problems including addiction, suicide, trauma, abuse, intra-familial violence, and acute chronic medical conditions. Utilizes a relational/systemic philosophy. Includes evidence-based practice and crisis intervention with individuals.

**MFT 6300**
**Working with Diversity in MFT**
**3**
* Prerequisite(s): Admission to the Master of Marriage and Family Therapy, M.A. program

Builds student awareness of diversity, power, privilege, and oppression as these relate to race, age, gender, ethnicity, sexual orientation, gender identity, socioeconomic status, disability, health status, religious affiliation, nation of origin, spiritual orientation, or other relevant social categories.

**MFT 6310**
**Child and Adolescent Development**
**3**
* Prerequisite(s): MFT 6000 and admission to the Marriage and Family Therapy, M.A. program

Introduces students to individual and family development during stages of childhood and adolescence, and developmentally appropriate individual and family therapy models. Addresses human sexual development. Discusses biopsychosocial health during childhood and adolescence.

**MFT 6320**
**Adult Issues in Human Development**
**3**
* Prerequisite(s): MFT 6300 and admission to the Marriage and Family Therapy, M.A. program

Introduces students to individual and family development across stages of adulthood. Addresses human sexuality. Discusses biopsychosocial health during adulthood.

**MFT 6400**
**Research in Marriage and Family Therapy**
**3**
* Prerequisite(s): MFT 6000 and admission to the Marriage and Family Therapy, M.A. program

Introduces students to basic research methodology. Examines evidence-based practice in MFT. Evaluates usefulness of couple, marriage, and family therapy research.

**MFT 6500**
**Community Intervention**
**1**
* Prerequisite(s): Admission to the Master of Marriage and Family Therapy, M.A. program

Introduces students to practice within defined contexts (e.g., healthcare settings, schools, military settings, private practice). Addresses nontraditional MFT professional practice using therapeutic competencies (e.g., community advocacy, psycho-educational groups). Considers multidisciplinary collaboration.

**MFT 6510**
**Contemporary Issues in MFT**
**1**
* Prerequisite(s): MFT 6000 and admission to the Marriage and Family Therapy, M.A. program

Develops student competence in emerging and evolving contemporary challenges. Examines problems and/or recent developments at the interface of MFT knowledge and practice and the broader local, regional, and global context. Includes discussion of contemporary issues such as immigration, technology, same-sex marriage, and violence in schools.

**MFT 6520**
**Clinical Business Development and Practice**
**2**
* Prerequisite(s): Admission to the Master of Marriage and Family Therapy, M.A. program
* Prerequisite(s) or Corequisite(s): MFT 6930

Introduces students to the development of private clinical practices. Specific emphasis on business practice in the mental health field. Includes discussion of HIPAA and telehealth.

**MFT 6600**
**Capstone in MFT**
**1**
* Prerequisite(s): Admission to the Marriage and Family Therapy, M.A. program
* Prerequisite(s) or Corequisite(s): MFT 6930

Emphasizes achievement of the program-level outcomes. Integrates knowledge across the program to promote student awareness of their own potential contributions to and positioning in the MFT field.

**MFT 6900**
**Pre-Practicum**
**3**
* Prerequisite(s): Admission to the Master of Marriage and Family Therapy, M.A. program

Introduces basic skills and competencies needed for effective and ethical clinical practice. Guides self-awareness and self-reflection. Presents expectations of competency in basic MFT interventions, sensitivity to client contextual variables, completion of case documentation, and use of supervision and feedback.

**MFT 6910**
**Practicum I**
**3**
* Prerequisite(s): Approval of MFT faculty and admission to the Marriage and Family Therapy, M.A. program
* Prerequisite(s) or Corequisite(s): MFT 6900

Develops student competence in MFT assessment and intervention. Includes practice with diverse, international, multicultural, marginalized, and/or underserved communities. Guides competence in working with sexual and gender minorities and their families as well as anti-racist practices. Guides self-awareness and self-reflection. Requires completion of case documentation, and effective use of supervision and feedback.

**MFT 6920**
**Practicum II**
**3**
* Prerequisite(s): MFT faculty approval and admission to the Marriage and Family Therapy, M.A. program
* Prerequisite(s) or Corequisite(s): MFT 6910

Continued development of student competence in MFT assessment and intervention. Includes practice with diverse, international, multicultural, marginalized, and/or underserved communities. Guides competence in working with sexual and gender minorities and their families as well as anti-racist practices. Guides self-awareness and self-reflection. Requires completion of case documentation, and effective use of supervision and feedback.

**MFT 6930**
**Practicum III**
**3**
* Prerequisite(s): Approval of MFT faculty and admission to the Marriage and Family Therapy, M.A. program
* Prerequisite(s) or Corequisite(s): MFT 6920

Additional development of student competence in MFT assessment and intervention. Includes practice with diverse, international, multicultural, marginalized, and/or underserved communities. Guides competence in working with sexual and gender minorities and their families as well as anti-racist practices. Guides self-awareness and self-reflection. Requires completion of case documentation, and effective use of supervision and feedback.

**MFT 6940**
**Practicum IV**
**3**
* Prerequisite(s): Approval of MFT Faculty and admission to the Marriage and Family Therapy, M.A. program
* Prerequisite(s) or Corequisite(s): MFT 6930

Final development of student competence in MFT assessment and intervention. Includes practice with diverse, international, multicultural, marginalized, and/or underserved communities. Guides competence in working with sexual and gender minorities and their families as well as anti-racist practices. Guides self-awareness and self-reflection. Requires completion of case documentation, and effective use of supervision and feedback.

# Business Management (MGMT)

**MGMT 1010** **SS**
**Introduction to Business**
**3**

Overviews the business world, its structure, procedures, and vocabulary. Provides information to assist in making occupational choices. Methods include lectures, class discussions, group activities, videos, and guest speakers. Completers should have a general knowledge of business and career opportunities. May be delivered online. Canvas Course Mats $13/Lumen applies.

**MGMT 1200**
**Business English**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 or appropriate test scores

For all those desiring to improve business English skills. Studies current usage of English grammar, including parts of speech, syntax, and punctuation. Emphasizes business usage. Lab access fee of $25 for computers applies.

**MGMT 1250**
**Principles of Leadership**
**3**

Required course for integrated studies degree students with an emphasis in leadership. Overviews principles of leadership. Provides students with information on successful leadership styles. Includes lectures, videos, cases, group activities, and class discussion. Lab access fee of $25 for computers applies.

**MGMT 1400**
**Introduction to Data Analytics**
**3**

Introduces data analytics to a general audience. Presents the role of the analyst and different career paths available within data analytics. Employs a broad range of use cases to introduce methods for extracting, cleaning, organizing, and analyzing data and sharing insights. Covers data visualization and report generating tools. Discusses the legal, ethical, and privacy issues involved with big data projects.

**MGMT 2030** **SS**
**Women in Business**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Explores the foundations of women in business today. Discusses the opportunities, challenges, and solutions of women as employees, managers, and leaders within all types of organizations. Includes topics such as opportunities for success, work-life issues, gender differences and role development, organizational culture and diversity, the glass ceiling and other barriers to success, career development, developing leadership, personal goals and ambitions, leadership styles, mentoring and coaching, and women in business professions. Includes lecture, in-class and online discussions, guest speakers, group activities, case studies, presentations, and written assignments.

**MGMT 2110 (Cross-listed with: COMM 2110)** **SS**
**Interpersonal Communication**
**3**

Examines the role of communication in interpersonal relationships. Includes the history of interpersonal communication research and theory and applications such as negotiation, conflict management, listening, and assertiveness.

**MGMT 2240**
**Business Calculus**
**3**
* Prerequisite(s): MATH 1050, MATH 1055 or MATH 1090 taken within the last two years with grade of C- or better or appropriate placement assessment score.

Analyzes profit, revenue, cost and average cost functions through rates of change, both average and instantaneous. Applies graphical, numerical, and algebraic techniques to optimization in business-related problems. Covers compound interest including present value and future value of ordinary annuities. Focuses on solving a variety of problems in economics and finance using derivatives and integrals. May be delivered hybrid and/or online. Canvas Course Mats $78/Cengage applies. Lab access fee of $25 for computers applies.

**MGMT 2340**
**Business Statistics I**
**3**
* Prerequisite(s): MATH 1050, MATH 1055, or MATH 1090 or higher, or appropriate test scores

Presents an application of statistics in business and economics covering methods of collecting, analyzing, and presenting data. Includes frequency distributions, averages, index numbers, probability, sampling, estimation, analysis of variance, time series, regression and correlation, and chi-square. May be delivered online. Canvas Course Mats $78/ McGraw applies. Lab access fee of $25 for computers applies. Software fee of $40 applies.

**MGMT 2400**
**Data Analytics for Business**
**3**

Introduces the field of data analytics in business. Introduces the software, languages, and hardware used in data analytics. Uses common analytical tasks such as clustering, classifying, and predicting outcomes, along with common algorithms used in data analytics, such as regression, decision trees, and neural networks. Discusses the legal, ethical, and privacy issues inherent with big data projects. Includes hands-on experience with data extraction, data analysis and interpretation.

**MGMT 2450**
**The Principles of Personal Excellence**
**3**

Introduce students to a holistic framework for the development of personal effectiveness and peak performance. Reviews principles, processes, and practices used by peak performers in many life disciplines. Offers students a chance to apply many practices and techniques, which they can apply within the many performances arenas of their life. Course fee of $15 applies

**MGMT 258R**
**Current Topics in International Business**
**1 to 3**
* Prerequisite(s): Department Chair Approval

Provides exposure to emerging topics of current interest in international business. Topics vary each semester. May apply a maximum of three hours toward graduation.

**MGMT 281R**
**Cooperative Work Experience**
**2 to 8**
* Prerequisite(s): Approval from School of Business Career and Corporate Manager

Provides opportunities to apply classroom theory on the job. Students work as paid employees in a job that relates to their careers while enrolled at the institution. Credit is determined by the number of hours a student works during the semester. Completers meet individually set goals. Six credits may be applied toward graduation. May be graded credit/no credit.

**MGMT 290R**
**Independent Study**
**1 to 3**

Provides independent study as directed in reading and individual projects. Requests must be submitted for approval by the department. Approval for this program will be coordinated with the instructor. May be repeated for up to three credits.

**MGMT 292R**
**Seminar**
**1 to 3**

Designed to give the student added insight into management principles essential for successful management of a business. Includes guest experts from the field of business. May be repeated for a total of three credits.

**MGMT 297H**
**Honors Seminar in Leadership Development**
**3**

Emphasizes factors that impact leadership effectiveness and skill development in organizations. Features lectures on topics such as leadership, participative management, negotiations, team building, and women's issues by local experts in a seminar setting. Includes group interaction and discussions, written summaries and instructor critique of student performance.

**MGMT 3000**
**Organizational Behavior WE**
**3**
* Prerequisite(s): MKTG 220G or ENGL 2010 and University Advanced Standing

Studies behavioral theories and concepts for creating effective organizations. Emphasizes knowledge of individual, group, and organizational processes and variables regarding people's attitudes and behaviors in organizational settings. Presents topics on communication, leadership, motivation, conflict management, socialization, team building, decision making, diversity, ethics, and culture. Includes lectures, case studies, oral presentations, written assignments, and group projects. Lab access fee of $32 for computers applies.

**MGMT 3020**
**Individual Action and Corporate Social Responsibility**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Focuses on moral issues in organizations and the role and importance these have in today's complex business environment. Explores the challenges that arise across the spectrum of business activity and studies human conduct in a business context and what constitutes right and wrong. Examines issues of ethics as they apply to business entities, managers, shareholders, customers, society, and other consultants. Focuses on identifying and solving real world ethical dilemmas in business, and evaluates various individual and corporate decision-making models.

**MGMT 3070**
**Total Quality Management**
**3**
* Prerequisite(s): MGMT 3450, Matriculation into Woodbury School of Business, and University Advanced Standing

Covers universal principles of quality assurance management, mechanics of a quality information system, and quality management practices. Emphasizes system elements, controls, and fitness for use. Includes process charting, quality costing concepts, statistical process control (SPC), sampling, variability, attribute charting, and continuing improvement strategies. May be delivered online. Lab access fee of $25 for computers applies. Software fee of $40 applies.

**MGMT 3210 (Cross-listed with: HM 3210)**
**Event Venue and Convention Management**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Analyzes and explores the conventions and meetings market, event venue management, and the corresponding relationship with convention and visitors bureaus. Covers various procedures in site selection, site layout and logistics, operations, negotiations and contracts, food and beverage service, and convention sales.

**MGMT 330G**
**Survey of International Business**
**3**
* Prerequisite(s): (ENGL 2010 or MKTG 220G), ECON 2010, and University Advanced Standing

Teaches international business, trade and foreign investment, and theories of international trade. Studies economic development, international investment and international agencies (government and private) that affect international business by informing, regulating or financing. Develops an appreciation of the unpredictable forces of foreign environments. Explores how international businessmen respond to these influences. Canvas Course Mats $78/McGraw applies

**MGMT 332G**
**Cross Cultural Communications for International Business**
**3**
* Prerequisite(s): (ENGL 2010 or COMM 1050) and University Advanced Standing

Discusses today's business environment which requires work in a multi-ethnic setting. Overviews critical elements that arise from the various cultural backgrounds which can impact both domestic and international organizations. Proceeds from a management point of view with lessons easily derived for the mid-level manager as well as for line personnel. Concentrates on managerial communications, negotiations, cultural changes, and management functions.

**MGMT 3345**
**Business Statistics II**
**3**
* Prerequisite(s): MGMT 2340 or STAT 2040 or appropriate test scores and University Advanced Standing

Studies advanced managerial concepts. Includes multiple regression, ANOVA, test of hypotheses, and time series techniques. Emphasizes statistical modeling, statistical decision-making, and is computation intensive. Lab access fee of $25 for computers applies. Canvas Course Mats $78/McGraw applies.

**MGMT 3440**
**Managing Organizations**
**3**
* Prerequisite(s): MGMT 3000 and University Advanced Standing

Studies management theory and emphasizes the managerial view of the elements and variables that influence the organization. Examines organizational design and change emphasizing the management tools used in planning, organizing, directing, controlling, and leading, and the coordinating of these factors within organizations. Uses current events as they relate to managing and developing the organization. Includes case analyses, team building exercises, videos, class discussions, group presentations, written assignments, and guest speakers. Lab access fee of $25 for computers applies.

**MGMT 3450**
**Operations Management**
**3**
* Prerequisite(s): Matriculation into WSB and University Advanced Standing

Focuses on the management of resources for products, production, or services within an organization. Covers project management, supply chain, facility location and layout, forecasting, scheduling, planning, and operational processes. Emphasizes product/service development, supply chain, forecasting, inventory control, quality assurance, and research techniques. May be delivered hybrid and/or online. Canvas Course Mats $78/McGraw applies. Lab access fee of $25 for computers applies.

**MGMT 3460**
**Scheduling, Forecasting and Inventory Management**
**3**
* Prerequisite(s): MGMT 3450, Matriculation into Woodbury School, and University Advanced Standing

Applies critical scheduling, forecasting and inventory management skills in business operations. Analyzes a wide array of quantitative and qualitative methods that are in current industry use. Analyzes scheduling and forecasting in business situations, and how to manage inventory systems. Evaluates both short-run and long-run forecasting and inventory considerations.

**MGMT 3470**
**Lean Management Systems**
**3**
* Prerequisite(s): MGMT 3450, matriculation into Woodbury School of Business, and University Advanced Standing

Teaches advanced operations management processes beyond introductory course. Studies process and value stream management. Teaches importance of continuous improvement and other techniques critical to operations management in modern organizations. Integrates hands-on experience in lean thinking processes. Software fee of $40 applies.

**MGMT 3480**
**Operations Simulation**
**3**
* Prerequisite(s): MGMT 3450 and University Advanced Standing

Applies critical operations management skill sets in a simulation. Creates simulations to analyze and solve operational problems. Applies data visualization software to make strategic decisions.

**MGMT 3500**
**Leadership Theory and Application**
**3**
* Prerequisite(s): University Advanced Standing

Examines leadership theory and how it applies to real-world situations. Facilitates thinking and dialogue about leaders and the leadership process. Covers leadership development strategies and approaches for individuals, teams, and organizations. Includes readings, discussions, reflections, experiential activities, guest speakers, written papers, and innovative assignments. Lab access fee of $25 for computers applies.

**MGMT 3700**
**Supply Chain and Logistics Management**
**3**
* Prerequisite(s): MGMT 3450 and University Advanced Standing

Teaches planning and controlling of supply chains and distribution networks. Covers concepts of network design, forecasting, aggregate planning, transportation, sourcing decisions, performance metrics, and the role of information technology in supply chain.

**MGMT 3730**
**Opportunities in Direct Sales**
**3**
* Prerequisite(s): University Advanced Standing

Discusses direct sales and the impact on our society. Covers basic terminology of the direct sales industry. Introduces distinctions between legal and illegal activity in the industry. Teaches the history of direct sales, compensation plans, and industry ethics. Analyzes communication skills in the direct sales industry. Explores the unique nature of the relationship between the company and the independent representative. Uses discussion, lecture, presentations and group activities to increase understanding and ability to analyze business under the umbrella of direct sales.

**MGMT 3740**
**Relationship Marketing**
**3**
* Prerequisite(s): MGMT 3730 and University Advanced Standing

For students interested in understanding relationship marketing as it applies to the direct selling industry. Focuses on the relationship between companies and their independent sales forces. Covers business ethics, compensation, structures, company conventions, distributor services, and online community building. Uses lectures, discussions, guest speakers, analyses in the field, and presentation of analysis in both oral and written format.

**MGMT 4350**
**Business Intelligence and Data Visualization**
**3**
* Prerequisite(s): MGMT 2240, MGMT 2340, Matriculation into Woodbury School and University Advanced Standing.

Utilizes data and data visualization tools to support business intelligence and inform business decisions. Identifies key variables and methods of presenting data. Prepares for industry certifications, software credentials, and internships.

**MGMT 4470**
**Strategic Operational Planning**
**3**
* Prerequisite(s): MGMT 3450 and University Advanced Standing

Integrates planning concepts in the planning hierarchy within a manufacturing framework. Explores in depth the concepts of capacity planning, advanced sales and operational planning, demand management and forecasting, advanced MRP/ERP, inventory control, scheduling and lot sizing. Focuses on linkages between production planning and execution.

**MGMT 4480**
**Management Science and Optimization**
**3**
* Prerequisite(s): MATH 1100 (or higher) or MGMT 2240, MGMT 2340, and University Advanced Standing

Explores management science and optimization models in depth, focusing on business applications and computer modeling. Introduces linear programming, integer programming, nonlinear programming, goal programming and network flow models. Studies transportation, assignment and transshipment problems. Also studies stochastic models, queueing, simulation and decision analysis.

**MGMT 450R**
**Leadership Practicum**
**1 to 3**
* Prerequisite(s): University Advanced Standing

Designed for upper-division students interested in acquiring and practicing applied leadership skills. Covers project management, team participation and/or leadership, effective meeting management, decision-making, and budgeting. May be repeated for a maximum of 6 credits toward graduation.

**MGMT 458R**
**Advanced Topics in International Business**
**1 to 3**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

Provides exposure to emerging topics of current interest in international business. Topics vary each semester. May apply a maximum of 6 hours toward graduation.

**MGMT 4620**
**Developing Business in China**
**3**
* Prerequisite(s): ENGL 2010, Junior Standing, and University Advanced Standing

Introduces the key factors driving the economy and companies doing business in and with China. Compares the institutions and characteristics of the Chinese economy and business system. Identifies issues facing managers of western corporations producing and selling in the Chinese market, sourcing from Chinese industry and competing with Chinese rivals.

**MGMT 481R**
**Internship**
**1 to 6**
* Prerequisite(s): Matriculation into Woodbury School of Business, approval from School of Business Career and Corporate Manager, and University Advanced Standing

For upper-division students working toward a Bachelor of Science Degree in Business Management. Provides a transition from school to work where learned theory is applied to actual practice through meaningful on-the-job experience. No more than three credit hours of internship work experience will apply toward graduation in any Business Management Specialization; may be repeated for a maximum of 6 credits. May be graded credit/no credit.

**MGMT 4835**
**Management Consulting Strategy Implementation**
**1**
* Prerequisite(s): Department Approval
* Corequisite(s): MGMT 4840

Builds on strategic management concepts and consulting course material using a hands-on, competitive business simulation.

**MGMT 4840**
**Management Consulting**
**3**
* Prerequisite(s): FIN 3100 with a minimum grade of B-, Instructor approval, and University Advanced Standing
* Corequisite(s): MGMT 4835

Builds knowledge and capability in the consulting process, competitive- and corporate-level strategic management elements, and client management strategies. Develops a business project with teams of students working together with a specific, recruited, local company. Applies knowledge and skills from the business curriculum, student teams will gather needed data, analyze it, problem-solve, and craft recommendations in order to improve competitive implementation and meet firm objectives using strategic management and project management tools.

**MGMT 4860**
**Business Strategy Formulation and Implementation**
**3**
* Prerequisite(s): FIN 3100, MKTG 3600, MGMT 3000, MGMT 3450 and Matriculation into the Woodbury School of Business and University Advanced Standing.

Integrates all major management area skills into a capstone experience for students in several WSB programs. Integrates strategic management concepts and thinking processes through case analysis. Includes topics from accounting, finance, marketing, economics, operations, and organizational behavior. Provides experiential learning with industry partners both local and regional. Canvas Course Mats $78/Wiley applies.

**MGMT 4870**
**International Management**
**3**
* Prerequisite(s): MGMT 3000, MKTG 3600, Matriculation into the Woodbury School of Business, and University Advanced Standing

Examines in depth the leading forces and trends shaping the opportunities and challenges confronted by multinational corporations (MNCs) as they assemble, grow, mature, coordinate and control their international network of subsidiaries, joint-ventures, alliances, and supplier firms. Examines the strategies pursued by MNCs in response to opportunities and challenges in this process, consistent with their distinctive strengths and weaknesses; and theories. Contrasts the models and strategic frameworks relating these strategies and forces/trends. Includes group project (written and oral presentations) on a multinational corporation developing or maturing its network in a selected market.

**MGMT 490R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

For bachelor's degree students and other interested persons. Offers independent study as directed in reading, in individual projects, etc., in the area of marketing and/or international business at the discretion and approval of the department chairperson. May apply a maximum of 6 hours toward graduation.

**MGMT 492R**
**Human Resource Seminar**
**1**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

Presents guest speakers on emerging human resource (HR) research and issues: strategy, international, culture, legal issues, planning and job analysis, recruitment and selection, performance management, compensation and benefits, and career development. May be repeated for 2 credits toward graduation.

**MGMT 494R**
**Seminar**
**.5 to 3**
* Prerequisite(s): University Advanced Standing

Provides short courses, workshops, and special programs in business management, leadership, or current business topics. Repeatable for up to 3 credits toward graduation.

**MGMT 495R**
**Executive Lecture Series**
**1**
* Prerequisite(s): University Advanced Standing

Consists of lectures presented by guest speakers on current business topics concerning the student, community, nation, business world, etc. May be required in business programs; see specific program listings for details. May apply a maximum of 3 credits toward graduation.

**MGMT 497H**
**Business Honors Seminar**
**1 to 3**
* Prerequisite(s): Permission required, 3.4 GPA or higher, senior status, and University Advanced Standing

Provides in-depth exposure to an issue of current interest in business by a local expert in a seminar setting. Includes group interaction and discussion, critical analysis of readings, and critique of student writings. Topics vary each semester.

**MGMT 4980**
**Business Research Seminar**
**3**
* Prerequisite(s): Instructor Approval and University Advanced Standing

Studies the process of researching and writing for scholarly publication. Includes understanding the concepts of scholarly conversation, managing scholarship, choosing a topic, identifying appropriate journals, using exemplars, creating a title and abstract, making an outline, developing an introduction and conclusion, writing the body of the paper, and then revising, submitting, and finally publishing in a scholarly journal.

**MGMT 6000**
**Career Development and Advancement**
**1.5**
* Prerequisite(s): Acceptance into the UVU MBA program

Develops ability to implement the career management process by exploring the structure of career research and networking. Enhances interviewing and salary negotiation skills and abilities. Also addresses the transitional soft skills needed in a career management position. Provides interaction between students and successful leaders of business and nonprofit organizations throughout the semester.

**MGMT 6215**
**Managing and Facilitating Professional Teams**
**3**
* Prerequisite(s): Admission to Master of Accountancy or the Master of Business Administration Program

Enhances the ability to analyze and function in team-based, professional environments. Teaches what actions are needed to increase the effectiveness of a team, solve interpersonal problems, and remove common roadblocks.

**MGMT 6440**
**Advanced Project Management**
**3**

Focuses on advanced tools and techniques to develop strategic project management skills with an emphasis on managing technical projects. Explores best practices aligned for Program Management, Project Portfolio Management, and Strategic Project Leadership and Management. Analyzes basic cost justification techniques for making economic decisions in technical organizations.

**MGMT 6450**
**Operations Management**
**3**
* Prerequisite(s): Acceptance in the MBA program

Analyzes operations and production activities. Reviews basic processes. Analyzes managing a production or service organization, evaluation of concepts such as inventory control, production control, procurement, quality management, planning, and forecasting.

**MGMT 6470**
**Organization Information Technologies**
**3**

Examines in depth how information and information management affect the strategy, structure and operations of organizations. Covers Technical and organizational foundations of information systems along with contemporary approaches to building, managing and protecting information systems including hands-on work with a modern Enterprise Resource Planning (ERP) system. Introduces concepts of Enterprise Architecture and compares to cloud-based Software as a Service offerings. Emphasizes how information technology affects decision-making. Uses Excel as a decision support tool. Examines the ethical and legal issues raised by the capabilities of information technology. May be delivered online.

**MGMT 6500**
**Managing Individuals and Groups**
**3**
* Prerequisite(s): Acceptance in the MBA program

Exposes students to the concepts, theories, and practices related to the behavior and attitudes of people in organizations. Examines issues at the individual, group, and organizational levels, including topics such as individual differences, motivation, leadership, human resource management, teamwork, and organizational design, and structure.

**MGMT 6510**
**Information Systems and Project Management**
**3**
* Prerequisite(s): Acceptance into the Woodbury School of Business MBA program

Examines information systems at the general management level. Employs a strategic look at needs of any organization and how the function of information systems assists in the effectiveness of organizations.

**MGMT 6740**
**Operations and Supply Chain Management**
**3**
* Prerequisite(s): MGMT 6450

Utilizes advanced topics in operations research which develop decision making processes for complex organizations and systems. Identifies creative methods to analyze problems, develop alternative processes for decision making, and optimum processes for business and organizations.

**MGMT 6800**
**Global Business Strategy**
**3**
* Prerequisite(s): Acceptance in the MBA program

Integrates case analysis considered from the CEO's perspective. Evaluates global competitiveness, strategic assessment, policy development, and strategy implementation. Canvas Course Mats $78/McGraw applies. Software fee of $40 applies.

**MGMT 6910**
**Designing Business**
**1.5**
* Prerequisite(s): Acceptance into the Woodbury School of Business MBA program

Provides an opportunity to integrate the functional areas of business using a simulation, a comprehensive business case, or a consulting project with a community-based organization.

**MGMT 6930**
**International Engagement**
**1.5**
* Prerequisite(s): Acceptance into the Woodbury School of Business MBA program

Provides an integrated, engaged, learning opportunity for students to experience differences in culture and business operations of another country through the completion and reflection of an international consulting project or case studies, and a possible international experience. Projects or case studies will require the integration of functional areas of business in an international setting, and will highlight how these functions are interrelated.

**MGMT 6940**
**MBA Consulting Project**
**3**
* Prerequisite(s): Acceptance into the Woodbury School of Business MBA program

Utilizes community consulting to focus on business development through identifying, evaluating, and executing business opportunities within new and existing businesses. Implements consulting processes and strategies, and allows students to practice tools and techniques for developing business models.

# Microbiology (MICR)

**MICR 2060** **BB**
**Microbiology for Health Professions**
**3**
* Prerequisite(s): BIOL 1610 and (ENGL 1010 or ENGH 1005) with a C- or higher in each. CHEM 1110 or higher is highly recommended
* Corequisite(s): MICR 2065

Studies the history of microbiology. Explores bacterial, fungal, parasitic, and viral diseases and their causes. Discusses the classification, physiology, genetics, and physical and chemical control of microbes. Emphasizes clinical applications. Is designed for those planning a career in the health professions such as nursing, dental hygiene, medicine, pharmacy, and dentistry. Includes weekly laboratory as a corequisite.

**MICR 2065**
**Microbiology for Health Professions Laboratory**
**1**
* Prerequisite(s): (BIOL 1010 or BIOL 1610) and (ENGL 1010 or ENGH 1005). CHEM 1110 highly recommended
* Corequisite(s): MICR 2060

Studies the history of microbiology. Explores bacterial, fungal, parasitic, and viral diseases and their causes. Discusses the classification, physiology, genetics, and physical and chemical control of microbes. Emphasis is on clinical applications. Designed for those planning a career in the health professions such as nursing, dental hygiene, medicine, pharmacy, and dentistry. Includes weekly laboratory. Course Lab fee of $44 for materials, lab applies.

**MICR 3150**
**Microbial Ecology WE**
**4**
* Prerequisite(s): BIOL 1620 and University Advanced Standing

Covers fundamentals of microbial ecology including interactions, major habitats, and factors that dictate microbial community structure consisting of bacteria, archaea, eukaryotes, and viruses. Includes in-depth examination of classic examples as well as additional systems to be selected based on class preferences.

**MICR 3200**
**Emerging and Re Emerging Diseases and Zoonoses**
**3**
* Prerequisite(s): MICR 2060 or MICR 3450 with a C- or higher in each and University Advanced Standing

Utilizes the most current infectious disease entities as examples for new (emerging) or old (re-emerging) diseases currently affecting mankind. Discusses zoonotic diseases (those transmissible from animals to humans and vice-versa) in detail. Emphasizes the underlying mechanisms of disease, and includes fundamental aspects of virology, bacteriology, and parasitology. Covers fundamental concepts in epidemiology, how the public health system deals with these diseases once they have been identified and instances where the public health system has failed in controlling these diseases along with the reasons for these failures. Investigates historical aspects of infectious diseases.

**MICR 3450**
**General Microbiology**
**3**
* Prerequisite(s): BIOL 3400 with a C- or higher and University Advanced Standing; BIOL 3600 recommended
* Corequisite(s): MICR 3455

Covers taxonomy, physiology and genetics of bacteria, archaea, viruses and eukaryotic microbes. Introduces industrial microbiology, biotechnology, and immunology and the biochemical basis of infectious diseases. Is designed for biology majors who desire an in-depth coverage of microbiology.

**MICR 3455**
**General Microbiology Laboratory**
**1**
* Prerequisite(s): BIOL 3400 and University Advanced Standing; BIOL 3600 recommended
* Corequisite(s): MICR 3450

Hands-on laboratory procedures that studies the methods of taxonomy and distinguishes physiology and genetics of prokaryotes (bacteria, Archaea), viruses and eukaryotic pathogens. Introduces methods used in industrial microbiology, biotechnology, and immunology and the biochemical basis of infectious diseases. Designed for biology majors who desire an in-depth coverage of microbiology. Course Lab fee of $60 for materials, lab applies.

**MICR 3550**
**Microbial Physiology**
**4**
* Prerequisite(s): MICR 3450 and University Advanced Standing

Covers the structure, metabolism, and growth of microorganisms, with an emphasis on bacteria. Examines the diversity of strategies that microbes use for energy metabolism and biosynthesis of macromolecules. Highlights the integration of metabolic processes, regulatory mechanisms, and environmental changes. Explores current research topics in microbial physiology.

**MICR 3650**
**Microbial Genetics**
**4**
* Prerequisite(s): MICR 3450 and University Advanced Standing

Covers the structure, function, expression, and evolution of microbial genes and genomes, with an emphasis on bacteria. Examines microbial genome replication, the flow of information from DNA to functional RNAs and proteins, mechanisms for regulation of genome expression, and microbial gene organization including bacterial genomes, operons, plasmids, and mechanisms of horizontal gene transfer. Discusses experimental methods to construct, map, and examine mutations, measure gene expression, and genetically modify microbes. Examines DNA sequencing, analysis and annotation of microbial genomes.

**MICR 4100 (Cross-listed with: ZOOL 4100)**
**Parasitology**
**4**
* Prerequisite(s): (BIOL 1620 or MICR 2060) with a C- or higher and University Advanced Standing

Introduces the study of parasites. Emphasizes the biology of principal groups of parasites affecting humans, livestock, and other animals, including their medical economic, and ecological significance. Emphasizes parasites causing zoonotic diseases. Includes weekly laboratory experience involving identification of parasites. Course Lab fee of $25 applies.

**MICR 4200**
**Microbiomes**
**3**
* Prerequisite(s): BIOL 1620, BIOL 3500, and University Advanced Standing

Explores the historical background, current knowledge and ongoing research on microbiomes and their role in evolution of biodiversity, ecology of diverse species and communities, behavior of individuals, and impact on host development and physiology.

**MICR 4300**
**Pathogenic Microbiology**
**4**
* Prerequisite(s): MICR 3450 or MICR 2060 and University Advanced Standing

Discusses fundamentals of microbial pathogenesis, replication, infection, and immune mechanisms. Explores the biology of bacterial, viral, fungal, protozoan, and helminth pathogens. Discusses identification, control, and treatments of various microbial pathogens. Includes weekly laboratory. Course Lab fee of $25 applies.

**MICR 4450 (Cross-listed with: BIOL 4450)**
**Immunology**
**3**
* Prerequisite(s): (MICR 2060 or MICR 3450 or ZOOL 2420) and University Advanced Standing
* Corequisite(s): BIOL 4455

Explores the macromolecules, cells and organs involved in innate and adaptive immunity. Examines the development of lymphocyte repertoire, positive and negative selection of lymphocytes and the production of effector lymphocytes. Studies properties of antigens, vaccines, antigen presenting cells and the mechanisms of antigen presentation. Reviews major immunological methods for medical diagnostics and other applications. Examines causes and consequences of autoimmune and lymphoproliferative diseases and immunodeficiencies. Probes how immune response could be manipulated for cancer therapy and transplantation medicine.

**MICR 4500**
**Virology**
**3**
* Prerequisite(s): BIOL 3400 and (MICR 3450 or MICR 2060) and University Advanced Standing; BIOL 3600 recommended

Examines the fundamentals of virology. Covers viral structure, biochemistry, genomics, viral multiplication cycles in prokaryotic and eukaryotic cells, and techniques used in viral studies. Discusses viral diseases, transmission, therapy, evolution, and epidemiology.

**MICR 4505**
**Applied Virological Methods**
**3**
* Prerequisite(s): MICR 2065 or MICR 3455; University Advanced Standing

Covers techniques commonly used in virology to identify viruses in samples that the students will collect including nucleic acid extraction, RT-PCR, cloning, virus inoculation, plaque assays, sequencing and bioinformatics. Includes a structured research experience for students. Requires students to learn and employ lab notebook etiquette and prepare a scientific report describing their findings.

**MICR 4600**
**Arthropod-Borne Pathogens**
**3**
* Prerequisite(s): BIOL 3400 and (MICR 2060 or MICR 3450); University Advanced Standing

Covers the cellular and organismal interactions of arthropod-borne pathogens with their vectors that lead to transmission. Examines the cell biology related to the interactions that allow arthropods to transmit pathogens of animals, humans, insects and plants. Discusses methods for control of these pathogens in the context of Integrated Pest Management.

**MICR 489R**
**Student Research**
**1 to 4**
* Prerequisite(s): BIOL 1620, CHEM 1210, instructor permission, and University Advanced Standing

Provides guided research studies in microbiology under the direction of a Biology Department faculty mentor. Includes any combination of literature reviews, original research, and/or participation in ongoing departmental projects. Involves students in the methodology of original microbiology research. Requires preparation and presentation of oral and/or written reports. May culminate in results that will form the basis of the senior thesis in the major, if thesis option is chosen. May be repeated for 9 credits toward graduation.

**MICR 490R**
**Special Topics in Microbiology**
**1 to 4**
* Prerequisite(s): BIOL 1620 and University Advanced Standing

Explores and examines special topics relating to the field of microbiology. Emphasizes areas of rapid growth in microbiology or current importance to society. May be repeated for a total of 9 credits toward graduation.

# Military Science (MILS)

**MILS 1200**
**Introduction to Leadership Excellence I**
**2**
* Corequisite(s): MILS 145R

Presents historical overview and development of military value systems and philosophies. Studies individual leadership styles, organization and time management, and writing skills. Includes ethics and code of an officer, role of an officer in the military, drill and ceremonies, fire team tactics, map reading, and basic rifle marksmanship. Lab required.

**MILS 1210**
**Introduction to Leadership Excellence II**
**2**
* Prerequisite(s): MILS 1200 or Department Approval
* Corequisite(s): MILS 145R

Compares and analyzes leadership styles found in the U.S. Army, as well as business, academic, and government organizations. Studies Army organization, active and reserve forces; winter survival, advanced fire-team and aggressor tactics. Lab required.

**MILS 143R**
**Military Fitness**
**1**

For Army ROTC students and all other interested students. Uses the Army Physical Fitness Test to evaluate the student's performance and improvement in the areas of flexibility, strength, and endurance. Includes instruction in foot care and road marching techniques. Repeats are required. See advisor for details.

**MILS 145R**
**Introduction to Leadership Dynamics and Techniques**
**1**
* Prerequisite(s): Department Approval

Leadership lab for UVU Army ROTC students and other students interested in the study of leadership. Studies the dynamics of leadership of groups and individuals in various environments. Provides opportunities for students to apply leadership principles and techniques in challenging situations and conditions. Required lab for students enrolled in UVU Military Science 1000- and 2000-level classes. Students not enrolled in Army ROTC may take this class up to six credits with department approval.

**MILS 2050**
**Small Unit Combat Tactics**
**2**

Introduces cadets to the personal challenges and competencies that are critical for effective leadership by introducing cadets to the personal development of life skills, critical thinking, goal setting, time management, and physical/mental fitness.

**MILS 2200**
**Advanced Organizational Leadership I**
**2**
* Prerequisite(s): MILS 1210 or Dept. Approval
* Corequisite(s): MILS 245R

Builds on skills and fundamentals learned in MILS 1200 and 2210. Studies the dynamics of leadership of groups and individuals in a field environment. Provides opportunities for students to apply leadership principles and techniques in challenging situations to further prepare them for leadership positions in the military or any career field they choose.

**MILS 2210**
**Advanced Organizational Leadership II**
**2**
* Prerequisite(s): MILS 2200 or Dept. Approval
* Corequisite(s): MILS 245R

Builds on skills and fundamentals learned in MILS 2200 and 1210. Studies the dynamics of leadership of groups and individuals in a field environment. Provides opportunities for students to apply leadership principles and techniques in challenging situations to further prepare them for leadership positions in the military or in any career field they choose.

**MILS 245R**
**Leadership Studies**
**1**
* Prerequisite(s): MILS 145R or instructor approval

Studies the dynamics of leadership of groups and individuals in a field environment. Provides opportunities for students to apply leadership principles and techniques in challenging situations to further prepare them for leadership positions in the military or in any career field they choose. May be repeated for up to four credits with departmental approval.

**MILS 259R**
**Current Topics in Military Science**
**3**

Provides exposure to emerging issues of current interest in military science. Topics vary each semester. May be repeated for a maximum of 9 credits toward graduation.

**MILS 3200**
**Small Unit Leadership I**
**3**
* Prerequisite(s): MILS 2210
* Corequisite(s): MILS 345R

Prerequisite to attendance at National Advanced Leadership Camp. Prepares for successful completion of camp. Studies land navigation, squad and platoon tactics, combat operations, physical fitness, and physical leadership. Lab required.

**MILS 3210**
**Small Unit Leadership II**
**3**
* Prerequisite(s): MILS 3200
* Corequisite(s): MILS 345R

Prerequisite to attendance at National Advanced Leadership Camp. Prepares for successful completion of camp. Studies land navigation, squad and platoon tactics, combat operations, physical fitness, and physical leadership. Lab required.

**MILS 345R**
**Advanced Leadership Dynamics and Techniques**
**1**
* Prerequisite(s): Departmental Approval

Leadership lab for UVU Army ROTC students and other students interested in the study of leadership. Studies the dynamics of leadership of groups and individuals in various environments. Provides opportunities for students to apply leadership principles and techniques in challenging situations and conditions. Required lab for students enrolled in UVU Military Science 3000- and 4000-level classes. Students not enrolled in Army ROTC may take this class four times for credit with department approval.

**MILS 4200**
**The Profession of Arms I**
**3**
* Prerequisite(s): Departmental Approval
* Corequisite(s): MILS 445R

Prepares the prospective officer for initial training and subsequent assignment into the U.S. Army. Includes overview of U.S. Army training management, military writing, administration, logistics, professionalism, and ethics. Lab required.

**MILS 4210**
**The Profession of Arms II**
**3**
* Prerequisite(s): MILS 4200 or Departmental Approval
* Corequisite(s): MILS 445R

Prepares the prospective officer for successful completion of Army assignments. Includes advanced U.S. Army leadership training, training management, military justice and law, pre-commissioning orientation, military briefing skills, and junior officer leadership.

**MILS 445R**
**Transition to Officership**
**1**
* Prerequisite(s): Departmental Approval

Leadership Lab for UVU Senior Army ROTC students. Studies the dynamics of leadership of groups and individuals in various environments. Provides opportunities for students to refine leadership skills in preparation for service with the United State Army. Required lab for students enrolled in UVU Military Science 4000-level classes. ROTC students may take this course up to 4 credits with departmental approval.

**MILS 4500**
**Advanced Leadership and Operations**
**3**
* Prerequisite(s): MILS 3200, MILS 3210, MILS 4200 and MILS 4210

Prepares the prospective officer for successful completion of Army assignments. Includes advanced understanding of U.S. Army operations and training, Officer, Non-Commission Officer and enlisted personnel management, and the use of the Military Decision Making Process.

# Marketing (MKTG)

**MKTG 1890**
**Introduction to Careers in Business**
**1**

Explores a wide variety of professional opportunities available in business including required skills, emerging trends, economic conditions, and workforce demands. Identifies and examines professional strengths, skills, and interests that add value in the workplace. Assists emerging candidates to align their abilities with industry needs. Initiates professional networking and internship opportunities. Requires professional outreach. Includes demonstrations, role playing and application exercises.

**MKTG 220G**
**Written Business Communication WE**
**3**

Teaches written business correspondence and business reports using direct and indirect approaches. Emphasizes analysis of audience and purpose in drafting documents with accurate and clear content, organization, and style. Includes application of punctuation, grammar, and usage principles to business writing situations. Emphasizes teamwork and collaboration. Teaches how to interrelate respectfully with individuals representing cultures and perspectives other than one's own. Lab access fee of $25 for computers applies.

**MKTG 2390**
**Professional Business Presentations**
**3**

Teaches business presentation skills. Emphasizes planning, developing, delivering, and evaluating business presentations. Includes informative and persuasive formats in diverse settings using a variety of media. Lab access fee of $25 for computers applies.

**MKTG 259R**
**Current Topics in Marketing**
**1 to 3**
* Prerequisite(s): Department Chair Approval

Provides exposure to emerging topics of current interest in marketing. Topics vary each semester. May apply a maximum of three hours toward graduation.

**MKTG 281R**
**Marketing Cooperative Work Experience**
**1 to 3**
* Prerequisite(s): Internship Orientation and Departmental Approval

Provides opportunities to apply classroom theory on the job. Students work as paid employees in a job that relates to their careers while enrolled at the college. Credit is determined by the number of hours a student works during the semester. Completers meet individually set goals. May be repeated for a maximum of 6 credits toward graduation. Graded Credit/No Credit.

**MKTG 290R**
**Independent Study**
**.5 to 3**
* Prerequisite(s): Department Chair Approval

Provides independent study as directed in reading and individual projects specifically related to the Marketing field at the discretion and approval of the Dean and/or Department Chair. May be repeated for a maximum of 6 credits toward graduation.

**MKTG 3170**
**Digital Advertising**
**3**
* Prerequisite(s): MKTG 3660 and University Advanced Standing

Teaches advanced digital advertising concepts and skills, including social, display, search, and video advertising as well as campaign management and decision making based on key metrics. Includes a digital advertising project and preparation for industry certifications in advertising.

**MKTG 3220**
**Retail Management**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Combines theoretical concepts with practical applications from a strategic management perspective. Includes lectures and discussions of current events within the retail industry to provide the primary basis for the integration of course materials with actual retail enterprise operations. Includes participation in a number of experiential learning exercises such as group and individual case analyses, outside research on the retail industry and specific retail firms, class presentations, guest speakers, and quizzes on selected retailing issues and practices. Lab access fee of $25 for computers applies. Canvas Course Mats $78/McGraw applies

**MKTG 3300**
**Marketing Analytics**
**3**
* Prerequisite(s): MGMT 2400 and University Advanced Standing

Provides a rigorous introduction to the exciting world of marketing analytics. Teaches the concepts, principles, and frameworks of marketing analytics from the perspective of a marketing strategist applying current marketing theory. Develops key skills required to understand current trends and make predictions based on available data.

**MKTG 335G**
**International Marketing**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Presents the problems of marketing in the international marketplace and how marketers approach and solve them. Focuses on concepts and principles by teaching the theory and practice of international marketing through the use of practical examples and actual case studies of international (both US and foreign) marketing organizations. Includes international marketing position of the US, market entry strategies, analysis of foreign markets, culture and marketing, product design, pricing, distribution, promotion and sales. May be delivered online. Lab access fee of $25 for computers applies.

**MKTG 3460**
**Internal Marketing and Corporate Imaging**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Introduces students to the fundamentals of Internal Marketing and Corporate Imaging. Focuses on internal marketing strategy, critical incident management, organizational change, employer brand, cause marketing, corporate citizenship, internal business communication and event management. Includes other topics, such as contingency planning, organizational culture, employee programs and training, motivation and internal reward programs. Includes case analysis, lectures, class discussions, group work and evaluation, videos, oral presentations, written assignments and guest speakers.

**MKTG 3600**
**Principles of Marketing**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MGMT 2400 or MGMT 2340 or STAT 2040 or STAT 1040 or PSY 3110

Studies consumers, markets, and environments from the perspective of the marketing manager. Covers the fundamentals of customer behavior, market research, marketing strategy, product management, pricing, professional selling, distribution, and promotion. Includes case analysis, lectures, class discussions, videos, oral presentations, written assignments, guest speakers, and a marketing plan project. Lab access fee of $25 applies. Canvas Course Mats $78/McGraw applies.

**MKTG 3620**
**Consumer Behavior**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Includes an analysis of consumer spending and saving habits, product preferences, shopping behavior, leisure time patterns, and social change. Explores the influence of advertising, selling and fashion trends. Includes lectures, class discussions, videos, projects, case analyses, oral presentations, written assignments, and guest speakers. Lab access fee of $25 for computers applies. Canvas Course Mats $78/McGraw applies.

**MKTG 3630**
**Services Marketing**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Presents skills and attitudes necessary to market services and to provide good customer service. Emphasizes the marketing skills involved in marketing services and basic marketing concepts, including positive customer relations, effectively handling customer complaints, and sound customer service procedures. Completers should develop successful service marketing strategies that can be applied in a business organizational setting. Includes lectures, guest speakers, video tapes, role plays, case analysis, oral presentations, and written assignments. Lab access fee of $25 for computers applies.

**MKTG 3640**
**Sales Management**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Analyzes the factors that go into managing a sales force. Teaches sales management strategies and tactics which help organizations achieve their revenue goals. Examines key behavioral, technological, and managerial trends in sales. Identifies current analytical, communication, relationship, and leadership skills needed by sales managers. Demonstrates the importance of sales and sales management in terms of people employed, dollars spent, and sales generated. Canvas Course Mats $55/ Chicago applies.

**MKTG 3650**
**Professional Selling**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Emphasizes theoretical skills in the personal selling process and the management of a sales force. Studies the recruiting, training and supervising of salespersons, organization of territories, compensation schemes, and forecasting. Includes lectures, guest speakers, video tapes, role playing, case analysis, oral presentations, and written assignments. Lab access fee of $25 for computers applies. Canvas Course Mats $35/Cengage applies. Canvas Course Mats $37/GoReact applies.

**MKTG 3660**
**Digital Marketing**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Provides an introduction to the many business uses of the Internet to create competitive advantage. Features discussions of e-business strategic components and practice with Web page exercises. Uses guided exercises to explore the Net, both in and out of class. Includes projects, research, and Net use in a particular industry. Emphasizes the sharing of concepts discussed in lectures, class activities, the assigned readings, and group projects. Lab access fee of $25 for computers applies.

**MKTG 3670**
**Advertising and Promotion**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Provides an understanding of advertising, its purposes, and production. Includes sequence of activities in preparing productive, persuasive marketing and advertising campaign plans. Covers the social, legal, and economic considerations involved in the campaign planning process. Includes lectures, class discussions, guest speakers, videos, and student presentations. Lab access fee of $25 for computers applies.

**MKTG 3680**
**Marketing with Social Media**
**3**
* Prerequisite(s): MKGT 3600 and University Advanced Standing

Teach students how to use social media platforms to market products and services. Includes the creation and marketing of a blog using WordPress and engaging with a local small business to write and execute a social media marketing campaign. Teaches the fundamentals of social media marketing and the most popular platforms like WordPress, Facebook, Twitter, Pinterest, and LinkedIN.

**MKTG 3685**
**Content Marketing**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Covers strategic use of content to attract new customers and retain current customers. Provides experience identifying and analyzing an audience to create targeted content to achieve set business objectives. Introduces graphic design applications, video editing software, copy writing skills, email automation systems, analytics tools, and other resources. Provides training to successfully create and implement an effective content marketing strategy.

**MKTG 3690**
**Digital Marketing Analytics**
**3**
* Prerequisite(s): MKTG 3660 and University Advanced Standing

Teaches advanced digital marketing concepts and skills related to digital marketing analytics and dashboards for web, social, and other digital platforms. Includes preparation for industry certifications in these areas.

**MKTG 3695**
**Digital Marketing Capstone**
**3**
* Prerequisite(s): MKTG 3660, MKTG 3685, MKTG 3680, MKTG 3690, University Advanced Standing, and matriculation in the Woodbury School of Business; Senior Standing is recommended.

Applies digital marketing theories, principles, and tactics to a live learning engagement project. Provides a framework for developing a complete digital marketing plan and gives students an opportunity to learn software, automation tools, and digital marketing creative strategy.

**MKTG 3700**
**Fundamentals of Product Management**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Provides a rigorous introduction to the development and management of new products from a marketing perspective. Emphasizes current best practices in assessing market opportunities, determining target customers, and defining and designing a product-based solution, and measuring and validating the solution through an iterative product development process. Includes a semester project and presentation, role-plays, and case studies.

**MKTG 3890**
**Business Career Preparation**
**2**
* Prerequisite(s): MKTG 1890, MKTG 220G, and University Advanced Standing

Emphasizes the seamless transition to professional advancement in the workforce by developing a career narrative consistently presented on paper, online, and in person. Focuses on industry research, networking, interviews, and professional branding, including the customization of career tools, through a practicum design. Requires professional outreach. Includes demonstrations, role playing and application exercises. Lab access fee of $25 for computers applies.

**MKTG 4300**
**Marketing Data Science**
**3**
* Prerequisite(s): MKTG 3300 and University Advanced Standing

Provides advanced learning in marketing data science. Emphasizes data collection and cleaning on an advanced level. Teaches advanced concepts, principles, and frameworks of marketing data science from the perspective of a marketing strategist applying current marketing theory. Builds on introductory skills to deepen understanding of current trends.

**MKTG 4400**
**Competitive Intelligence**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Teaches Competitive Intelligence (CI), the study of processes and techniques leading to business analysis applied to industry and company investigation. Overviews the Competitive Intelligence process including information collection, intelligence analysis, and intelligence process assessment.

**MKTG 459R**
**Advanced Topics in Marketing**
**1 to 3**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

Provides exposure to emerging topics of current interest in marketing. Topics vary each semester. May apply a maximum of 12 hours toward graduation.

**MKTG 4600**
**Customer Experience**
**3**
* Prerequisite(s): MGMT 2400 or MGMT 2340 or STAT 2040 or STAT 1040 or PSY 3110 or appropriate test scores, and University Advanced Standing

Covers managerial uses of marketing research in formulating marketing strategy. Includes determination of situations requiring research, appraisal of alternative research methods, and evaluation of studies. Presents theoretical concepts in research methodology. Includes lectures, class discussions, group projects, case analyses, oral presentations, written assignments, and speakers. Lab access fee of $25 for computers applies. Canvas Course Mats $78/McGraw applies.

**MKTG 4610**
**Sales Operations**
**3**
* Prerequisite(s): MKTG 3600 and University Advanced Standing

Provides students with an understanding of Sales Operations and the key performance indicators driving professional sales organizations. Instills a data-driven perspective necessary for responding to organizational sales and revenue challenges. Develops important skills in forecasting, report and dashboard development, and territory analysis and design, as well as proficiency in Sales Force Automation and CRM software.

**MKTG 4620**
**Advanced Professional Selling**
**3**
* Prerequisite(s): MKTG 3650 and University Advanced Standing

Covers advanced business-to-business selling skills and practices. Emphasizes current best-practices in prospecting, needs identification, relationship-building, negotiating, and closing. Includes competitive role-play and case studies. Canvas Course Mats of $37/GoReact applies.

**MKTG 4650**
**Marketing Management Capstone**
**3**
* Prerequisite(s): MKTG 3600, MKTG 3620, MKTG 3650, MKTG 3660, MKTG 335G. Matriculation into the Woodbury School of Business and University Advanced Standing; For Marketing Majors only; Senior Standing is recommended.

Presents detailed marketing analysis skills, planning and control of various marketing mix variables, target markets, and the marketing environment using both oral and written case studies. Includes lectures, class discussions, videos, projects, case analyses, oral presentations, written assignments, and guest speakers.

**MKTG 481R**
**Marketing Internship**
**1 to 3**
* Prerequisite(s): Departmental Approval and University Advanced Standing

For upper-division students working toward a Bachelor of Science Degree in Marketing. Provides a transition from school to work where learned theory is applied to actual practice through meaningful on-the-job experience. May be repeated for a maximum of 6 credits toward graduation. May be graded credit/no credit.

**MKTG 482R**
**Sales Internship**
**1 to 8**
* Prerequisite(s): Departmental Approval and University Advanced Standing

For upper-division students working toward a Bachelor of Science Degree in Marketing. Provides a transition from school to work where learned theory is applied to actual practice through meaningful on-the-job experience. May be repeated for a maximum of 6 credits toward graduation. May be graded credit/no credit.

**MKTG 483R**
**Digital Marketing Internship**
**1 to 8**
* Prerequisite(s): Departmental Approval and University Advanced Standing

For upper-division students working toward a Bachelor of Science Degree in Marketing. Provides a transition from school to work where learned theory is applied to actual practice through meaningful on-the-job experience. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**MKTG 490R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Department Chair Approval

Provides independent study as directed in reading and individual projects specifically related to the Marketing field at the discretion and approval of the Dean and/or Department Chair. May be repeated for a maximum of 6 credits toward graduation.

**MKTG 494R**
**Seminar**
**.5 to 3**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

Provides short courses, workshops, and special programs in business management, leadership, or current business topics. Repeatable for up to six credits toward graduation.

**MKTG 4980**
**Research Seminar in Marketing**
**3**
* Prerequisite(s): Department Chair Approval and University Advanced Standing

Studies the process of researching and writing for scholarly publication. Includes understanding the concepts of scholarly conversation; managing scholarship; choosing a marketing topic; identifying appropriate journals; using exemplars; creating a title and abstract; making an outline; developing an introduction and conclusion; writing the body of the paper; and then revising, submitting, and finally publishing in a scholarly journal.

**MKTG 6400**
**Technology Marketing and Customer Experience**
**3**

Teaches conceptual frameworks and analytical tools for marketing decision making in technology businesses from a cross-functional and strategic orientation. Focuses on understanding user needs, technology standards and network externalities, forecasting and planning, solution design and architecture, platform strategy, and managing adoption. Examines through cases, assignments, and projects how to use marketing analytics for intelligence gathering, analysis, and decision making, how to develop high-value solutions for users based on a deep understanding of their needs, and how to communicate the value of and provide access to those solutions through marketing technology.

**MKTG 6600**
**Marketing Strategy**
**3**
* Prerequisite(s): Acceptance in the MBA program

Analyzes current marketing management problems. Emphazies marketing concepts, research techniques, decision making, and marketing strategy development.

**MKTG 6620**
**Marketing Research and Analytics**
**3**
* Prerequisite(s): Acceptance into MBA program

Explores tools and analysis techniques related to customer relationship management. Focuses on "thick" data research, including: ethnography, social listening, interviewing, and laddering. Utilizes research tools, such as survey design, web analytics, and eye-tracking technology, to collect and analyze data through factor analysis, cluster analysis, classification trees, and multidimensional scaling.

**MKTG 6640**
**Brand, Product, and Services Management**
**3**
* Prerequisite(s): Acceptance into MBA program

Focuses on the practice of advanced marketing management topics including: brand management, product management, product development, services marketing, pricing and conjoint analysis. Integrates forecasting including diffusion models and other tactics, resource allocation, and managing profit and loss statements.

**MKTG 6660**
**Marketing Channels and Communications**
**3**
* Prerequisite(s): Acceptance into MBA program

Explores key advanced marketing practices related to delivering and communicating value. Examines retailing, e-commerce, websites, personal selling, lead generation, digital marketing, as well as promotion and campaign management.

**MKTG 6860**
**Applied Business Research**
**3**
* Prerequisite(s): Acceptance into the Woodbury School of Business MBA program

Provides students with the capability to design and conduct applied business research projects in the varied disciplines as well as integrative across disciplines. Examines the philosophy of science, research design, measurement and scaling, reliability and validity, communication of research results, and related issues.

**MKTG 6920**
**Creativity and Innovative Problem Solving**
**1.5**
* Prerequisite(s): Acceptance into the Woodbury School of Business MBA program

Applies an understanding of the nature of creativity and expansive problem solving within the business environment through projects, simulations and/or case study. Provides awareness about individual and organizational characteristics which impact creative thinking and limit imaginative solutions.

# Masters of Public Service (MPS)

**MPS 6000**
**Public Services Administration**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Explores senior level administrative functions within a public services organization. Analyzes and assesses positive and negative practices within public service organizations, including managerial actions and bureaucracy. May be delivered online.

**MPS 6010**
**Public Services Finance and Budgeting**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Analyzes financial and budgeting operations occurring in the public sector. Assesses funding streams, budget development, financial management concerns, and fiduciary responsibilities of public service leaders. May be delivered online.

**MPS 6020**
**Public Services Policy and Evaluation**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Provides the investigative, ethical, and development tools needed to form public policy and evaluate program success. Develops analysis skills to examine new ideas, test their viability, determine program needs, and organize to meet these needs. Designed to address how to make policy, how to assess if policy is working, and how to fix the flaws in existing policy. May be delivered online.

**MPS 6030**
**Legal Issues for the Public Services**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Evaluates the law and its application within the public services. Examines constitutional principles in relation to public service functions. May be delivered online.

**MPS 6040**
**Organizational Behavior in the Public Services**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Examines organizational behavior within the public services and compares and contrasts it to the private sector. Researches the public services to make comparisons and develop a theoretical basis, for use in administrative decision-making in dealing with organizations and their people. Applies conceptual frameworks, case discussions, and skill-oriented activities which include: motivation, learning and development, group dynamics, leadership, communication, power and influence, change, diversity, organizational design, and culture. Helps participants acquire skills and analytic concepts to improve organizational relationships and effectiveness. May be delivered online.

**MPS 6050**
**Public Services Leadership and Ethics**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Analyzes leadership approaches within the public services. Identifies the need for people-centric leadership that serves both the public servants and the community. Uses case study analysis to differentiate between leadership approaches to people and the management of processes. Explores ethical issues in public service delivery. May be delivered online.

**MPS 6060**
**Research Methods for the Public Services**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Identifies qualitative and quantitative research methods within a public services framework. Introduces the impact social science discovery has on the formulation of public policy. Illustrates research designs utilized within qualitative and quantitative methodologies. May be delivered online.

**MPS 6400**
**Public Services Program Development and Evaluation**
**3**
* Prerequisite(s): Acceptance into the Master of Public Service program

Provides program planning and evaluation responsibilities in public service settings. Focuses on the critical components of most planning models which include: performing a needs assessment; priority setting; creating a problem statement; establishing goals and objectives; developing and implementing interventions; evaluation; and budgeting.

**MPS 679R**
**Special Topics in Public Services**
**1 to 6**
* Prerequisite(s): Acceptance into the Master of Public Service Program
* Prerequisite(s) or Corequisite(s): MPS 6060

Provides students with an opportunity to study and/or research special public service topics. Requires students to identify relevant topics of public services, analyze their issues and impacts, and synthesize possible solutions/models for application in the public services arena. Calls for creation of a significant research paper worthy of communication to a broader peer audience. May be repeated for a maximum of 6 credits toward graduation.

**MPS 690R**
**Public Services Project**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program
* Prerequisite(s) or Corequisite(s): MPS 6060

Teaches synthesis of public service/emergency services coursework and primary/secondary research in order to formulate a public policy or empirical work relating to public services administration. This course is intended to be successfully completed in one semester. In exigent circumstances, students may repeat this course for a total of 6 credits toward graduation, with departmental approval. May be delivered online.

# Music (MUSC)

**MUSC 1010** **FF**
**Introduction to Music**
**3**

A survey course designed to make music more meaningful. Studies melody, harmony, form, and rhythm together with historical and biographical information. Canvas Course Mats $50/Norton

**MUSC 101H** **FF**
**Introduction to Music**
**3**

Develops an appreciation and understanding of music. Studies melody, harmony, form, and rhythm. Focuses on the historical development of Western art music, including the contributions of major composers. Examines musical genres such as the chant, motet, madrigal, concerto grosso, opera, cantata, oratorio, symphony, music drama and tone poem. Practices the aural identification of specific compositions.

**MUSC 102G** **FF**
**Introduction to World Music**
**3**

Explores diverse music from around the world. Includes a study of melody, harmony, form, and rhythm in international historical and cultural contexts. Involves a significant number of listening assignments and discussions over the various ways music functions within societies. Pays particular attention to the ways in which musical traditions adapt to changes within communities on a local and global scale.

**MUSC 1030** **FF**
**American Popular Music**
**3**

Studies the emergence, development, and characteristics of American music including Jazz, Blues, Country, Rock, Motown, Hip-Hop, and other popular styles. Examines the contributions of European, African, Latin and other cultural traditions on American popular music. Studies the influences of mass media and technology. Examines the marketing and dissemination of popular music by the music industry. Studies the role of popular music as a symbol of race, class, gender, and generation. Fulfills the Fine Arts general education distribution requirement and addresses the Intellectual and Practical Skills Foundation essential learning outcomes of qualitative reasoning.

**MUSC 1050**
**Beginning Piano I**
**2**

Provides group instruction for students with little or no piano and note-reading experience. Covers melodic and rhythmic notation, key recognition, and major and minor finger patterns. Teaches basic harmonization, transposition and improvisation. Course Lab fee of $17 for equipment applies.

**MUSC 1060**
**Beginning Piano II**
**2**
* Prerequisite(s): MUSC 1050

Builds on the skills learned in Beginning Piano I. Studies notation, scales, chord progressions, sight-reading, basic harmonization, transposition, and improvisation. Course lab fee of $17 applies.

**MUSC 1100** **FF**
**Fundamentals of Music**
**3**

Examines the fundamentals of music theory such as pitch notation, meter, rhythm, time signatures, intervals, major and minor scales, key signatures, and triads. Fulfills the Fine Arts general education distribution requirement and addresses essential learning outcomes of quantitative reasoning. Lab access fee of $10 for computers applies.

**MUSC 1110**
**Music Theory I**
**3**
* Corequisite(s): MUSC 1130

Studies the fundamentals of music theory including elementary harmony, primary and secondary triads with inversions, non-harmonic tones and modulation.

**MUSC 1120**
**Music Theory II**
**3**
* Prerequisite(s): MUSC 1110
* Corequisite(s): MUSC 1140

Provides further study of the fundamentals of music theory. Covers the analysis and composition of music using leading tone triads, seventh chords, secondary dominants, sequences, voice leading and modulation.

**MUSC 1130**
**Aural Skills I**
**1**
* Corequisite(s): MUSC 1110

Provides training in the aural identification of intervals and triads. Practices rhythmic dictation in simple meters, and melodic dictation of simple melodies. Studies the solfege movable "Do" system.

**MUSC 1140**
**Aural Skills II**
**1**
* Prerequisite(s): MUSC 1130
* Corequisite(s): MUSC 1120

Provides further training in the aural identification of intervals and triads. Practices rhythmic dictation in simple and compound meters, and melodic dictation in major and minor keys. Studies the solfege movable "Do" system.

**MUSC 1150**
**Group Piano I**
**1**
* Corequisite(s): MUSC 1110 recommended

Develops fundamental piano skills including five-finger major and minor scales, arpeggios, chord progressions, sight-reading, and performance. Prepares students for music major keyboard examinations. Course Lab fee of $17 for equipment applies.

**MUSC 1160**
**Group Piano II**
**1**
* Prerequisite(s): MUSC 1150 or equivalent proficiency examination
* Corequisite(s): MUSC 1120 recommended

Builds on the skills learned in Group Piano I. Develops facility in two-octave major scales, arpeggios, chord progressions, sight-reading, harmonization, transposition, and performance. Prepares students for music major keyboard examinations. Course Lab fee of $17 for equipment applies.

**MUSC 1170**
**Group Guitar I**
**2**

Teaches fundamental skills used in playing popular guitar styles. Covers essential left and right hand techniques as well as basic musical rudiments.

**MUSC 1180**
**Group Guitar II**
**2**
* Prerequisite(s): MUSC 1170

Develops a variety of right and left hand techniques. Teaches both standard and tablature-style notation. Provides solo and ensemble performance opportunities.

**MUSC 124R**
**UVU Concert Choir**
**1**

Provides group training in the various styles of choral literature. Basic skills in note reading, matching pitch and blending with the ensemble expected. Requires participation at scheduled performances. May be repeated as desired.

**MUSC 125R**
**University Band**
**1**

Provides group training in the various styles of band literature. Requires participation at scheduled performances. May be repeated as desired.

**MUSC 1400**
**Music Technology I**
**2**

Examines the fundamental concepts and usage of technologies in music. Studies the history of analog and digital recording and the emergence of synthesis. Details the historical and current uses of Musical Instrument Digital Interface (MIDI). Introduces the basics of a Digital Audio Workstation (DAW) and contemporary music notation. Software fee of $22 applies. Course Lab fee of $10 for computers applies.

**MUSC 1402**
**Music Technology II**
**2**
* Prerequisite(s): MUSC 1400

Builds on the concepts covered in Music Technology I. Examines the uses of Musical Instrument Digital Interface (MIDI) and virtual instruments in the modern Digital Audio Workstation (DAW). Studies in greater depth the processes of contemporary music notation. Software fee of $22 applies. Course Lab fee of $10 for computers applies.

**MUSC 1410**
**Survey of Commercial Music Careers**
**1**

Introduces optimal career paths in contemporary music. Covers careers including but not limited to film composition, arranging, production, film music editing, studio engineering, performance, and education. Emphasizes practical skills in entrepreneurship, marketing, and networking.

**MUSC 145R**
**Private Lessons I**
**1**

Offers twelve 30-minute private lessons. Focuses on the individual needs of the student in developing skills and techniques. Requires personal practice as determined by instructor. Does not fulfill music major degree requirements. May be repeated as desired. Course fee of $270 for support applies.

**MUSC 1630**
**Group Voice I**
**1**

Provides group instruction in the development of vocal skills and techniques. Covers classical vocal production, breath management, diction, and performance skills. Provides student performance of vocal literature from several genres and style periods.

**MUSC 1640**
**Group Voice II**
**1**
* Prerequisite(s): MUSC 1630 or instructor permission

Provides more advanced group instruction in the development of vocal skills and techniques. Covers classical vocal production, breath management, English and Italian diction, performance anxiety and performance skills. Provides student performance of vocal literature from several genres and style periods.

**MUSC 1800**
**Introduction to Music Education**
**3**

Introduces the music education profession including history, philosophy, professional communities, career opportunities, and music teaching standards. Emphasizes the place of music and the arts in education, the role of government in schools, meeting the challenges of 21st century education. Covers personal, professional, and musical skills necessary for successful music teaching and learning. Requires observation of music classrooms in public and private school settings outside of scheduled class time. Includes micro teaching and a final portfolio and interview which culminates in matriculation to the music education degree.

**MUSC 1810**
**Contemporary Theory and Improvisation I**
**3**

Studies jazz and contemporary music theory and applies this knowledge to the practice of improvisation. Introduces chord symbol spelling and notation practices. Develops aural skills through transcription of jazz recordings. Analyzes jazz and popular songs including repertoire with diatonic chord progressions in major and minor keys, tunes with secondary dominants, and the twelve bar blues. Provides training in melodic, rhythmic, and creative improvisational strategies.

**MUSC 2001**
**Diction for Singers I**
**1**

Teaches the International Phonetic Alphabet (IPA) as it pertains to the English, Italian and Latin languages. Applies IPA directly to song literature for each language. Provides basic reading, comprehension, and grammar skills in the Italian and Latin languages. Course lab fee of $15 for support applies.

**MUSC 2002**
**Diction for Singers II**
**1**

Teaches proficiency in the International Phonetic Alphabet (IPA) as it pertains to the German and French languages. Applies IPA directly to song literature for each language. Provides basic reading, comprehension, and grammar skills in each language. Course lab fee of $15 for support applies.

**MUSC 2100** **FF**
**Teaching Music for Children**
**3**

For Elementary Education students and other interested students and community members. Introduces concepts and techniques of music education applicable to the elementary school classroom. Teaches concepts and skills through a combination of readings and lectures. Applies vocal and instrumental basics and class projects. Addresses the Utah State Core Curriculum for music for the elementary school.

**MUSC 2110**
**Music Theory III**
**3**
* Prerequisite(s): MUSC 1120

Studies the diatonic and chromatic materials of common practice music theory. Covers the analysis and composition of music using chromatic chords such as secondary dominants, diminished seventh chords, Neapolitan chords, and Italian, French and German sixth chords. Practices multiple methods of modulation.

**MUSC 2125**
**Music Theory IV**
**3**
* Prerequisite(s): MUSC 2110

Surveys compositional techniques used by post-tonal composers. Builds on the knowledge and skills learned in the tonal music theory classes.

**MUSC 2130**
**Aural Skills III**
**1**
* Prerequisite(s): MUSC 1140
* Corequisite(s): MUSC 2110

Provides training in the aural identification of intervals, triad inversions and chord progressions. Practices rhythmic dictation of syncopated rhythms and asymmetric and mixed meters, and melodic dictation of disjunct melodies and two-part dictation. Studies the solfege movable "Do" system in major, minor keys and modes with coordinating Kodaly hand signs.

**MUSC 2140**
**Aural Skills IV**
**1**
* Prerequisite(s): MUSC 2130

Provides further training in the aural identification of intervals, triad inversions and chord progressions. Practices rhythmic dictation of complex rhythm patterns and asymmetric and mixed meters. Teaches four-part harmonic dictation. Completes study of the solfege movable "Do" system.

**MUSC 2150**
**Group Piano III**
**1**
* Prerequisite(s): MUSC 1160 or equivalent proficiency examination
* Corequisite(s): MUSC 2110 recommended

Builds on the skills learned in Group Piano II. Develops further facility in one-octave harmonic minor scales, arpeggios, chord progressions, sight-reading, harmonization, transposition, improvisation, and accompanying. Prepares students for music major keyboard proficiency examinations. Course lab fee of $17 for equipment applies.

**MUSC 2160**
**Group Piano IV**
**1**
* Prerequisite(s): MUSC 2150 or equivalent proficiency examination
* Corequisite(s): MUSC 2125 recommended

Builds on the skills learned in Group Piano III. Develops facility in two-octave major and harmonic minor scales, arpeggios, chord progressions, sight-reading, harmonization, transposition, improvisation in classical and contemporary styles, playing contemporary and jazz chord charts, and accompanying. Prepares students for music major keyboard proficiency examinations. Course lab fee of $17 for equipment applies.

**MUSC 2170**
**Jazz and Contemporary Keyboard Skills I**
**1**
* Prerequisite(s): MUSC 1160 or demonstration of equivalent keyboard proficiency

Introduces and develops basic jazz keyboard voicings and chord construction, rhythmic comping for jazz and popular styles, simple improvisation with left hand voicings, and fake book reading skills. Covers the Blues, ii-V-I, dominant cycles, tritone substitutions, diminished passing chords, and turnarounds with secondary dominants. Course lab fee of $17 applies.

**MUSC 2180**
**Jazz and Contemporary Keyboard Skills II**
**1**
* Prerequisite(s): MUSC 2170 or demonstration of equivalent keyboard proficiency

Builds on the jazz and contemporary keyboard skills developed in MUSC 2170. Teaches complex open and closed position chord voicings using 4, 5, and 6 notes, including chords built in fourths. Develops hand independence through the performance of composed and improvised melodies in the right hand while comping with the left hand. Develops advanced melodic and harmonic techniques over the Blues, ii-V-I, dominant cycles, tritone substitutions, diminished passing chords, and turnarounds with secondary dominants.

**MUSC 2210**
**Contemporary Theory and Improvisation II**
**2**
* Prerequisite(s): MUSC 1810

Builds on skills and knowledge developed in MUSC 1810. Introduces modal harmony and develops techniques for modal jazz improvisation. Develops improvised chromatic embellishment techniques including passing tones, neighbor tones, and enclosures. Develops bebop improvisation techniques including syncopated accent patterns and #9 connectors. Introduces chord symbols and harmonic progressions not covered in MUSC 1810. Develops improvisational strategies for borrowed chords, altered chords, diminished chords, tritone substitutions, side-slipping, and dense harmonic rhythm (two chords per measure). Introduces symmetrical scales (whole tone and octatonic) and their application to tonal and modal improvisation.

**MUSC 2350**
**Fundamentals of Conducting**
**2**
* Prerequisite(s): MUSC 1120

Provides an introduction to the basics of conducting. Focuses on baton technique, score reading, interpretation and rehearsal.

**MUSC 2400**
**Digital Audio Workstation**
**2**
* Prerequisite(s): MUSC 1402 or Music Technology Certificate major

Introduces the Digital Audio Workstation, including shortcuts and commands for maximizing effectiveness and understanding within the workstation. Covers the basics of the software interface, audio and MIDI recording and editing, effects and creating a final product. Software fee of $22 applies. Course Lab fee of $10 for computers applies.

**MUSC 2420**
**Music Production Basics**
**2**
* Prerequisite(s): MUSC 2400

Introduces the basics of music production. Analyzes various aspects of contemporary music including sound and part selection for each instrument in the rhythm section. Discusses various recording and production techniques used in current music productions. Introduces students to technical production tools and techniques including but not limited to phasers, chorus, flange, delay, echo, reverb, compression, eq, filters, and distortion. Introduces the students to common production pitfalls such as overproduction. Software fee of $22 applies. Course Lab fee of $10 for computers applies.

**MUSC 245R**
**Private Lessons II**
**1**

Offers twelve 60-minute private lessons. Designed to meet the individual needs of the student in developing skills and techniques. Does not fulfill music major degree requirements. May be repeated as desired. Course fee of $443 for support applies.

**MUSC 250R**
**Private Lessons for Music Majors**
**1**
* Prerequisite(s): Music major entrance audition required.
* Corequisite(s): MUSC 251R

Offers twelve 60-minute private lessons for music majors. Focuses on the individual needs of the student in developing skills and techniques. Requires participation in weekly performance class. Includes juried evaluations. May be repeated as desired. Course fee of $443 for support applies.

**MUSC 251R**
**Performance Class**
**1**
* Corequisite(s): MUSC 250R

Provides additional performance experience for music majors. Develops an ability to offer and receive constructive criticism. Explores performance-related topics such as practice strategies, performance anxiety, interpretive phrasing, technical mastery, memorization and jury preparation. May be repeated for a maximum of 12 credits toward graduation.

**MUSC 281R**
**Internship in Music I**
**1 to 8**
* Prerequisite(s): Departmental Approval

Provides an opportunity for students to receive college credit and explore career options in music by working in music-related fields. Applies academic concepts to actual work experiences. Requires approval of faculty sponsor and completion and acceptance of application. Requires completion of an orientation, completion of Master Agreement between UVU and employer, completion of goals and tasks as required by academic department, and completion of final evaluation. May be repeated for a total of 8 credits towards graduation. May be graded credit/no credit.

**MUSC 290R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Instructor permission and advisor approval

Individual projects to be negotiated by student and instructor on a case-by-case basis to be approved by the departmental advisor. May be repeated for a maximum of 4 credits toward graduation.

**MUSC 3005**
**Vocal Literature I**
**1**
* Prerequisite(s): MUSC 1120 and University Advanced Standing

Presents an overview of the English and Italian art song literature from 1500 to present. Provides performance training of stylistic elements appropriate for each time period.

**MUSC 3006**
**Vocal Literature II**
**1**
* Prerequisite(s): MUSC 3005 and University Advanced Standing

Presents an overview of the French and German art song literature from 1500 to present. Provides performance training of stylistic elements appropriate for each time period.

**MUSC 3025**
**Songwriting I**
**2**
* Prerequisite(s): MUSC 1400 and University Advanced Standing

Studies the creative processes and techniques involved in commercial songwriting. Covers the essential elements of lyric writing, setting lyrics to melody, and utilizing functional harmony. Explores the process of developing a production plan for a song demo. Software fee of $22 applies. Course Lab fee of $10 for computers applies.

**MUSC 3026**
**Songwriting II**
**2**
* Prerequisite(s): MUSC 3025 and University Advanced Standing

Expands on the skills learned in Songwriting I. Focuses on the demands of commercial music projects, including the creation of lyrics and songs that have mass appeal. Discusses the professional expectations of writing on demand in a specific musical style for requisitioned purposes. Covers the business aspects of songwriting including demos, property rights, publishing, and marketing options. Software fee of $22 applies. Course Lab fee of $10 for computers applies.

**MUSC 3030**
**Jazz and Contemporary Arranging I**
**2**
* Prerequisite(s): MUSC 1402, MUSC 2210 and University Advanced Standing

Develops skills in jazz arranging for small instrumental ensembles including trumpet, trombone, saxophone, piano, guitar, bass, and drum set. Develops arranging strategies such as instrumental textures (homophony, polyphony, unison, and combination texture), harmonization using approach techniques (diminished approach, chromatic approach, dominant approach, etc.), and voicing techniques (4-way close, drop 2, quartal voicings, slash chords). Implements strategies for planning and executing a successful arrangement. Offers the opportunity for students to have their arrangements performed and recorded by a UVU Jazz Combo. Lab access fee of $10 applies. Software fee of $22 applies.

**MUSC 3031**
**Jazz and Contemporary Arranging II**
**2**
* Prerequisite(s): MUSC 3030 and University Advanced Standing

Develops advanced arranging techniques for large instrumental jazz ensembles. Examines and analyzes scores by major composers. Offers students the opportunity to create original arrangements for large jazz ensemble.

**MUSC 306R**
**Advanced Keyboard Skills**
**1**
* Corequisite(s): MUSC 250R or MUSC 450R or MUSC 455R

Provides advanced study in piano technique, sight-reading, and ensemble skills. Develops pedagogical skills through masterclasses and teaching beginners. May be repeated for maximum of 12 credits toward graduation. Course lab fee of $17 applies.

**MUSC 3120**
**Form and Analysis**
**3**
* Prerequisite(s): MUSC 2110 and University Advanced Standing

Explores the structure, meaning and organization of music. Concentrates on the standard practices of European-sphere music since 1600. Teaches techniques for understanding and classifying musical structure. Places techniques and knowledge from the first three semesters of music theory into a comprehensive whole.

**MUSC 3150**
**Advanced Instrumental Conducting**
**2**
* Prerequisite(s): MUSC 2350 and University Advanced Standing

Teaches advanced baton techniques, score preparation and basic rehearsal procedures for instrumental ensembles.

**MUSC 320R**
**Masterworks Chorale**
**1**
* Prerequisite(s): Audition

Provides group training in the various styles of choral literature. Requires attendance at scheduled performances. May be repeated as desired. Course fee of $20 for support applies.

**MUSC 322R**
**Chamber Choir**
**1**
* Prerequisite(s): Audition

For the advanced singer desiring experience in choral performance. Provides the opportunity of performing in a small group of select singers. Studies music of various styles and periods. Requires participation in concerts, programs, and tours. May be repeated as desired. Course fee of $20 for support applies.

**MUSC 327R**
**Men's Choir**
**1**
* Prerequisite(s): Audition

Provides male vocalists with advanced individual and ensemble training. Includes emphasis on auditioning, rehearsal and performance etiquette, and ensemble skills and dynamics. Requires participation in concerts, programs and tours. May be repeated as desired. Course Lab fee of $15 for support applies.

**MUSC 328R**
**Women's Choir**
**1**
* Prerequisite(s): Audition

Provides female vocalists the opportunity to perform in a select group of treble singers. Studies music of various styles and periods. Requires participation in concerts, programs, and tours. May be repeated as desired. Course fee of $20 for support applies.

**MUSC 330R**
**Wind Symphony**
**1**
* Prerequisite(s): Audition

Improves musical performance skills by participation in the band. Studies and performs serious concert literature. Requires attendance at all concerts, performances, tours and acquisition of performance attire. May be repeated as desired.

**MUSC 331R**
**Percussion Ensemble**
**1**
* Prerequisite(s): Audition

Provides percussion ensemble experience. Emphasis on sight reading and music performance skills. Attendance is expected at all concerts, rehearsals, and tours. May be repeated as desired.

**MUSC 332R**
**Jazz Orchestra**
**1**
* Prerequisite(s): Audition

Provides the advanced instrumentalist the opportunity to perform traditional and contemporary repertoire for large jazz ensemble. Improvisational and sight-reading skills are emphasized. Requires attendance at all performances. May be repeated as desired.

**MUSC 333R**
**Small Jazz and Commercial Ensembles**
**1**
* Prerequisite(s): Audition

Provides the advanced instrumentalist and vocalist the opportunity to perform in small ensembles specializing in jazz and other commercial styles including, pop, rock, country, funk, reggae, hip hop, etc. Emphasizes improvisation, rhythmic skills, and knowledge of harmony. Requires attendance at all performances. May be repeated as desired.

**MUSC 334R**
**Pep Band**
**1**
* Prerequisite(s): Audition

Provides opportunities to perform band literature for athletic events, including home games, playoffs and championships. Requires participation at all rehearsals and assigned games. May be repeated as desired.

**MUSC 3410**
**Elementary Music Methods I**
**2**
* Prerequisite(s): MUSC 2110 and University Advanced Standing

Teaches the sequence, tools, materials, and philosophy of teaching musical concepts to children in grades K-3. Develops skill on classroom instruments.

**MUSC 3411**
**Elementary Music Methods II**
**2**
* Prerequisite(s): MUSC 2110, MUSC 3410, and University Advanced Standing

Teaches the sequence, tools, materials, and philosophy of teaching musical concepts to children in grades 4-6. Develops skill on classroom instruments.

**MUSC 3412**
**Music Career Development**
**3**
* Prerequisite(s): MUSC 2110 and University Advanced Standing

Examines various career options in the music industry. Covers the identification of audience and client and the process of supplying products appropriate to their needs. Includes advertising, client relations, social media, and creating an online presence. Explores the development of funding sources for music projects and basic music accounting practices. Covers sync fees, performance rights organizations (PRO), and multiple streams of income through royalties. Lab access fee of $10 applies.

**MUSC 3415**
**Instrumental Pedagogy and Literature I**
**2**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MUSC 2110

Provides students the opportunity to study the pedagogy and literature of their major instrument. Examines various pedagogical approaches and incorporates in-class teaching demonstrations. Includes the selection of appropriate solo and chamber literature for beginning and intermediate levels.

**MUSC 3416**
**Instrumental Pedagogy and Literature II**
**2**
* Prerequisite(s): MUSC 3415 and University Advanced Standing

Provides students the opportunity to study the pedagogy and literature of their major instrument. Examines various pedagogical approaches and incorporates in-class teaching demonstrations. Includes the selection of appropriate solo and chamber literature for advanced levels.

**MUSC 3450**
**Music History and Literature I**
**3**
* Prerequisite(s): MUSC 2125 and University Advanced Standing

Covers the history of European music from ancient times to the Classic era. Surveys periods, genres, composers, works, performance practice, and sources. Emphasizes musical meaning, style, and interpretation.

**MUSC 3451**
**Music History and Literature II**
**3**
* Prerequisite(s): MUSC 3450 and University Advanced Standing

Covers the history of European-sphere music from the Classic era to the present. Surveys periods, genres, composers, works, preformance practice and sources. Emphasizes musical meaning, style and interpretation.

**MUSC 360R**
**Commercial Music Private Lessons**
**1**
* Prerequisite(s): MUSC 250R and University Advanced Standing

Offers twelve 30-minute private lessons. Focuses on the individual needs of the student, developing skills and techniques in commercial composition, production, or improvisation. May be repeated as desired. Course fee of $270 for private instruction applies.

**MUSC 3620**
**Percussion Techniques I**
**1**
* Prerequisite(s) or Corequisite(s): MUSC 2110

Prepares music education majors in the pedagogy and methods of percussion instruments for beginning players.

**MUSC 3621**
**Percussion Techniques II**
**1**
* Prerequisite(s): MUSC 3620 and University Advanced Standing

Prepares music education majors in the pedagogy and methods of percussion instruments for intermediate players in secondary school programs.

**MUSC 3630**
**Vocal Techniques**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MUSC 2110

Provides an introduction to vocal pedagogy and basic choral concepts for music education majors. Focuses on principles of healthy vocal production. Covers vocal anatomy, breath energy, phonation, resonance, articulation, registration, warm-ups, basic diction, ensemble singing, and working with adolescent voices. Involves solo and ensemble singing, rehearsal conducting, and private teacher observations.

**MUSC 3649**
**String Techniques I**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MUSC 2110

Studies the pedagogical process of a beginning and intermediate string class. Covers strategies for the recruitment and organization of an orchestra program. Discusses the selection and maintenance of string instruments, accessories and supplies.

**MUSC 3650**
**String Techniques II**
**1**
* Prerequisite(s): MUSC 3649 and University Advanced Standing

Provides additional instruction in string performance skills. Studies the pedagogical process of an advanced string class. Covers the planning and execution of effective rehearsals. Discusses choices for method books and orchestra literature.

**MUSC 3659**
**Woodwind Techniques I**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MUSC 2110

Teaches basic performing skills on the clarinet and saxophone including tone production, articulation, registers and fingerings. Studies pedagogical processes, methods and literature. Covers strategies for the recruitment and organization of a band program. Discusses instrument selection and maintenance, reeds and accessories.

**MUSC 3660**
**Woodwind Techniques II**
**1**
* Prerequisite(s): MUSC 3659 and University Advanced Standing

Provides performance instruction on the flute, oboe, and bassoon. Studies pedagogical processes and choices for method books and band literature. Covers the planning and execution of effective rehearsals. Discusses instrument selection and maintenance, reeds and accessories.

**MUSC 3679**
**Brass Techniques I**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MUSC 2110

Teaches basic performing skills on the trumpet and French horn. Studies the assembly, mechanism, embouchure formation, tone, breath control, intonation and fingerings of each instrument. Discusses brand selection, accessories, equipment supplies and instrument care. Covers pedagogical processes, repertoire and method resources.

**MUSC 3680**
**Brass Techniques II**
**1**
* Prerequisite(s): MUSC 3679 and University Advanced Standing

Provides basic performance instruction on the trombone, euphonium and tuba. Studies the assembly, mechanism, embouchure formation, tone, breath control, intonation and fingerings of each instrument. Covers rehearsal strategies and literature selection. Discusses choices for instrument brands, accessories and supplies.

**MUSC 3690**
**Jazz Practicum**
**1**
* Prerequisite(s): (MUSC 3659 or MUSC 3679) and University Advanced Standing

Provides a practical study of basic jazz performance, improvisation, transcription, styles, history and rehearsal techniques. Prepares students to teach jazz.

**MUSC 370R**
**Symphony Orchestra**
**1**
* Prerequisite(s): Audition

Provides opportunity to improve musical performance skills by participating in orchestra. Studies and performs serious concert literature from all periods of music history. Requires attendance at all concerts, rehearsals, tours and acquisition of performance attire. May be repeated as desired.

**MUSC 372R**
**Chamber Orchestra**
**1**
* Prerequisite(s): Audition

Provides smaller orchestra experience. Improves individual and ensemble performance skills. Studies and performs serious concert literature from all periods of music history. Attendance is expected at all concerts, rehearsals, and tours. Audition is required. May be repeated as desired.

**MUSC 373R**
**Advanced Small Ensembles**
**1**
* Prerequisite(s): Instructor Approval

Provides opportunities for performing in small groups of select musicians. Studies music of various styles and periods. Some public performances will be required. May be repeated as desired.

**MUSC 379R**
**Studio Recording Workshop**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MUSC 1400

Provides performance opportunities in a contemporary recording studio environment. Examines the interrelating roles of performer, engineer, and producer. May be repeated for a maximum of 6 credits toward graduation. Lab access fee of $10 for computers applies. Software fee of $100 for computers applies.

**MUSC 3800**
**Junior Recital**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): MUSC 450R or MUSC 455R

Provides a solo recital experience for students during their junior year.

**MUSC 410R**
**Music Composition**
**2**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MUSC 2110

Builds on compositional techniques for music majors. Explores historical and contemporary techniques, repertoire, and concepts with an emphasis on creating and performing an original piece. Provides opportunities for students to explore their own creative process and demonstrate their knowledge through composition projects. May be repeated for a maximum of 8 credits toward graduation. Software fee of $22 applies. Course Lab fee of $10 for computers applies.

**MUSC 4130**
**Scoring and Arranging**
**2**
* Prerequisite(s): MUSC 3120 and University Advanced Standing

Studies techniques of scoring and arranging music for orchestra, band, choir, and small ensembles. Software fee of $22 applies. Course Lab fee of $10 for computers applies.

**MUSC 4140**
**Counterpoint**
**3**
* Prerequisite(s): MUSC 3120 and University Advanced Standing

Teaches the techniques of combining melodic voices in a historical context. Covers concepts from the entire span of music history since the emergence of polyphony around the twelfth century. Emphasizes the disciplines of sixteenth- and eighteenth-century counterpoint. Software fee of $15 applies. Course Lab fee of $10 for computers applies.

**MUSC 4150**
**Advanced Choral Conducting**
**2**
* Prerequisite(s): MUSC 2350 and University Advanced Standing

Develops advanced baton techniques, score preparation and basic rehearsal procedures for choral organizations. Explores advanced tools of coordination and musicianship, and covers communication and score analysis.

**MUSC 420R**
**Film Scoring**
**2**
* Prerequisite(s): MUSC 410R and University Advanced Standing

Covers theoretical concepts, creative and collaborative methods, and practical experiences in the process of creating music for film and video. Includes elements of film score history, dramatic structure, collaboration, spotting, musical structure and form (including leitmotif and variation), timing, temp tracks, digital mockups and production demos, recording and mixing film music, copyright and contractual concerns, developing a portfolio of musical scoring work. Activities include lecture/discussion of theoretical principles, analysis of masterworks in the film music genre, and production of a student-scored film/video clip. May be repeated as desired. Software fee of $100 applies. Course Lab fee of $10 for computers applies.

**MUSC 4220**
**Choral Literature and Methods**
**2**
* Prerequisite(s): MUSC 2350 and University Advanced Standing

Studies the process of developing a successful school choral program. Analyzes the quality of choral literature and its suitability for various skill levels. Studies effective rehearsal management strategies. Examines current resources and systems for choral program administration. Develops skills in singing, score analysis, conducting techniques, section leading, and microteaching.

**MUSC 4221**
**Advanced Choral Literature and Methods**
**2**
* Prerequisite(s): MUSC 4220 and University Advanced Standing

Provides further examination of the processes involved in developing a successful school choral program. Studies the history and performance practices of stylistic periods of choral literature. Provides opportunities to plan and lead choral ensemble rehearsals. Includes preparations of materials for professional portfolios. Covers strategies for long-term professional development.

**MUSC 422R**
**Commercial Music Performance Workshop**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): MUSC 250R or MUSC 450R or MUSC 455R or MUSC 360R

Provides experience performing various styles of commercial music. Explores techniques required in the performance of contemporary styles. Addresses stage presence analysis and provides opportunities for students to explore various performance techniques. Discusses the control of performance anxiety. Practices the basic techniques of stage presentation, lighting, stage direction, and costuming. Develops advanced-level commercial performance proficiency. May be repeated for a maximum of 8 credits toward graduation.

**MUSC 423R**
**Opera Workshop**
**1**
* Corequisite(s): MUSC 250R or MUSC 450R
* Prerequisite(s) or Corequisite(s): MUSC 455R

Provides experience performing scenes from opera. Explores the techniques of dramatic characterization and stage craft. Addresses the process of character analysis. Discusses the control of performance anxiety. Practices the basic techniques of stage makeup and costuming. Develops advanced-level singing proficiency. May be repeated for a maximum of 12 credits toward graduation. Course Lab fee of $100 for support applies.

**MUSC 4240**
**Vocal Pedagogy**
**2**
* Prerequisite(s): MUSC 2002 and University Advanced Standing

Provides instruction centered on the art and science of vocalization as it pertains to teaching in a studio scenario and in personal study. Presents varied teaching methods for vocal instruction in group and one-to-one situations. Provides students the opportunity to teach and receive immediate peer and instructor evaluations on the efficacy of their teaching style and lesson content.

**MUSC 4340**
**Marching Band Techniques**
**1**
* Prerequisite(s): University Advanced Standing

Teaches organization and training of marching bands in public schools. Emphasizes precision marching and traditional formation techniques. Covers elements of instrumentation, charting, drill techniques and parade marching. Software fee of $22 applies Course Lab fee of $10 for computers applies.

**MUSC 4360**
**Instrumental Literature and Methods**
**2**
* Prerequisite(s): MUSC 2350 and University Advanced Standing

Studies literature, methodology, and administration of a junior high school instrumental music program.

**MUSC 4370**
**Advanced Instrumental Literature and Methods**
**2**
* Prerequisite(s): MUSC 2350, MUSC 4360, and University Advanced Standing

Studies literature, methodology, and administration of a high school instrumental music program.

**MUSC 450R**
**Advanced Private Lessons for Music Majors**
**1**
* Prerequisite(s): Sophomore Review required and University Advanced Standing
* Corequisite(s): MUSC 451R

Offers twelve 60-minute private lessons for music majors. Focuses on the individual needs of the student in developing advanced skills and techniques. Requires participation in weekly performance class. Includes juried evaluations. May be repeated as desired. Course fee of $443 for support applies.

**MUSC 451R**
**Performance Class**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): MUSC 450R or MUSC 455R

Provides advanced performance experience for music majors. Develops an ability to offer and receive constructive criticism. Explores performance-related topics such as practice strategies, performance anxiety, interpretive phrasing, technical mastery, memorization and jury preparation. May be repeated for a maximum of 12 credits toward graduation.

**MUSC 455R**
**Private Lessons for Music Performance Majors**
**2**
* Prerequisite(s): BM in Performance major, Sophomore Review, and University Advanced Standing
* Corequisite(s): MUSC 451R

Offers twelve 60-minute private lessons for music performance majors. Focuses on the individual needs of the student in developing advanced skills and techniques. Requires participation in weekly performance class. Includes recital preparation and juried evaluations. May be repeated as desired. Course fee of $443 for recital preparation applies.

**MUSC 470R**
**Studio Arranging and Producing**
**3**
* Prerequisite(s): MUSC 2400, MUSC 3120, and University Advanced Standing

Covers theoretical concepts of arranging and production in the recording studio in various styles and applications. Incorporates practical experience in a working professional studio. Applies principles of orchestration, both traditional and contemporary, in the classroom and studio environment. Emphasizes communication skills with recording artists, musicians and engineers. Covers logistical protocols for scheduling, booking of studios and musicians, studio demeanor and ethics, and working with clients. May be repeated for a maximum of 12 credits towards graduation. Software fee of $100 applies. Course Lab fee of $10 for computers applies.

**MUSC 4780**
**Pre-Service Student Teaching**
**2**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): MUSC 4221, MUSC 4360, or MUSC 4370

Provides placement in a secondary public school setting in one weekly class or ensemble in preparation for the final student teaching experience. Requires score preparation, assistance with sectionals, teaching music literacy concepts and mini lessons, and other work as assigned by the supervisor and cooperating teacher. Includes peer observations in various school settings. Provides formal observations by content faculty.

**MUSC 4785**
**Student Teaching Seminar**
**2**
* Prerequisite(s): University Advanced Standing

Provides support for the student teaching experience. Includes classroom management, ongoing content mentorship, supervision of conducting and score preparation, faculty and peer feedback, and assistance with senior portfolio. Requires written assignments and off-campus peer observations.

**MUSC 4800**
**Senior Recital**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): MUSC 450R or MUSC 455R R

Provides a solo recital experience for students during their senior year.

**MUSC 481R**
**Internship in Music II**
**1 to 8**
* Prerequisite(s): Departmental Approval and University Advanced Standing

Provides an opportunity for upper-division students to receive college credit and work in a music-related field. Offers students the opportunity to focus on a specific career path and prepare themselves to enter the profession. Applies academic concepts to actual work experiences. Requires approval of faculty sponsor and completion and acceptance of application. Also requires completion of an orientation, completion of Master Agreement between UVU and employer, completion of goals and tasks as required by academic department, and completion of final evaluation. May be repeated for a total of 8 credits towards graduation. May be graded credit/no credit.

**MUSC 490R**
**Advanced Independent Study**
**1 to 3**
* Prerequisite(s): MUSC 3120 and University Advanced Standing

Individual projects to be negotiated by student and instructor on a case-by-case basis. May be repeated for a maximum of 12 credits toward graduation.

**MUSC 492R**
**Advanced Topics in Music**
**1 to 3**
* Prerequisite(s): MUSC 3120, departmental approval, and University Advanced Standing; Certain topics may require other prerequisite

Examines advanced topics in music. Examples could include historical, theoretical, or pedagogical topics such as Schenkerian analysis or 16th century counterpoint. May be repeated for a maximum of 9 credits toward graduation. Software fee of $100 applies. Course Lab fee of $10 for computers applies.

# National Security Studies (NSS)

**NSS 2010**
**Introduction to National Security**
**3**
* Prerequisite(s): ENGL 2010; HIST 1700 or HIST 2700 or POLS 1100 or CJ 1010

Categorizes elements of the national security field. Explores the national security system, focusing on contemporary issues. Analyzes formulation and execution of national security policy through diplomacy, intelligence operations, and military force.

**NSS 301R**
**National Security Area Studies**
**3**
* Prerequisite(s): University Advanced Standing; POLS 1100, HIST 1700, or HIST 2700, or CJ 1010

Examines the national security issues associated with a particular geographic area in the global community. May be repeated for a maximum of 9 credits toward graduation.

**NSS 3050**
**US Intelligence Community**
**3**
* Prerequisite(s): University Advanced Standing

Examines the US Intelligence Community (IC) and its core responsibilities and processes. Assesses the IC's two-fold role to support policy makers and operations, the customer-driven intelligence production cycle, how national foreign intelligence requirements are generated and prioritized, what activities are authorized and which activities are prohibited, intelligence oversight by Congress, and privacy concerns. Evaluates the missions, roles, responsibilities, and authorities of the (IC) constituent agencies and assess the IC's intelligence collection disciplines.

**NSS 4210**
**Law of War**
**3**
* Prerequisite(s): University Advanced Standing; POLS 1100, HIST 1700, HIST 2700, or CJ 1010

Examines the law that governs situations of armed conflict, including the history and development of the law. Assesses major contemporary issues in this area of the law, to include detention policy, drone warfare, terrorism as a tactic of war, and preemptive force.

**NSS 4250**
**National Security Career Strategies**
**3**
* Prerequisite(s): NSS 2010; University Advanced Standing

Emphasizes the development of effective techniques for successfully locating, applying for and securing employment as well as advancing in a National Security-related career path. Includes industry and job research, demonstration, role play, development of writing materials, and application exercises. Provides preparation for internship and career entry experience.

**NSS 4300**
**Intelligence Cycle and Collections**
**3**
* Prerequisite(s): NSS 2010, NSS 3050, and University Advanced Standing

Describes the intelligence collection and production cycle. Evaluates the nature, organization, activities, and key issues surrounding the methods of intelligence and counterintelligence collection. Examines historical development and utilizations of the dominant collection activities, including human intelligence, geospatial intelligence, signals intelligence, measurement and signature intelligence, and their role in American statecraft. Explores significant policy issues related to intelligence collection in the U.S. experience, including legal, moral, ethical, organizational, strategic, and performance issues, and measures of effectiveness. Applies specific skills in writing and open source intelligence collection.

**NSS 4400**
**Statecraft and Strategy**
**3**
* Prerequisite(s): NSS 2010

Analyzes the theory, history, practice, and challenges of statecraft and strategy in U.S. national security. Examines the various methods of statecraft that are available to policymakers. Evaluates how these methods have been used successfully in the pursuit of national interests and purposes. Assesses instruments of national power, including military power; economic strategy; intelligence; the use of information, disinformation, and propaganda; various types of diplomacy, political, moral, and psychological influence; and other instruments of soft power.

**NSS 4600**
**National Security Law**
**3**
* Prerequisite(s): University Advanced Standing; POLS 1100, HIST 1700, HIST 2700, or CJ 1010

Evaluates the distribution of national security powers amongst the three branches of government. Reviews the laws and policies that govern the legality of war, military operations in wartime, intelligence collection, protection of national security information, foreign intelligence surveillance, covert action, special military operations, offensive counterterrorism operations, detention and interrogation of terrorism suspects, and other current issues in the national security area.

**NSS 475R**
**Current Topics in National Security**
**3**
* Prerequisite(s): University Advanced Standing; POLS 1100, HIST 1700, HIST 2700, or CJ 1010

Presents selected topics in National Security and will vary each semester. Requires a special project related to the area of study. May be repeated with different topic areas for a maximum of 9 credits toward graduation.

**NSS 4800**
**Intelligence Analysis and Tradecraft**
**3**
* Prerequisite(s): University Advanced Standing

Appraises structured analytic techniques commonly embraced as sound tradecraft within the Intelligence Community (IC) and applies these techniques in the context of actual intelligence cases. Applies the structured analytic techniques of decomposition and visualization, idea generation, scenarios and indicators, hypothesis generation and testing, assessment of cause and effect, challenge analysis, and decision support. Evaluates IC analytic standards and discuss ethical considerations.

**NSS 481R**
**National Security Internship**
**1 to 9**
* Prerequisite(s): University Advanced Standing

Provides academic credit for work for students in a paying or non-paying (volunteer) job for a national security employer or other approved related situation. Emphasizes successful work experience with emphasis on identifying and solving problems. May be repeated for a maximum of 9 credits toward graduation. May be graded credit/no credit.

**NSS 491R**
**Directed Readings and Special Projects in National Security**
**1 to 3**
* Prerequisite(s): University Advanced Standing

Offers independent study as directed in reading, individual projects, etc., at the discretion and approval of the department chair. May be repeated for a maximum of 9 credits.

**NSS 4990**
**National Security Capstone Seminar**
**3**
* Prerequisite(s): NSS 2010, NSS 301R, NSS 4600, NSS 475R, and University Advanced Standing

Includes readings and discussions about a variety of complex national security problems and issues. Offers directed research project tailored to each student's special interests.

**NSS 6500**
**US National Security Policy and Strategy**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program or department approval

Examines how the United States formulates national security policy and strategy. Analyzes conceptual foundations, organizational structures and functions, decision-making processes, and priority issues in US national security. Assesses the role and authorities of the President and Executive Branch, congressional oversight, national security policy development and implementation, the implementation and limits of national power, the role of intelligence, the relevant legal frameworks, and specific national security challenges.

**NSS 6600**
**State Responses to Terrorism-Counterterrorism in a Collaborative Environment**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Outlines how federal, state, and local law enforcement have developed a standardized information sharing process in an effort to mitigate terror attacks. Analyzes state fusion centers, intelligence-led policing, community engagement, and multi-agency emergency response plans. Utilizes practical lecture, table top exercise, and case studies, to demonstrate how states act independently to prevent, thwart, and mitigate acts of terror stemming from domestic terrorists, transnational terrorist organizations, and inspired lone offenders.

**NSS 6700**
**Intelligence Analysis and Tradecraft**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program.

Appraises structured analytic techniques commonly embraced as sound tradecraft within the Intelligence Community (IC) and applies these techniques in the context of actual intelligence cases. Applies the structured analytic techniques of decomposition and visualization, idea generation, scenarios and indicators, hypothesis generation and testing, assessment of cause and effect, challenge analysis, and decision support. Evaluates IC analytic standards and discuss ethical considerations.

**NSS 6800**
**U.S. Military-Strategy and Structure**
**3**
* Prerequisite(s): Acceptance into the Masters of Public Services Program

Examines the U.S. Military services, commands, and agencies, and its core responsibilities and processes. Assesses the historical roles that the U.S. Military has played in American national security policy. Evaluates the United States' military strategy. Evaluates the relationship between strategy and structure in current U.S. military doctrine and policy.

# Nursing (NURS)

**NURS 2210**
**Practical Nurse to Registered Nurse**
**1**
* Prerequisite(s): Licensure as a Practical Nurse; acceptance into ASN in Nursing program.

Introduces the role of the registered nurse in providing patient-centered, safe, and quality care for adults in health care settings. Emphasizes the use of assessment to plan patient care and evaluate patient outcomes. Includes the functions of the registered nurse in the interprofessional healthcare team.

**NURS 2220**
**Practical Nurse to Registered Nurse**
**1**
* Prerequisite(s): Licensure as a Practical Nurse; acceptance into ASN in Nursing program.

Introduces the role of the registered nurse in providing patient-centered, safe, and quality care for adults in health care settings. Emphasizes the use of assessment to plan patient care and evaluate patient outcomes. Includes the functions of the registered nurse in the interprofessional healthcare team.

**NURS 2300**
**Nursing Health Assessment**
**1**
* Prerequisite(s): Acceptance into ASN/BS Nursing program
* Corequisite(s): NURS 2305
* Prerequisite(s) or Corequisite(s): NURS 2320

Introduces the health history interview and physical assessment for patients across the lifespan. Uses a holistic approach in identifying health care needs of the patient within the context of standards of nursing practice.

**NURS 2305**
**Nursing Health Assessment Laboratory**
**1**
* Prerequisite(s): Acceptance into ASN/BS Nursing program
* Corequisite(s): NURS 2300
* Prerequisite(s) or Corequisite(s): NURS 2320

Integrates knowledge, behaviors and skills from current and previous courses in lab and simulation settings. Provides opportunities to perform health assessments. Prepares students to enter the clinical setting. Course Lab fee of $22 applies.

**NURS 2310**
**Nursing Pharmacology**
**3**
* Prerequisite(s): CHEM 1110, ZOOL 2320 and Acceptance into ASN/BS Nursing program
* Prerequisite(s) or Corequisite(s): ZOOL 2420

Examines general principles of drug therapies, including medication administration, pharmacotherapeutics, and dosage calculations. Focuses on major drug categories and prototypes in each category. Serves as a basis for understanding drug therapy as an important part of health care.

**NURS 2320**
**Fundamentals of Nursing Care**
**2**
* Prerequisite(s): Acceptance into ASN/BS Nursing program
* Corequisite(s): NURS 2325
* Prerequisite(s) or Corequisite(s): NURS 2300

Promotes safe patient care for individuals across the lifespan. Emphasizes nursing interventions based on an individualized patient assessment to promote quality care and risk reduction. Course fee of $75 for online assessment & review tools applies.

**NURS 2325**
**Nursing Practice Simulation and Skills Lab I**
**2**
* Prerequisite(s): Acceptance into ASN/BS Nursing program
* Corequisite(s): NURS 2320
* Prerequisite(s) or Corequisite(s): NURS 2300

Provides opportunity to practice safe patient care for patients across the lifespan. Integrates knowledge, behaviors and skills from current and previous courses in lab, simulation and clinical settings. Prepares students to engage in the clinical setting and provide basic nursing care. Course Lab fee of $169 applies.

**NURS 2410**
**Nursing Care of Adults with Common Health Needs**
**3**
* Prerequisite(s): NURS 2320
* Corequisite(s): NURS 2415
* Prerequisite(s) or Corequisite(s): NURS 2420

Incorporates theories of nursing care for adult patients with common health needs and builds upon concepts learned in current and previous courses. Emphasizes pharmacotherapeutics, clinical judgment, and health assessment, promotion, and teaching in caring for patients with common health needs. Integrates standards of nursing practice in caring for patients and their support systems. Course fee of $75 for online assessment & review tools applies.

**NURS 2415**
**Nursing Care of Adults with Common Health Needs Clinical**
**2**
* Prerequisite(s): NURS 2320
* Corequisite(s): NURS 2410
* Prerequisite(s) or Corequisite(s): NURS 2420

Provides clinical opportunities to care for adult patients with common physiological problems in healthcare settings. Incorporates pharmacotherapeutics, clinical judgment, and health assessment, promotion, and teaching in management of patients with common health needs. Integrates standards of nursing practicein delivery of care to patients and their support systems.

**NURS 2420**
**Nursing Care of the Aging Population**
**2**
* Prerequisite(s): NURS 2300, NURS 2310
* Corequisite(s): NURS 2410

Introduces the aging process and changes with aging. Identifies special needs of older adults and nursing interventions to meet those needs. Prepares students to meet the needs of the increasing elderly population including caring for patients with chronic illnesses and end-of-life concerns. Includes a service learning component requiring visits to a community setting with active seniors.

**NURS 2430**
**Mental Health Nursing**
**2**
* Prerequisite(s): NURS 2300, NURS 2310
* Corequisite(s): NURS 2435

Examines psychosocial and neurobiological aspects of disorders of cognition, mood and behavior. Explores trends in nursing and interprofessional care of persons with psychiatric disorders. Integrates standards of nursing practice in the core for patients with mental health needs and their support systems.

**NURS 2435**
**Mental Health Nursing Clinical**
**1**
* Prerequisite(s): NURS 2300, NURS 2310, NURS 2320
* Corequisite(s): NURS 2430

Provides clinical opportunities to care for patients with mental health needs. Integrates standards of nursing practice in delivery of care to patients and their support systems with an emphasis on mental health care.

**NURS 2445**
**Nursing Practice/Simulation/Skills Lab II**
**1**
* Prerequisite(s): NURS 2305 and NURS 2325
* Corequisite(s): NURS 2410

Integrates nursing knowledge, behaviors, and skills from current and previous courses in lab and simulation settings. Prepares students for care of patients with common health needs, mental health needs, and conditions related to aging. Course Lab fee of $169 applies.

**NURS 3310**
**Nursing Care of Child Bearing Families**
**2**
* Prerequisite(s): NURS 2410 and University Advanced Standing
* Corequisite(s): NURS 3315

Builds on concepts learned in previous and concurrent courses to provide nursing care to families in the reproductive years. Emphasizes the child-bearing family, including physiological and psychosocial adaptation to pregnancy, birth, and the immediate newborn period, and disorders of the reproductive patient. Integrates nursing process in providing a holistic, collaborative approach to clients and families in secondary and tertiary settings such as physician offices, labor and delivery, mother/baby, clinical simulation, and others.

**NURS 3315**
**Nursing Care of Child Bearing Families Clinical**
**1**
* Prerequisite(s): NURS 2410 and University Advanced Standing
* Corequisite(s): NURS 3310

Provides clinical opportunities to provide nursing care to families in the reproductive years. Emphasizes the child-bearing family, including physiological and psychosocial adaptation to pregnancy, birth, and the immediate newborn period, and disorders of the reproductive patient. Integrates nursing process in providing a holistic, collaborative approach to clients and families in secondary and tertiary settings such as physician offices, labor and delivery, mother/baby, clinical simulation, and others.

**NURS 3320**
**Nursing Care of Child Rearing Families**
**2**
* Prerequisite(s): NURS 3310, NURS 3315, and University Advanced Standing
* Corequisite(s): NURS 3325

Integrates previously mastered principles of medical surgical nursing and normal child growth and development with the knowledge and skill to promote, maintain, and restore child health within the sociocultural context of the family. Explores application of the nursing process to safely meet common health problems of children from infancy through adolescence in clinical settings ranging from the laboratory to intensive care.

**NURS 3325**
**Nursing Care of Child Rearing Families Clinical**
**1**
* Prerequisite(s): NURS 3310, NURS 3315, and University Advanced Standing
* Corequisite(s): NURS 3320

Safely applies the nursing process to meet health problems of children from infancy through adolescence in clinical settings ranging from the laboratory to intensive care. Integrates previously mastered principles of medical surgical nursing and normal child growth and development with the knowledge and skill to promote, maintain, and restore child health within the sociocultural context of the family.

**NURS 3330**
**Nursing Care of Individuals with Complex Health Needs**
**2**
* Prerequisite(s): NURS 2410 and University Advanced Standing
* Corequisite(s): NURS 3335
* Prerequisite(s) or Corequisite(s): ZOOL 4400 highly recommended

Incorporates concepts learned in current and previous courses into principles of nursing care for patients with complex health needs. Emphasizes pathophysiology, pharmacotherapeutics, monitoring, and interventions required in caring for patients in acute and unstable conditions. Integrates standards of nursing practice in caring for patients and their support systems. Course fee of $75 for online assessment & review tools applies.

**NURS 3335**
**Nursing Care of Individuals with Complex Health Needs Clinical**
**2**
* Prerequisite(s): NURS 2410 and University Advanced Standing
* Corequisite(s): NURS 3330
* Prerequisite(s) or Corequisite(s): ZOOL 4400 highly recommended

Provides clinical opportunities to care for patients with complex health needs. Incorporates pathophysiology, pharmacotherapeutics, monitoring, and interventions required in management of patients in acute and unstable conditions. Integrates standards of nursing practice in delivery of care to patients and their support systems.

**NURS 3340**
**Nursing Care of Women Children and Developing Families**
**3**
* Prerequisite(s): NURS 2410 and University Advanced Standing
* Corequisite(s): NURS 3345

Explores application of the nursing process to address health issues of women, children and developing families. Emphasizes safety and quality of nursing care.

**NURS 3345**
**Nursing Care of Women Children and Developing Families Clinical**
**1**
* Prerequisite(s): NURS 2415 and University Advanced Standing
* Corequisite(s): NURS 3340

Provides clinical and/or laboratory opportunities to apply the nursing process to address health issues of women, children and developing families.

**NURS 3355**
**Nursing Practice/Simulation/Skills Lab III**
**1**
* Prerequisite(s): NURS 2445 and University Advanced Standing
* Corequisite(s): NURS 3330

Integrates nursing knowledge, behaviors, and skills from current and previous courses in lab and simulation settings. Prepares students to care for women, children, developing families, and individuals with complex and critical conditions. Course lab fee of $169 applies.

**NURS 3400**
**Patient Care Coordination and Management**
**1**
* Prerequisite(s): NURS 3330, NURS 3335, and University Advanced Standing
* Corequisite(s): NURS 3405

Focuses on the core roles of the nurse as a provider of care, manager of care, and member of the profession. Incorporates aspects of evidence-based nursing practice. Explores the scope of nursing practice related to national and local healthcare regulations. Course fee of $75 for online assessment & review tools applies.

**NURS 3405**
**Patient Care Coordination and Management Preceptorship**
**2**
* Prerequisite(s): NURS 3330, NURS 3335, and University Advanced Standing
* Corequisite(s): NURS 3400

Provides clinical experiences in coordinating and managing the care of a small group of patients. Focuses on the core roles of the nurse as a provider of care, manager of care, and member of the profession. Incorporates aspects of delegation, prioritization, time management, communication, and group dynamics.

**NURS 3420**
**Mentoring in Nursing**
**1**
* Prerequisite(s): NURS 2320 and University Advanced Standing

Provides an opportunity for students to develop personal leadership and mentoring skills as they work with other nursing students and/or patients.

**NURS 3440**
**Pharmacology for the Practicing Nurse**
**2**
* Prerequisite(s): NURS 3330 and University Advanced Standing
* Corequisite(s): NURS 3400

Emphasizes clinical judgement, patient teaching, and evaluation of patient outcomes. Explores in depth the pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of medications and complementary and integrative health therapies.

**NURS 3445**
**Nursing Practice Simulation and Skills Lab IV**
**1**
* Prerequisite(s): NURS 3355 and University Advanced Standing

Integrates nursing knowledge, behavior, and skills from current and previous courses in lab and simulation settings. Prepares students for entry-level practice as a registered nurse. Course Lab fee of $169 applies.

**NURS 4120**
**Rapid Response Concepts Across the Lifespan**
**2**
* Prerequisite(s): (NURS 3330 and NURS 3340) or (RESP 2320 and RESP 2165) and University Advanced Standing

Prepares registered nurses to respond to, stabilize and transport adult and pediatric patients experiencing life threatening emergencies in hospital and prehospital settings. Enhances skills in the diagnosis and treatment of patients requiring care by a rapid response team, through didactic instruction and active participation in simulated cases. Course Lab fee of $50 applies.

**NURS 4130**
**Critical Care in Nursing**
**2**
* Prerequisite(s): NURS 3330 and University Advanced Standing

Expands upon nursing care of individuals with complex disorders. Focuses on nursing in the critical care setting and includes specialized topics such as: nursing assessment, equipment, diagnostic tests, medication administration, ECG monitoring and standard nursing care of the client with an acute illness.

**NURS 4210**
**Concepts in Child Bearing**
**2**
* Prerequisite(s): NURS 3310 and University Advanced Standing

Introduces the student to special concepts related to the child bearing family, including legal and ethical questions that relate to childbearing. Discusses local and global issues in childbearing.

**NURS 4220**
**Pediatric Acute Care Nursing**
**2**
* Prerequisite(s): NURS 3340 and University Advanced Standing

Applies the nursing process to provide family centered nursing care to hospitalized children from birth through adolescence. Explores and examines sociocultural, economic, developmental, emotional and physiologic factors which influence ill newborns or children and their families.

**NURS 4230**
**Palliative Care in Nursing**
**3**
* Prerequisite(s): NURS 2410 and University Advanced Standing

Describes the principles of palliative care nursing throughout the illness trajectory. Explores personal emotions, beliefs and values in understanding the nature of suffering. Examines basic principles of palliative care within a quality of life framework.

**NURS 4240**
**Promoting Active Senior Lifestyles**
**2**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): NURS 2410, NURS 2415, and NURS 2420

Explores the importance of an active lifestyle throughout the lifespan. Includes service learning experiences in health screening, health promotion teaching, and observation of active senior adults. May require overnight travel.

**NURS 4300**
**Nursing Theory**
**2**
* Prerequisite(s): NURS 2410 and University Advanced Standing

Examines various nursing models and theories which influence current nursing practice. Explores essential and interdependent relationships among knowledge, theory, research, and nursing practice. Assists students to conduct a basic assessment of a theory and gain insight into the development of their individual philosophies of nursing practice.

**NURS 4320**
**Nursing in the Community**
**2**
* Prerequisite(s): NURS 3405 and University Advanced Standing
* Corequisite(s): NURS 4325

Explores professional nursing practice in community-based and community-focused settings to promote and preserve the health of populations. Emphasizes nursing's impact on behaviors that promote health and reduce risk. Includes principles of family and community assessments, epidemiology, and environmental health.

**NURS 4325**
**Nursing in the Community Clinical**
**1**
* Prerequisite(s): NURS 3405 and University Advanced Standing
* Corequisite(s): NURS 4320

Applies professional nursing practice in community-based and community-focused settings to promote and preserve the health of populations. Utilizes family and community assessments, epidemiological and environmental health principles to plan and implement health promotion and risk reduction programs within the community.

**NURS 4340**
**Genomics in Nursing and Health**
**2**
* Prerequisite(s): NURS 3330 and University Advanced Standing

Explores the expanding science of genomics and related fields, with emphasis on implications for nursing practice. Examines current and developing genetic and genomic concepts and technologies as they relate to nursing practice and health.

**NURS 441G**
**Nursing in Global Perspective**
**3**
* Prerequisite(s): NURS 2300 and University Advanced Standing

Explores nursing and health care issues in a global perspective to promote culturally competent health care in a diversifying population.

**NURS 4500**
**Nursing Leadership**
**3**
* Prerequisite(s): NURS 3405 and University Advanced Standing

Explores leadership concepts and assists students to develop knowledge and skills necessary for leadership in nursing care delivery. Discusses leadership concepts related to nursing roles as providers of care, managers of care and members of the profession.

**NURS 4510**
**Clinical Assessment and Reasoning**
**2**
* Prerequisite(s): NURS 3405 and University Advanced Standing

Develops skills of systematic history taking, clinical examination and clinical reasoning with a focus on people with complex health problems. Explores critical thinking skills and habits as well as nursing process and other clinical judgment models.

**NURS 4520**
**Navigating Health Systems**
**3**
* Prerequisite(s): NURS 3405 and University Advanced Standing

Examines health systems, including the relationships between delivery, access, utilization and patient outcomes. Explores how organizational and economic structures, political, sociocultural, and legal factors influence the design and functions of health services.

**NURS 4540**
**Research and Theory in Nursing Practice WE**
**4**
* Prerequisite(s): NURS 3330, completion of a university-level statistics course with a minimum C or higher and University Advanced Standing

Prepares nurses to find, evaluate and apply evidence as a foundation to propose creative, innovative, or evidence-based solutions to clinical practice problems. Explores selected nursing theories and conceptual models, fundamentals of the research process, and relationships between theory, practice and research.

**NURS 4550**
**Quality and Safety in Nursing WE**
**3**
* Prerequisite(s): NURS 3330 and University Advanced Standing

Explores quality and safety initiatives in health care. Develops knowledge and skills to create and maintain a culture of quality and safety through monitoring and improving outcomes of care processes.

**NURS 481R**
**Internship in Nursing**
**1 to 3**
* Prerequisite(s): Department Chair approval and University Advanced Standing

Provides supervised, practical, clinical experience for students preparing for careers in Nursing. May be repeated for a maximum of 3 credits toward graduation. May be graded credit/no credit.

**NURS 489R**
**Undergraduate Research in Nursing**
**1 to 4**
* Prerequisite(s): NURS 2410, Department approval, and University Advanced Standing

Provides nursing students the opportunity to conduct research mentored by a faculty member. Requires the creation of a significant intellectual or creative product worthy of publication or presentation. May be repeated for a maximum of 4 credits toward graduation.

**NURS 490R**
**Special Topics in Nursing**
**1 to 4**
* Prerequisite(s): NURS 2410 and University Advanced Standing

Explores special topics of current relevance to nursing in an in-depth manner. May be repeated for a maximum of 4 credits toward graduation.

**NURS 495R**
**Independent Study in Nursing**
**1 to 3**
* Prerequisite(s): NURS 2410, Departmental approval, and University Advanced Standing

Provides students an opportunity to pursue independent study in nursing with a faculty mentor. Includes any combination of literature reviews, original research, participation in departmental and independent projects. Requires preparation and presenation of oral and/or written reports. May be repeated for up to 3 credits toward graduation.

**NURS 6000**
**Leadership Development**
**2**
* Prerequisite(s): Admission into the Master of Science in Nursing (MSN) program or Department approval

Provides opportunities for students to examine the role of the graduate nurse leader of the 21st century. Explores requisite skills necessary to lead in complex environments, facilitate improved patient outcomes, and institute quality improvement strategies as they gain an understanding of the interconnectedness of academia and service and apply professional leadership concepts in an interdisciplinary context.

**NURS 6050**
**Nursing Informatics**
**2**
* Prerequisite(s): Admission into the MSN program or Department approval.

Introduces nursing informatics theory, evolving practice applications, and skill development. Discusses human factors essential to effective application of nursing informatics in practice. Applies technical skills and processes for the integration of nursing informatics into nursing education and clinical practice settings.

**NURS 6200**
**Advanced Nursing Theory**
**2**
* Prerequisite(s): Admission into the MSN program or Department approval

Provides students opportunities to critique and deconstruct extant and emerging theories as they relate to nursing. Explores the relationships among theory, knowledge, science, and evidence-based nursing practice. Facilitates the advancement of nursing practice based on theoretical principles.

**NURS 6250**
**Advanced Nursing Research**
**3**
* Prerequisite(s): Admission into the MSN program or Department approval

Prepares students to explore, critique, synthesize, and utilize appropriate research findings to resolve nursing problems and improve outcomes. Incorporates various research designs in the development of nursing practice. Applies research methodology and ethical considerations in development of a research proposal for evidence-based practice.

**NURS 6300**
**Advanced Nursing in Health Systems and Policy**
**2**
* Prerequisite(s): Admission into the MSN program or Department approval

Prepares students for their role in becoming change agents within the workforce. Provides students opportunity to critique current healthcare policies, including the effects policies have on current nursing practice, and current health care systems. Identifes changes that need to occur in order to advance nursing and health care in the future.

**NURS 6350**
**Advanced Nursing Pathophysiology/ Pharmacology**
**3**
* Prerequisite(s): Admission into the MSN program or Department approval

Focuses on pathophysiological and pharmacological processes across the lifespan and the development of clinical reasoning skills that distinguish the relationships between normal physiology and the specific system alterations produced by injury and disease. Gives particular attention to etiology, pathogenesis, developmental and environmental influences and the clinical manifestations of major health problems with pharmacologic interventions to students enrolled in the nursing education program.

**NURS 6450**
**Advanced Nursing Assessment**
**3**
* Prerequisite(s): Admission to the MSN program or departmental approval.

Introduces concepts of advanced health assessment of individuals, families, and communities. Emphasizes application of advanced assessment techniques to perform focused and comprehensive health assessments for patients across the lifespan. Utilizes diagnostic reasoning as the primary means of collecting and analyzing data. Incorporates ethical and cultural factors in care plan development.

**NURS 6500**
**Curriculum Design and Development**
**3**
* Prerequisite(s): Admission to the MSN Program or Department approval

Explores curriculum design and development in nursing and incorporates reviewing, restructuring, and developing curricula to meet identified learning needs. Enhances student skill and understanding of curricular processes designed to foster and advance nursing education.

**NURS 6600**
**Teaching Nursing in the Classroom Setting**
**2**
* Corequisite(s): NURS 6605

Focuses on facilitating learning in classroom settings. Incorporates aspects of the philosophy of adult education and adult learning theory, the teaching process and self-evaluation through reflective thinking/processing.

**NURS 6605**
**Teaching Nursing in the Classroom Setting Practicum**
**2**
* Corequisite(s): NURS 6600

Focuses on application of teaching/learning skills in the nursing classroom setting. Incorporates aspects of the philosophy of adult education and adult learning theory, the teaching process and self-evaluation through reflective thinking/processing. Provides practicum experience in the teaching/learning environment.

**NURS 6650**
**Teaching Nursing in the Clinical Setting**
**2**
* Prerequisite(s): Admission to MSN program
* Corequisite(s): NURS 6655

Focuses on effective teaching skills for clinical settings. Establishes teacher-learner relationships as being different than in the didactic setting.

**NURS 6655**
**Teaching Nursing in the Clinical Setting Practicum**
**2**
* Prerequisite(s): Admission to MSN program
* Corequisite(s): NURS 6650

Focuses on applying effective teaching skills for clinical settings. Establishes teacher-learner relationships as being different than in the didactic setting.

**NURS 6700**
**Evaluation of Learning Outcomes**
**3**
* Prerequisite(s): Admission to MSN program

Explores the application of various methods of evaluation, measurement and grading of learning outcomes. Applies assessment techniques to various aspects of nurse education.

**NURS 6795**
**Synthesis of Teaching Practice Practicum**
**3**
* Prerequisite(s): Admission to MSN program

Provides students the opportunity to synthesize research findings through the development, implementation and evaluation of a teaching project related to nursing.

**NURS 699R**
**MSN Thesis Continung Registration**
**1 to 6**
* Prerequisite(s): NURS 697R

Provides students the opportunity to continue registration in the completion of thesis including original research on a particular subject within the discipline of nursing. May be repeated with department approval.

# Nutrition (NUTR)

**NUTR 1020**
**Foundations of Human Nutrition**
**3**

For students interested in various health care professions. Considers basic principles of human nutrition. Studies factors that influence nutritive requirements and maintenance of nutritional balance. Examines relationships between proper nutrition and social, mental and physical well-being. Canvas Course Mats $66/ McGraw applies

**NUTR 2020** **BB**
**Nutrition Through the Life Cycle**
**3**
* Prerequisite(s): NUTR 1020

For students interested in various health care professions, particularly professions in nutrition, dietetics, and food sciences. Studies application of nutrition principles to the human life cycle. Includes nutrient functions, needs, sources, and alterations during pregnancy, lactation, growth, development, maturation, and aging.

# Physician Assistant Studies (PAS)

**PAS 6621**
**Behavioral Medicine for the Physician Assistant II**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6617

Focuses on how to identify, diagnose, and manage patients with a variety of mental and behavioral disorders across the lifespan. Covers topics from depression, substance abuse, and domestic violence, as well as normal and abnormal development. Content and case complexity will become progressively more involved throughout the course series. This is the second of a two course series.

**PAS 6636**
**Orthopedics-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Successful completion of the didactic phase.
* Prerequisite(s) or Corequisite(s): PAS 6623

Provides a supervised clinical experience in Orthopedic Practice. Includes exposure to out-patient and in-patient follow up. May be Graded Credit/No Credit.

**PAS 6701**
**Human Anatomy for the Physician Assistant I**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program

Provides an in-depth, graduate-level understanding of human anatomy using a regional approach with instruction via lecture, simulation, and prosected cadavers. Helps students correlate the interactions between diverse structures and systems. Aligns content with the clinical medicine series. This is the first in a three-course series.

**PAS 6702**
**Human Anatomy for the Physician Assistant II**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6701 with a C or higher

Provides an in-depth, graduate-level understanding of human anatomy using a regional approach with instruction via lecture, simulation, and prosected cadavers. Helps students correlate the interactions between diverse structures and systems. Aligns content with the clinical medicine series. This is the second in a three-course series.

**PAS 6703**
**Human Anatomy for the Physician Assistant III**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6702 with a C or higher

Provides an in-depth, graduate-level understanding of human anatomy using a regional approach with instruction via lecture, simulation, and prosected cadavers. Helps students correlate the interactions between diverse structures and systems. Aligns content with the clinical medicine series. This is the third and final course in this series.

**PAS 6711**
**Physiology/Pathophysiology for the Physician Assistant I**
**2**
* Prerequisite(s): Acceptance into Physician Assistant Program

Examines how the human body functions from the cellular level to the interaction of organs and systems. Introduces functions related to anatomy and associations with common dysfunctions and diseases. Delivers content in an organ system-based approach with the goal of preparing physician assistant students for clinical practice. Aligns content with the clinical medicine series. This is the first of a three-course series.

**PAS 6712**
**Physiology/Pathophysiology for the Physician Assistant II**
**2**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6711 with a C or higher

Examines how the human body functions from the cellular level to the interaction of organs and systems. Introduces functions related to anatomy and associations with common dysfunctions and diseases. Delivers content in an organ system-based approach with the goal of preparing physician assistant students for clinical practice. Aligns content with the clinical medicine series. This is the second of a three-course series.

**PAS 6713**
**Physiology/Pathophysiology for the Physician Assistant III**
**2**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6712 with a C or higher

Examines how the human body functions from the cellular level to the interaction of organs and systems. Introduces functions related to anatomy and associations with common dysfunctions and diseases. Delivers content in an organ system-based approach with the goal of preparing physician assistant students for clinical practice. Aligns content with the clinical medicine series. This is the third and final course in this series.

**PAS 6721**
**Clinical Medicine I**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program

Teaches students to recognize, diagnose, and manage common medical conditions covering all organs and systems. Organizes the clinical medicine content into sets of modules. This is the first in a four-course series.

**PAS 6722**
**Clinical Medicine II**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6721 with a C or higher

Teaches students to recognize, diagnose, and manage common medical conditions covering all organs and systems. Organizes the clinical medicine content into a set of modules. This is the second in a four-course series.

**PAS 6723**
**Clinical Medicine III**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6722 with a C or higher

Teaches students to recognize, diagnose, and manage common medical conditions covering all organs and systems. Organizes the clinical medicine content into sets of modules. This is the third in a four-course series.

**PAS 6724**
**Clinical Medicine IV**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6723 with a C or higher
* Corequisite(s): PAS 6781

Teaches students to recognize, diagnose, and manage common medical conditions covering all organs and systems. Organizes the clinical medicine content into sets of modules. This is the fourth and final course in this series.

**PAS 6731**
**Pharmacology/Pharmacotherapy for the Physician Assistant I**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program

Applies clinical principles of pharmacology, pharmacokinetics, and pharmacodynamics. Focuses on the concepts of pharmacotherapy necessary for clinical prescribing decisions and includes discussion about side effects, complications, dosages, and contraindications. Aligns content with the clinical medicine series. This is the first in a four-course series.

**PAS 6732**
**Pharmacology/Pharmacotherapy for the Physician Assistant II**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6731 with a C or higher

Applies clinical principles of pharmacology, pharmacokinetics, and pharmacodynamics. Focuses on the concepts of pharmacotherapy necessary for clinical prescribing decisions and includes discussion about side effects, complications, dosages, and contraindications. Aligns content with the clinical medicine series. This is the second in a four-course series.

**PAS 6733**
**Pharmacology/Pharmacotherapy for the Physician Assistant III**
**3**
* Prerequisite(s): Acceptance in the Physician Assistant Program and PAS 6732 with a C or higher

Applies clinical principles of pharmacology, pharmacokinetics, and pharmacodynamics. Focuses on the concepts of pharmacotherapy necessary for clinical prescribing decisions and includes discussion about side effects, complications, dosages, and contraindications. Aligns content with the clinical medicine series. This is the third of a four-course series.

**PAS 6734**
**Pharmacology/Pharmacotherapy for the Physician Assistant IV**
**3**
* Prerequisite(s): Acceptance into the Physician Assistant Program and PAS 6733 with a C or higher

Applies clinical principles of pharmacology, pharmacokinetics, and pharmacodynamics. Focuses on the concepts of pharmacotherapy necessary for clinical prescribing decisions and includes discussion about side effects, complications, dosages, and contraindications. Aligns content with the clinical medicine series. This is the fourth and final course in this series.

**PAS 6741**
**Clinical Skills I**
**4**
* Prerequisite(s): Acceptance into Physician Assistant Program

Teaches the knowledge and skill set needed for history taking, focused and comprehensive physical examination, and use of diagnostic studies. Emphasizes patient dignity and autonomy as well as provider communication skills. Develops oral and written documentation skills appropriate for medical records. Aligns content with the clinical medicine series. This is the first in a three-course series.

**PAS 6742**
**Clinical Skills II**
**3**
* Prerequisite(s): Acceptance into the Physician Assistance Program and PAS 6741 with a C or higher

Teaches the knowledge and skill set needed for history taking, focused and comprehensive physical examination, and use of diagnostic studies. Emphasizes patient dignity and autonomy as well as provider communication skills. Develops oral and written documentation skills appropriate for medical records. Aligns content with the clinical medicine series. This is the second in a three-course series.

**PAS 6743**
**Clinical Skills III**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6742 with a C or higher

Teaches the knowledge and skill set needed for history taking, focused and comprehensive physical examination, and use of diagnostic studies. Emphasizes patient dignity and autonomy as well as provider communication skills. Develops oral and written documentation skills appropriate for medical records. Aligns content with the clinical medicine series. This is the third and final course in this series.

**PAS 6751**
**Clinical Decision Making I**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program

Provides the opportunity to work through clinical scenarios coinciding with the clinical medicine series and content covered in other courses within a small group, case-based setting. This is the first in a three-course series.

**PAS 6752**
**Clinical Decision Making II**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6751 with a C or higher

Provides the opportunity to work through clinical scenarios coinciding with the clinical medicine series and content covered in other courses within a small group, case-based setting. This is the second in a three-course series.

**PAS 6753**
**Clinical Decision Making III**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6752 with a C or higher

Provides the opportunity to work through clinical scenarios coinciding with the clinical medicine series and content covered in other courses within a small group, case-based setting. This is the third and final course in this series.

**PAS 6761**
**Behavioral Medicine**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program

Focuses on how to identify, diagnose, and manage patients with a variety of mental and behavioral disorders in diverse populations across the lifespan. Covers topics such as normal and abnormal development, domestic violence, end of life care, diversity in medicine, health literacy, mental and behavioral disorders, as well as substance abuse.

**PAS 6762**
**Personal and Clinical Leadership**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program

Introduces the foundations of professional practice and leadership in the clinical setting. Includes the principles of managing conflict, self-reflection, mindful practice, and patient safety awareness in clinical practice.

**PAS 6771**
**Physician Assistant Profession**
**2**
* Prerequisite(s): Acceptance into Physician Assistant Program

Introduces the origin of the PA profession, PA professional organizations, and the culture of American medicine. Covers topics including credentialing, certification, team-based care, and the future trends of the PA profession.

**PAS 6772**
**Special Populations**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the first didactic year.

Teaches the knowledge and skill set needed for history taking, focused and comprehensive physical examination, and use of diagnostic studies and assessment tools for patient populations with unique characteristics. Emphasizes shared decision-making, cultural awareness, and vulnerabilities of patient populations covered in this course.

**PAS 6773**
**Health Promotion and Disease Prevention**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the first didactic year.

Teaches the basic principles of wellness, health promotion, and disease prevention in the clinical setting. Covers topics including epidemiology, screening for common preventable diseases, interventions (in some cases), as well as complementary and alternative medicine.

**PAS 6774**
**Supplemental Topics in Medicine**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the first didactic year.

Examines specialized topics in patient care with emphasis on collaboration with other healthcare professionals. Includes topics in nutrition, genetics, dental health, and team-based care.

**PAS 6775**
**Health Care Delivery Systems and Medical Ethics**
**2**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the first didactic year.

Provides an overview of the United States healthcare delivery system, healthcare policy, quality care, patient safety, and prevention of medical errors. Reviews the role of the physician assistant in the healthcare system.

**PAS 6776**
**Physician Assistant Practice**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the first didactic year.

Prepares the physician assistant to enter clinical practice. Covers applications for registration for PANCE and national provider identification (NPI) numbers. Focuses on the importance of accurate and complete documentation related to patient care. Teaches students to create customized career development tools. Includes a PANCE review course.

**PAS 6781**
**Capstone I**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the first didactic year.

Mentors students in creating the foundation for a robust professional portfolio based on competency domains and entrustable professional activities. Helps students develop the ability to critically review medical literature and determine what skills and training are most needed for a selected area of interest. This is the first in a three-course series.

**PAS 6782**
**Capstone II**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6781

Mentors students in initiating a robust professional portfolio. Helps students create a single space where all documentation of competency will be organized and accessible. Prepares students to work independently and in teams to further skills and training relevant to selected areas of interest. This is the second in a three-course series.

**PAS 6783**
**Capstone III**
**1**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6782

Mentors students in completing a robust professional portfolio. Helps students finalize a single space where all documentation of competency will be organized and accessible for potential employers and future growth. Prepares students to work independently and in teams to show skills and training relevant to selected areas of interest. This is the third and final course in this series.

**PAS 6790**
**Family Medicine I-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with clinical experience in practicing the principles of family medicine. Facilitates experience in outpatient evaluation of patients across the lifespan (infant, child, adolescent, adult, and elderly) including preventive medicine and acute and chronic illness. This is a five-week supervised clinical practical experience (SCPE) and the course syllabus reflects both the first and second courses in this series. May be graded credit/no credit.

**PAS 6791**
**Family Medicine II-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and PAS 6790

Provides the physician assistant student with clinical experience in practicing the principles of family medicine. Facilitates experience in outpatient evaluation of patients across the lifespan (infant, child, adolescent, adult, and elderly) including preventive medicine and acute and chronic illness. This is a five-week supervised clinical practical experience (SCPE) and the course syllabus reflects both the first and second courses in this series. May be graded credit/no credit.

**PAS 6792**
**Behavioral and Mental Health Care-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with an opportunity to learn, understand and gain clinical experience in practicing the principles of behavioral and mental health care conditions. Facilitates experience in outpatient / inpatient evaluation of patients across the lifespan (adolescent, adult, and elderly) including acute and chronic illness. This is a five-week supervised clinical practical experience (SCPE). May be graded credit/no credit.

**PAS 6793**
**Womens Health-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with clinical experience in managing common gynecologic disorders. Includes obstetrical experience with routine prenatal and postpartum care, and may include labor and delivery. Comprises women's health care in an inpatient / outpatient setting across the lifespan (adolescent, adult, and elderly) including preventive medicine and acute and chronic illness. This is a five-week supervised clinical practical experience (SCPE). May be graded credit/no credit.

**PAS 6794**
**Pediatrics-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with clinical experience in practicing the principles of pediatric medicine. Facilitates experience in outpatient evaluation of patients across the lifespan (prenatal, neonatal, infant, child, adolescent) including preventive medicine and acute and chronic illness. This is a five-week supervised clinical practical experience (SCPE). May be graded credit/no credit.

**PAS 6795**
**Emergency Medicine-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with clinical experience in practicing the principles of emergency medicine. Facilitates experience in the evaluation of patients across the lifespan (infant, child, adolescent, adult, and elderly). Includes learning skills needed for the appropriate triage, stabilization, diagnosis, and management of patients with significant traumatic injuries, acute illnesses, acute complications of chronic illnesses, as well as the management of less life-threatening problems. This is a five-week supervised clinical practical experience (SCPE). May be graded credit/no credit.

**PAS 6796**
**Surgery-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with clinical experience in practicing the principles of surgery. Facilitates experience in pre-operative, intra-operative, and post-operative evaluation and management of patients across the lifespan (adolescent, adult, and elderly) including acute, chronic, and emergent conditions in the inpatient, outpatient, and operating room settings. This is a five-week supervised clinical practical experience (SCPE). May be graded credit/no credit.

**PAS 6797**
**Internal Medicine-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with clinical experience in practicing the principles of internal medicine. Facilitates experience in either an outpatient setting, inpatient setting, or a combination of both, caring for adult and elderly patients with acute, chronic, and/or preventive care needs. This is a five-week supervised clinical practical experience (SCPE). May be graded credit/no credit.

**PAS 6798**
**Elective Rotation I-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with clinical experience in a specific area of interest approved by the faculty from a variety of surgical, family medicine, or internal medicine specialties or subspecialties. Enables students to learn to recognize conditions treated by these specialties, so they can refer patients appropriately and/or work in a supportive role for such specialists. This is a five-week supervised clinical practical experience (SCPE). May be graded credit/no credit.

**PAS 6799**
**Elective Rotation II-Supervised Clinical Practice Experience**
**3**
* Prerequisite(s): Acceptance into Physician Assistant Program and successful completion of the didactic phase.

Provides the physician assistant student with clinical experience in a specific area of interest approved by the faculty from a variety of surgical, family medicine, or internal medicine specialties or subspecialties. Enables students to learn to recognize conditions treated by these specialties, so they can refer patients appropriately and/or work in a supportive role for such specialists. This is a five-week supervised clinical practical experience (SCPE). May be graded credit/no credit.

# Physical Education Sports (PES)

**PES 1010**
**Aerobics I**
**1**

A co-ed aerobic dance-exercise class that introduces aerobic conditioning principles designed to develop cardiovascular/respiratory systems, strength, coordination, and flexibility. Teaches choreographed routines involving jogging, dancing, and vigorous exercise set to music.

**PES 1011**
**Aerobics II**
**1**

A co-ed aerobic dance-exercise class that emphasizes increased knowledge in cardiovascular training, flexibility, and exercise injuries. Students acquire a more strenuous and advanced level of aerobic proficiency through high impact routines set to music.

**PES 1050**
**Powertone**
**1**

For students interested in strength and weight training in a group exercise setting. Utilizes bar/barbells, weights, bands, medi-balls, stability balls, and ropes set to music to present a total muscle conditioning class that is target-specific.

**PES 1055**
**Pilates I CoreMax Training**
**1**

A contemporary approach to Pilates exercise. A total body workout that challenges and optimizes strength, flexibility and endurance. Incorporates FlexBands, BOSU, stability balls, weighted balls, fitness circle and matwork to assist individuals in achieving optimal health and well-being. All exercises are designed to lengthen the body, strengthen the mid-section (core & spine), and improve posture and flexibility.

**PES 1057**
**Power Yoga**
**1**

For students interested in bringing balance to both body and mind. Presents a vigorous and powerful approach using Ashtanga, Anusara, and Hatha Yoga's. Uses flowing progressive postures, meditative awareness, and breath control.

**PES 1085**
**Weight Training I**
**1**

An introductory weight training course which provides the student with the needed information to develop a personalized strength program. Teaches proper lifting techniques. Demonstrates methods to increase muscular strength and endurance. Includes lab. Course fee of $25 for equipment applies.

**PES 1086**
**Weight Training II**
**1**

An individualized intermediate course for students who wish to continue their weight training program. Students will write their own program and set standards of goals that are attainable throughout the training period. Course fee of $25 for equipment applies.

**PES 1087**
**Weight Training III**
**1**
* Prerequisite(s): PES 1086 or instructor approval

An advanced course for students and varsity athletes who wish to maintain their individualized weight training program. Students will write their own program and set standards or goals that are attainable throughout the training period.

**PES 1097** **FE**
**Fitness for Life TE**
**2**

Provides information, tools, and skills to aid students in engaging in an active, healthy lifestyle throughout life. Offers the opportunity to learn about exercise program design, physiological adaptations that underlie fitness, and strategies to maintain an active lifestyle across the lifespan. Features access to high quality exercise facilities. Requires participation in exercise 2-3 days per week outside of the scheduled class activities. Stresses comprehensive principles in health, wellness, physical activity, and fitness assessment. Canvas Course Mats $66/McGraw applies

**PES 1100**
**Tennis I**
**1**

Covers the basic concepts of the game. Teaches general tennis skills including scoring, forehand, backhand, overhead, volley and net game, and service. Teaches basic tennis rules and strategy techniques. Includes labs, lectures, audio-visual, practice and inter-class participation. Taught on block only.

**PES 1101**
**Tennis II**
**1**

Covers more advanced techniques of tennis. Includes volley and half volley (net game) and technical shots - drop, lob and top spin. Includes labs, lectures, audio-visual, practice and inter-class participation. Covers the more competitive strategies for both singles and doubles. Taught on block only.

**PES 1105**
**Badminton**
**1**

Covers basic concepts of badminton. Includes scoring, forehand, backhand, overhead, net game, and service. Studies strategy techniques for both singles and doubles. Uses labs, lectures, audio-visual, practice and inter-class participation. Emphasizes skills, fundamentals, conditioning, and rules of the sport.

**PES 1110**
**Racquetball I**
**1**

Covers basic fundamentals of racquetball. Teaches the skills, rules and strategies necessary to play and enjoy racquetball. Uses demonstrations and labs, practice and inter-class participation.

**PES 1111**
**Racquetball II**
**1**

Includes advanced skills, rules and strategies in singles, doubles and cut-throat matches. Uses demonstration and labs, practice and inter-class participation. Successful completers should have developed a minimum of Level C skills.

**PES 1130**
**Golf I**
**1**

A beginning course designed to teach students fundamental techniques, rules and etiquette of the game. Includes instruction on equipment and golf techniques such as grip, stance, and swing. Provides practice rounds leading to in-class tournaments. Uses demonstrations and labs, practice and inter-class participation. Taught on block only.

**PES 1131**
**Golf II**
**1**

Designed to teach students advanced golf skills, rules, and strategies to be used in inter-class tournaments. Evaluates individual golf game strengths and weaknesses. Emphasizes playing according to USGA rules. Taught on block only.

**PES 1135**
**Archery I**
**1**

For beginners. Covers basic concepts of archery, both for target shooting and field hunting. Includes use of re-curve and compound bows. Studies the language of archery. Includes laboratory sessions (both indoors and outdoors when weather permits), video instruction, demonstration, and shooting practice. Taught on block only. Course fee of $20 for support, equipment applies.

**PES 1136**
**Archery II**
**1**

Builds upon the basic concepts learned in PES 1135. Covers skills, fundamentals, conditioning, history, and rules of the sport. Includes lecture, labs, demonstration and practice (outdoors when weather permits), and video presentations. Taught on block only. Course fee of $20 for support, equipment applies.

**PES 1145**
**Bowling I**
**1**

Teaches bowling skills and rules to beginning bowlers. Improves skills of advanced bowlers. Covers scoring procedures. Follows National Bowling Council techniques and rules of American Bowling Congress and Women International Bowling Congress. Includes lecture and participation.

**PES 1146**
**Bowling II**
**1**

For those with intermediate bowling skills. Teaches techniques of advanced bowling. Studies rules and strategies. Enhances enjoyment, commitment, and performance of the sport of bowling.

**PES 1155**
**Beginning Fencing**
**1**

Teaches fencing strategy, analysis, focus form and precision. Provides aerobic exercise and analyzes fencing style. Completers should be familiar with competition rules, competition officiating and will participate in class tournament at the novice level. Course fee of $20 for equipment applies.

**PES 1200**
**Basketball I**
**1**

An introductory course designed to teach the basic skills of shooting, passing, ball handling, rebounding, etc. Introduces and practices new skills each class session. Provides regular scrimmage time. Designed for fun and good competition. Includes an exciting class tournament during the course.

**PES 1201**
**Basketball II**
**1**

Teaches advanced skills of shooting, passing, ball handling, rebounding, etc. Stresses fun and competition. Provides regular scrimmage time. Includes an exciting class tournament during the course.

**PES 1210**
**Volleyball I**
**1**

Covers basic concepts of volleyball. Teaches fundamentals and rules of the sport. Introduces new skills such as sprawl and roll. Includes labs, lectures, audio-visual, practice and inter-class participation.

**PES 1211**
**Volleyball II**
**1**

Teaches advanced volleyball skills and team concepts for intermediate volleyball players. Reviews fundamentals and rules. Covers 6-person, 3-person, and 2-person volleyball, Includes labs, lectures, audio-visual, practice and scrimmages.

**PES 1212**
**Volleyball III**
**1**

Teaches volleyball skills and team concepts for advanced players. Briefly reviews fundamentals and rules. Teaches variable-size team competition. Includes labs, lectures, audio-visuals, practice, and scrimmages.

**PES 1214**
**Volleyball Club Team**
**1**
* Prerequisite(s): Instructor approval

For men's volleyball club team. Includes practice and competitive team play. Requires demonstrated advanced skills through try-outs. May be repeated once for credit.

**PES 1230**
**Soccer I**
**1**

Covers the basic concepts of soccer including ball control, heading, trapping, passing or dribbling and shooting. Teaches the rules of the game and the strategy of both defense and offense. Includes lecture, media, demonstration and actual game situations. Stresses coordination, balance, agility, speed, endurance, team effort and team play.

**PES 1231**
**Soccer II**
**1**

Expands upon and further develops the fundamental skills, techniques, tactics and rules from the Soccer I course. Covers the following topics: defensive soccer tactics, offensive soccer tactics, soccer systems & strategies and conditioning for soccer. Topics will be practiced by using a variety of drills on the field individually and in groups/teams in order to further develop playing performance in real game settings. Examines soccer rules and regulations established by FIFA (Federation Internationale de Football Association) and (United States Soccer Federation) USSF.

**PES 1234**
**Soccer Club Team**
**1**

* Prerequisite(s): Instructor approval

For men's and women's soccer team members. Designed for participation in competitive practice and team play. Advanced fundamentals and skills will be drilled. May be repeated once for credit toward graduation.

**PES 1254**
**Lacrosse Club Team**
**1**

For men's lacrosse club team. Presents an overview of the history of lacrosse. Includes practice and competitive team play. Requires demonstrated advanced skills through tryouts. May be repeated once for credit.

**PES 1260**
**Ice Hockey**
**1**

Teaches basic ice hockey skills including: skating (forwards, backwards, crossovers, spins, starts and stops), stick handling, passing, shooting. Practices offensive and defensive positioning, culminating in participating in several hockey games. The majority of the class wiil take place on the ice with short lectures and outside reading assignments. Course fee of $60 for support, equipment applies.

**PES 1300**
**Swimming I**
**1**

For non-swimmers and others interested in improving and maintaining their swimming ability. Students progress at their own pace. Covers breathing techniques, self rescue, floating, back floating, back stroke, breast stroke and front crawl. Students who pass off all of the required skills early will be put on an individualized swimming workout schedule. Individual attention will be given to students as needed. Course fee of $40 for support applies.

**PES 1301**
**Swimming II**
**1**

For swimmers who have a working knowledge of the basic strokes and are interested in improving their level of swimming. Provides an individually designed workout schedule for each student. Emphasizes stroke technique work on an individual basis. Course fee of $40 for support applies.

**PES 1315**
**Water Aerobics**
**1**

For students interested in an alternative aerobics class. Introduces aerobic conditioning principles designed to develop the cardiovascular - respiratory systems, strength, and coordination. Course fee of $30 for support, equipment applies.

**PES 1405**
**Womens Safety Awareness and Self Defense**
**1**

A beginning course in women's self-awareness, self-empowerment, and self-defense. Emphasizes environmental awareness and strategies in avoiding dangerous situations. Teaches self-defense techniques that can be used in a crisis situation.

**PES 1410**
**Introduction to Tai Chi**
**1**

Introduces to students an ancient martial exercise developed in China. Studies an effortless, low-impact, rhythmical ballet-like exercise that is a superior activity for all age levels. Stresses slow respiration and balanced, relaxed, slow postures. Promotes increased blood circulation, joint and bone strength. Focuses on the Yang style short form solo exercise which may be an effective means of self-defense.

**PES 1415**
**Survey of Martial Arts**
**1**

Introduces and surveys many of the popular styles of marial arts. Includes brief background of history, learning fundamental kicks, strikes, blocks, holds and other moves/techniques of the following martial arts: Kenpo Karate, Jiu Jitsu, Muay Thai (kick boxing), Tai Chi, and self-defense strategies.

**PES 1425**
**Jiu Jitsu I**
**1**

A beginning class in the martial art of Jiu Jitsu with an emphasis on Russian Sambo Jiu Jitsu also known as Combat Jiu Jitsu. Learn the basics of Jiu Jitsu including: grappling, take downs, escapes, arm locks, etc.

**PES 1426**
**Jiu Jitsu II**
**1**

* Prerequisite(s): PES 1425

An intermediate class in the marital art of Jiu Jitsu. Practices and improves on the basics of Jiu Jitsu including: grappling, take downs, escapes, and arm locks.

**PES 1435**
**Kenpo Karate I**
**1**

A beginning course in the martial art of Kenpo Karate. Introduces basic blocks, punches, strikes, and kicks. Emphasizes self defense techniques.

**PES 1436**
**Kenpo Karate II**
**1**

* Prerequisite(s): PES 1435 or Yellow Belt rank in Kenpo Karate

An intermediate course in Kenpo Karate for the student with the rank of yellow belt and above. Students work at their own pace and progress toward the next rank in the Kenpo system.

**PES 1440**
**Aikido**
**1**

Covers beginning techniques to the art of self-defense. Teaches different holds and locks, using various forms of nonresistance in order to defend and prevent injury from an opponent.

**PES 1460**
**Kickboxing I**
**1**

A beginning course in the martial art of kickboxing (Muay Thai). Discusses the history of Muay Thai, ring strategy, and the rules of the ring. Includes leg strengthening, shadow boxing, stretching, punches, elbows, kicks, and knees while contact is made to bags and kicking shields. Teaches self-defense, ring strategy and the requirements to advance to the second level of kickboxing (Muay Thai). Includes intense aerobic workout.

**PES 1670**
**Ice Skating**
**1**

Teaches basic ice skating skills including forward and backward skating, turns, stops, crossovers, spins, and jumps. Students will choreograph and perform a developmentally appropriate ice skating program set to music. Course fee of $60 for support, equipment applies.

**PES 200R**
**Intercollegiate Athletics**
**1**

* Prerequisite(s): Coach approval

Provides an opportunity to improve strategic and physical performance by working with instructor in chosen activity. May be repeated for 4 credits toward graduation.

**PES 201R**
**Elite Precision Team**
**1**
* Prerequisite(s): Audition required

For students selected to be members of the Elite Precision Team. Includes performances at home basketball games, competition, and the year end showcase. Studies dance styles such as jazz, funk, hip hop, and lyrical. May be repeated once for credit towards graduation.

**PES 2050**
**Aerobic Instructor Training**
**2**

For students interested in becoming Certified Aerobic Instructors. Teaches basic concepts of anatomy, physiology, components of fitness, nutrition, and exercise injuries. Emphasizes the use of music, cueing and choreography. Prepares students for the AFAA Certification test.

**PES 2200**
**Officiating Baseball and Softball**
**2**

For students wishing to officiate in interscholastic, intramural, and community games. Teaches rules, techniques, problems and procedures in officiating. Gives National Federation or OSA examinations. Introduces softball/baseball National Federation publications such as Rule Book, Case Book, Umpires Manual and Rules (Simplified and Illustrated). Utilizes lecture, media, guest lecturers, practical game situations, etc.

**PES 2210**
**Officiating Basketball**
**2**

For students wishing to officiate in intramural and community programs. Teaches rules, officiating, techniques, problems and procedures. Uses lecture, media, guest lecturers and practical game situations. Gives National Federation or OSA examinations. Introduces National Federation publications, such as Rule Book, Case Book, Umpires Manual, and Rules (Simplified and Illustrated).

**PES 2220**
**Officiating Volleyball**
**2**

Provides students with the necessary skills to officiate the game of volleyball. Teaches both collegiate and high school rules and protocol. Provides students with a working understanding of officiating volleyball, as well as the opportunities for employment, through match observations and practical experience. Prepares students for certification as high school entry level official.

**PES 2300**
**Introduction to Fundamentals of Athletic Coaching**
**2**

For coaches of youth and other interested community members. Overviews methods, teaching techniques, coaching philosophies and practical experiences in both team and individual sports. Includes lecture and demonstration, media presentations, game scouting, and field project and class journals. Stresses motivation, selection, discipline, management, and the technical aspects of coaching.

**PES 2400**
**Sports Injuries**
**2**
* Prerequisite(s): ZOOL 1090 or Permission of instructor

Prevention and care of fitness, sport, and physical education performance injuries. Emphasizes the responsibilities of the coach/PE teacher related to sport injuries. Examines recognition, cause, prevention and care of sports related injuries to specific body parts. Explores protective equipment, enivironmental factors, and nutritional considerations. Reviews injuries which occur to specific populations such as adolesscent and elderly athletes. Course fee of $20 for materials applies.

**PES 281R**
**Cooperative Work Experience**
**2 to 9**
* Prerequisite(s): Approval of Cooperative Coordinator

Designed for Physical Education and Recreation majors. Provides paid on-the-job experiences in the student's major. Includes student, employer, and coordinator evaluations, on-site work visits, written assignments, and oral presentations. Provides experience in writing and completing individualized work objectives that improve present work performance. Credit is determined by the number of hours a student works during the semester. May be repeated for a maximum of 16 credits toward graduation. May be graded credit/no credit.

**PES 3220**
**Teaching and Coaching Basketball**
**2**
* Prerequisite(s): University Advanced Standing

Designed for those planning to coach basketball. Overviews methods, teaching techniques, coaching philosophies and practical experiences in both team and individual sports. Includes lecture and demonstration, media presentations, game scouting and field project, and class journals.

**PES 3230**
**Teaching and Coaching Football**
**2**
* Prerequisite(s): University Advanced Standing

Prepares students for coaching football. Covers basic offensive and defensive philosophy and techniques. Covers organization, equipment, conditioning, and safety.

**PES 3240**
**Teaching and Coaching Volleyball**
**2**
* Prerequisite(s): University Advanced Standing

For any coach, volleyball player or fan interested in learning more about one of the fastest growing sports in America. Teaches how to coach volleyball. Presents principles that coaches or players can use as a foundation to create their own game. Develops a greater appreciation for volleyball. Stresses the skills, fundamentals, rules, teaching techniques, and coaching strategies behind the sport. Includes labs, videos, and guest lecturers.

**PES 3250**
**Teaching and Coaching Aerobics and Cheerleading**
**2**
* Prerequisite(s): University Advanced Standing

Teaches basic aerobic principles including concepts of anatomy, physiology, and exercise injuries. Emphasizes choreography, cueing, and the use of music. Also, introduces basic cheerleading skills and methods of teaching kicks, jumps, and tumbling. Presents skills necessary to teach an aerobic class and advise a cheerleading program.

**PES 3260**
**Teaching and Coaching Baseball and Softball**
**2**
* Prerequisite(s): University Advanced Standing

Designed for those planning to coach baseball or softball. Covers teaching techniques, coaching philosophies and building a program. Includes strategy of team selection and offensive and defensive planning. Studies game skills.

**PES 4900**
**Exercise Science Senior Practicum**
**3**
* Prerequisite(s): EXSC 3700, EXSC 4000, EXSC 4100, and University Advanced Standing

Emphasizes application of physical activity promotion in a variety of settings. Options include service learning activities, assessing athletes, working in clinical settings that address assessment and exercise prescription in the elderly, cardiac and pulmonary rehabilitation, and outpatient physical therapy.

# Physical Education Teacher Ed (PETE)

**PETE 2110**
**Fundamental Motor Skill Analysis and Performance**
**1**

Covers acquisition of fundamental motor skills and movements concepts necessary before advanced motor skills can be effectively taught. Includes motor development concepts, water safety, educational gymnastics, jump rope, and other rhythmic and fundamental skills and concepts. Requires students to assess their own skill performances as well as others' performances. Students with special needs will be encouraged to use appropriate accommodations and/or modifications.

**PETE 2120**
**Fitness for Secondary Physical Educators**
**1**
* Prerequisite(s): PES 1097

Provides and enhances preservice teachers' abilities to teach Fitness for Life and other health-related fitness concepts and classes for students in grades 6-12. Focuses on evaluation and performance of a variety of developmentally appropriate fitness activities. Trains preservice teachers to develop appropriate lesson plans for secondary students, as well as how to help individual students develop personalized fitness programs.

**PETE 2150**
**Elementary Physical Education SPARK Method**
**2**

Prepares future classroom teachers, recreation leaders, and interested health and fitness professionals to instruct physical activity classes. Focuses on experiential learning.

**PETE 2210**
**Racket Sport Analysis and Teaching Progressions**
**1**

Introduces skills, concepts, and rules to help teachers and coaches teach racket sports to youngsters in grades K-12. Focuses on positive transfer of learning between various racket sports, including pickleball, racquetball, badminton, speedminton, and tennis. Explores and implements developmentally appropriate progressions for key skills and strategies, especially those common to all racket sports.

**PETE 2220**
**Target Sport Analysis and Teaching Progressions**
**1**

Introduces skills, concepts, and rules to help teachers and coaches teach target sports to youngsters in grades K-12. Focuses on helping teachers and coaches use positive transfer to enhance the teaching of skills, strategies, and concepts common to target games and sports. Developmentally appropriate progressions for key skills and strategies will be explored and implemented. Covers the main target sports: archery, bowling, golf, and disc golf. Course Lab fee of $70 for teaching experience, transportation applies.

**PETE 2230**
**Individual Sports Track and Field and Tumbling**
**1**
* Prerequisite(s): PES 1097

Introduces Track and Field events taught in K-12 schools in Utah. Includes fundamental tumbling skills appropriately taught to K-12 students. Focuses on developmentally appropriate progressions for all learners. Includes hints to enhance positive transfer from a previously learned skill to a new skill, specifically individual sport skills and concepts.

**PETE 2310**
**Invasion Sports Soccer and Team Handball**
**1**

Introduces skills, concepts, and rules to help teachers and coaches teach soccer and team handball to youngsters in grades K-12. Focuses on helping teachers and coaches use transfer to enhance the teaching of skills and concepts common to all invasion games, as well as to soccer and team handball specifically. Explores and implements developmentally appropriate progressions for key skills and strategies in soccer and team handball.

**PETE 2320**
**Teaching and Analyzing Basketball and Volleyball**
**1**

Introduces skills, concepts, and rules to help teachers and coaches teach basketball and volleyball to youngsters in grades K-12. Focuses on helping teachers and coaches use positive transfer to enhance student learning. Explores and implements appropriate progressions for key skills and strategies in volleyball and basketball.

**PETE 2330**
**Team Sports for the Physical Educator**
**1**

Introduces skills, concepts, and rules to team sports appropriate for secondary physical education classes. Sports covered may vary due to weather and current popularity in local schools. Possible sports include: touch rugby, lacrosse, floor hockey, field hockey, flag football, and softball.

**PETE 2400**
**Skill Analysis Capstone**
**1**
* Prerequisite(s): PETE 2110, PETE 2120, PETE 2210, PETE 2220, PETE 2230, PETE 2310, PETE 2320, PETE 2330

Review and perform skills needed for successful demonstration in physical education classes, with emphasis on any skills not performed successfully in prerequisite courses. Utilizes cues and critical elements for teaching motor skills, movement concepts and strategies covered in prerequisite courses. Analyze skill performances and game strategies. Demonstrate minimum water safety techniques.

**PETE 2500**
**Skill Analysis and Competency for PETE Majors**
**3**

Provides instruction in all fundamental motor skills, movement concepts, and various fundamental sport skills. Covers appropriate progressions, lead-up activities, and games. Includes tinikling, lummi sticks, jump rope, juggling, and other activities appropriate for K-12 physical education. Requires initial assessment for skillful performance in physical education content areas. Canvas Course Mats $67/McGraw applies.

**PETE 2700**
**Foundations of Physical Education K-12 Teacher Education**
**3**

Introduces the Physical Education K-12 Teacher Education Program. Includes introductions to National Initial Physical Education Teacher Standards, NASPE Standards, Appropriate Practices documents, Professional Associations, History and Philosophy of Physical Education, and Motor Development theories. Prepares students to succeed in the UVU PETE Program.

**PETE 289R**
**Early Undergraduate Research in Physical Education Pedagogy**
**1 to 4**
* Prerequisite(s): EXSC 270G and departmental approval of research proposal.

Provides students an early opportunity to conduct research under the mentorship of a faculty member. Students will put in practice the theoretical knowledge gained in prior major courses. Students will create a significant intellectual or creative product that is appropriate for Physical Education Pedagogy and worthy of communication to a broader audience. May be repeated for a maximum of 6 credits toward graduation.

**PETE 3100**
**Introduction to Physical Education Pedagogy**
**3**
* Prerequisite(s): PETE 2500 or permission of instructor, University Advanced Standing

Promotes the acquisition and application of effective teaching skills for K-12 physical education, including focus on the National Standards for Physical Education. Includes observations and experiences with K-12 students and faculty. Introduces and works toward meeting the National Initial Physical Education Teacher Education Standards. Introduces content necessary to succeed in all upper-division PETE courses.

**PETE 3400**
**Elementary Classroom Teachers as Movement Educators**
**2**
* Prerequisite(s): (Admission to professional elementary education program or instructor approval) and University Advanced Standing

For elementary education majors. Presents characteristics of quality physical education programs. Encourages classroom teachers to incorporate physical activity throughout the day. Identifies appropriate practices and activities for teaching movement to all children.

**PETE 3450**
**Special Populations in Physical Education**
**3**
* Prerequisite(s): PETE 3100, EDSP 340G, and University Advanced Standing

Involves planning and conducting physical education programs for children with special needs. Incorporates hands-on experiences working with individual with special needs. Analyzes of a variety of possible adaptations for individuals with physical, sensory, emotional, and/or intellectual impairments.

**PETE 4200**
**Methods of Teaching Elementary Physical Education**
**3**
* Prerequisite(s): PETE 2500, PETE 2700, PETE 3100 and University Advanced Standing
* Corequisite(s): PETE 4400
* Prerequisite(s) or Corequisite(s): PETE 2120

Promotes the analysis and development of elementary physical education curricula. Promotes curricular concepts through reading, lecture/discussion, movement, self-appraisal, and teaching children. Requires application of educational principles and techniques necessary for effective teaching in the elementary school. Emphasizes appropriate selection of curriculum content and transition to teaching/learning models. Offers unit and lesson planning and evaluation. Includes a substantial field experience. Course lab fee of $78 applies.

**PETE 4250**
**Methods of Teaching Secondary Physical Education**
**3**
* Prerequisite(s): EXSC 3550, PETE 4200, PETE 4400, acceptance into UVU's Secondary Education program and University Advanced Standing

Provides opportunities for application of learning from all previous courses to the successful teaching of secondary physical education. Emphasizes the attainment of all current National Initial Physical Education Standards at the acceptable level or above.

**PETE 4400**
**Assessment in Physical Education**
**3**
* Prerequisite(s): (MAT 1000 or higher mathematics course), PETE 3100, and University Advanced Standing
* Corequisite(s): PETE 4200

Examines the need for valid assessment in K-12 physical education programs. Introduces a variety of assessment instruments. Analyzes the use of assessment to enhance learning and reliably determine student progress toward stated objectives. Promotes the development of a meaningful grading system that communicates student progress toward course objectives and SHAPE America standards.

**PETE 481R**
**Physical Education Teacher Education Internship**
**1 to 4**
* Prerequisite(s): PES 1097, EXSC 3500, EXSC 3550, PETE 3100, and University Advanced Standing

Encourages students to apply learning in a professional setting. Allows students practical experience working at a physical education teaching or coaching related job. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**PETE 489R**
**Undergraduate Research in Physical Education Teacher Education**
**1 to 4**
* Prerequisite(s): PETE 3100, department approval of research proposal, and University Advanced Standing

Provides students the opportunity to conduct research under the mentorship of a faculty member. Students will put in practice the theoretical knowledge gained in prior major courses. Students will create a significant intellectual or creative product that is appropriate for Physical Education Pedagogy and worthy of communication to a broader audience. May be repeated for a maximum of 8 credits toward graduation.

**PETE 4900**
**Student Teaching Seminar for Physical Education**
**1**
* Prerequisite(s): Admission to Professional Education Program, successful completion of all professional education and content courses, and University Advanced Standing
* Corequisite(s): EDSC 4850

Supports student teachers during their student teaching experience. Examines each student's teaching experiences. Encourages students to integrate learning from all professional education and content courses. Discusses concerns related to current teaching experiences as well as future experiences. Investigates job seeking criteria and opportunities.

# Philosophy (PHIL)

**PHIL 1000** **HH**
**Introduction to Philosophy**
**3**

Designed to investigate major philosophical ideas from the Pre-Socratic era to the present. Students should develop philosophical skills through supervised analysis of readings in epistemology (knowledge), metaphysics (reality), ethics (values), and social philosophy. Emphasizes the articulation, assessment, and discussion of fundamental religious, social, political issues through class discussions, lectures, media, and writing projects.

**PHIL 100H** **HH**
**Introduction to Philosophy**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Designed to investigate major philosophical ideas from the Pre-Socratic era to the present. Students should develop philosophical skills through supervised analysis of readings in epistemology (knowledge), metaphysics (reality), ethics (values), and social philosophy. Emphasizes the articulation, assessment, and discussion of fundamental religious, social, political issues through class discussions, lectures, media, and writing projects.

**PHIL 120R**
**Philosophy Forum**
**1**

Introduces students to the interchange of traditional and contemporary philosophical issues in various venues. Provides enriched learning situations in which students may interact with noted guest scholars. Includes lectures, symposia, field trips, outreach projects, and activities oriented to engage students in philosophical discourse. Meets in conjunction with the Philosophy Club. Grading is on a credit/no credit basis. May be repeated for a total of four credits toward the AA/AS, BA/BS degree.

**PHIL 1250** **HH**
**Introduction to Logic and Critical Thinking**
**3**

Introduces fundamental elements of informal logic and applies these to critical thinking. Covers subjects and concepts such as (but not limited to) definition, argument, fallacy, deduction versus induction, validity, soundness, induction, causal reasoning, abductive reasoning, analogical reasoning, and probability.

**PHIL 130R**
**Ethics Forum**
**1**

Introduces students to a wide variety of public policy and ethical issues. Provides enriched learning situations in which students are exposed to noted guest scholars and other lecturers. Includes attendance and participation at specified events by engaging in discussion of relevant issues. May be repeated for a maximum of 3 credits toward graduation.

**PHIL 1610** **HH**
**Introduction to Western Religions**
**3**

For students majoring in humanities related disciplines and other students interested in the academic study of religion. Presents the comparative study of the history, ritual, "theology," and ethical beliefs of the major western religions including Judaism, Christianity, Islam, Zoroastrianism, Baha'i, and nontraditional religious belief in the western world. Explores similarities and differences between them by examining the primary sources and sacred texts along with the unique beliefs and practices of each tradition.

**PHIL 1620** **HH**
**Introduction to Eastern Religions**
**3**

For students majoring in humanities-related disciplines and other students interested in the academic study of religion. Presents the comparative study of the history, ritual, "theology," and ethical beliefs of the major eastern religious traditions including Hinduism, Jainism, Buddhism, Sikhism, Taoism, Confucianism, and Shintoism. Explores similarities and differences between them by examining the primary sources and sacred texts along with the unique beliefs and practices of each tradition.

**PHIL 2000**
**Formal Logic I**
**3**

Introduces the basic elements of categorical logic as well as formalized propositional logic and formalized first-order quantificational logic. Includes Venn diagrams, proofs, truth tables, tableaux and translations from natural language.

**PHIL 2050** **IH**
**Ethics and Values**
**3**
* Prerequisite(s): ACT scores of 29+ in English and Reading taken within the last five years or completion of ENGL 1010 or ENGL 101H with a grade of C- or higher.

Challenges students to explore and clarify their values; critically read works of philosophy, literature, religion, and history toward understanding the basis of their ethical views; and read, study, research, discuss, and write about difficult ethical issues. Focuses on issues of good vs. evil, justice vs. injustice, equality vs. inequality, and the necessity of defining and examining happiness and values. Engages students in serious reflection on issues of ethics and values as they relate to the students' own lives.

**PHIL 205G** **IH**
**Ethics and Values**
**3**
* Prerequisite(s): ACT scores of 29+ in English and Reading taken within the last five years or completion of ENGL 1010 or ENGL 101H with a grade of C- or higher.

Challenges students to explore and clarify their values; critically read works of philosophy, literature, religion, and history toward understanding the basis of their ethical views; and read, study, research, discuss, and write about difficult ethical issues. Focuses on issues of good vs. evil, justice vs. injustice, equality vs. inequality, and the necessity of defining and examining happiness and values. Engages students in serious reflection on issues of ethics and values as they relate to the students' own lives.

**PHIL 205H** **IH**
**Ethics and Values**
**3**
* Prerequisite(s): ACT scores of 29+ in English and Reading taken within the last five years or completion of ENGL 1010 or ENGL 101H or ENGH 1005 with a grade of C- or higher.

Systematically explores the core issues in the realm of ethics and values, especially as they relate to life in the contemporary world. Focuses on good versus evil, justice versus injustice, and the necessity of ideals and equality. Emphasizes reading and writing skills at a more challenging level.

**PHIL 2110** **HH**
**Ancient Greek Philosophy WE**
**3**
* Prerequisite(s): ENGL 1010 or ENGL 101H or ENGH 1005 or PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or permission of the instructor

Provides students with an overview of the history and evolution of philosophical thought from its origins in pre-Socratic philosophers through Aristotle. Reviews the influence of pre-Socratic ideas upon the work of Plato and Aristotle and the impact of Greek philosophy on the evolution of Western philosophy, science, and culture. Requires writing-intensive assignments.

**PHIL 2130** **HH**
**Medieval Philosophy**
**3**
* Prerequisite(s): PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or permission of the instructor

Provides an overview of the development of philosophical thought from the Hellenistic period through Thomas Aquinas. Covers the influence of Ancient Greek philosophy and the impact of Christianity upon the evolution of Western philosophical thought. Carefully considers the conceptions of God, nature, the human being, and morality advanced during this period; along with the profound impact Medieval philosophy had on the European Enlightenment and modern philosophy.

**PHIL 2150** **HH**
**Early Modern Philosophy**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 or PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or permission of the instructor

Provides an overview of the history and evolution of ideas in Western culture during the modern period of philosophy from Descartes through Kant. Focuses on the dialogue between rationalism and empiricism, and examines Kant's attempt to bridge the gap between these two approaches. Requires writing-intensive assignments.

**PHIL 281R**
**Internship**
**1 to 6**
* Prerequisite(s): Permission from departmental chair

Allows philosophy students to receive credit for service as an intern in a governmental, not for profit, or private agency apart from their regular employment. Provides practical and research development in selected areas of service related to students' academic and/or professional interests or goals. Internship must be supervised by agency representative. Must be approved by philosophy internship advisor and department chair and written contracts must be completed and signed. Repeatable for a maximum of six credit hours toward graduation. May be graded credit/no credit.

**PHIL 290R**
**Independent Study**
**1 to 3**

Provides independent study as directed in reading and individual projects. Request must be submitted for approval by the department. Students may do independent study for one, two or three credits with a limit of three credits applying toward graduation with an AA/AS degree.

**PHIL 295R**
**Directed Readings**
**1 to 3**

Provides an opportunity for second year students to do in-depth research within the discipline of Philosophy. Study is limited to advanced work beyond that which can be completed in existing, available classes. A proposal must be submitted and approved by the department prior to enrollment.

**PHIL 3000**
**Formal Logic II**
**3**
* Prerequisite(s): PHIL 2000 and University Advanced Standing

Continues the exploration of first-order quantificational logic. Includes discussion of multiple quantification, formal syntax and semantics, proofs, truth-tables, tableaux, algebra of classes, set theory, and the metalogical properties of formal systems.

**PHIL 3040 (Cross-listed with: COMM 3040)**
**Media Ethics**
**3**
* Prerequisite(s): University Advanced Standing

Covers ethical issues in media communication. Includes discussions of ethnicity, gender, nationalism, and conflict. Analyzes development of moral agency. Examines tensions between individual freedoms and social responsibilities. Addresses ethical questions in the context of current struggles within and over corporate and public media.

**PHIL 3150**
**Philosophical Issues in Feminism**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Introduces students to various themes in feminist philosophy. Focuses on the concepts of sex and gender, including such issues as the nature, explanatory import and normative implications of biological sex differences, the sex/gender distinction, the idea of gender as a social construct, the structure and impact of gender oppression and the nature and value of the norms of femininity and masculinity.

**PHIL 3160**
**Gender Values Knowledge and Reality**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Examines the impact of gender on specific areas of philosophy including, but not limited to, aesthetics, ethics, social and political philosophy, epistemology, metaphysics, philosophy of religion, philosophy of science, philosophy of language and the history of philosophy. Examines the meaning of gender with an emphasis on the diversity of experience across varying gender roles.

**PHIL 3200**
**Metaphysics**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Acquaints the student with competing abstract philosophical problems concerning the general nature and structure of reality. Examines the history of and problems of metaphysics including, but not limited to: personal identity, causation, causal determinism, the nature of universals, anti-realism, realism, change, substance and essence, space and time, and philosophy of mind.

**PHIL 3300**
**Epistemology**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Explores diverse theories of knowledge from within the Western tradition. Includes concepts of truth and falsity, skepticism, justification, identity, and intentionality. Discusses empiricism, rationalism and twentieth-century Philosophy of Mind.

**PHIL 3400**
**Philosophy of Science**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Explores fundamental issues in the philosophy of science. Includes the structure of the scientific method, scientific explanation, and the epistemological status of scientific laws and theories.

**PHIL 3450**
**Philosophy of Childhood**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Examines philosophical theories and models of childhood, their implication on contemporary conceptions, controversial social, philosophical, legal, educational, and political issues pertaining to childhood, and the capacity of children to engage in philosophical dialogue.

**PHIL 3460**
**The Ethics of Human/Animal Relationships**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205G or PHIL 205H or PHIL 1000 or PHIL 100H) and University Advanced Standing

Introduces a comprehensive philosophical and academic investigation of the relationship between human and nonhuman animals. Develops and refines critical thinking and discursive strategies for evaluating traditional and contemporary philosophical, legal, religious, moral, and social considerations that inform human attitudes about nonhuman animals. Challenges students to analyze a range of pertinent topics, including, but not limited to: animal welfare, animal liberation, animal sentience and consciousness, animal rights, the animal ethics movement, the animal rights movement, religious attitudes, animals, animal law, and animal activism.

**PHIL 3470**
**Pragmatism and American Philosophy**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Introduces students to various philosophical themes and figures unique to classical American Philosophy and American Pragmatism. Focuses on assorted thematic topics characteristic of American Pragmatism, as well as the work of the American transcendental school and various philosophical writings from American women, such as Jane Addams, and African-American philosophers, such as Alain Locke.

**PHIL 3510**
**Business and Professional Ethics**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G) and University Advanced Standing

Develops concepts and philosophies essential to understanding ethical concerns in today's business and professions. Presents current case studies and theories about business ethics and helps students determine their own attitudes about contemporary and historical business morality. Examines a variety of approaches, solutions, and methods of critically thinking about ethics in business and professions.

**PHIL 3520**
**Bioethics**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G or instructor approval) and University Advanced Standing

Shows how ethical theories can help provide frameworks for moral judgment and decision-making in the wake of recent scientific, technological, and social developments which have resulted in rapid changes in the biological sciences and in health care. Topics include: codes of ethics, ethical theories, and practical applications, such as: professional-patient relationships, genetic engineering, euthanasia, managed health care, end-of-life issues, abortion, and reproductive technologies.

**PHIL 3530**
**Environmental Ethics**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G) and University Advanced Standing

Presents a comprehensive, balanced introduction to the field of environmental ethics. Examines a variety of national and international environmental issues. Challenges students to think and write critically about classic and contemporary works on ethics and the environment. Analyzes ethical, scientific, aesthetic, political, economical and religious perspectives pertaining to the environment.

**PHIL 3540 (Cross-listed with: RLST 3540)**
**Christian Ethics**
**3**
* Prerequisite(s): PHIL 1610 and University Advanced Standing

Examines key developments and conceptions in Christian ethics through historical and conceptual methodologies. Explores the relationship between religious and secular approaches to ethics in their approach to questions of war, economics, politics, and/or other relevant issues.

**PHIL 355G**
**Moral Philosophy**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G or instructor approval) and University Advanced Standing

Surveys the global history of moral and ethical philosophy from ancient to contemporary figures. Focuses on the following issues and theories: the good, moral reasoning and judgment, objectivism vs. conventionalism and relativism, natural law theory, ethical egoism, hedonism, virtue ethics, deontology, consequentialism, utilitarianism, materialism, moral sentiment, roles of emotion and reason in ethical and moral deliberation and judgment, as well as race, gender, and sexuality in ethics.

**PHIL 357R**
**Moral Reasoning Through Case Studies Ethics Bowl**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205G or PHIL 205H) and University Advanced Standing

Studies complex, contemporary ethical issues and develops an advanced understanding of principles and theories studied in other ethics and moral theory courses. Uses a case study approach to ethical inquiry and introduces students to the content, format, rules, and procedures of the National Collegiate Ethics Bowl competition. Required for those students who wish to participate in the regional and national competitions and provides a challenging opportunity for others who are interested in participating in exciting ethical deliberations and discussions. May be repeated for up to 9 credits for graduation with approval of instructor and department chair.

**PHIL 3600**
**Philosophy of Religion**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

For students majoring in humanities related disciplines and other students interested in the academic study of religion. Teaches critical thinking methods and strategies regarding traditional philosophical issues in religious belief and practice. Explores various topics including the traditional arguments for the existence of God, religious experience, the relation between faith and reason, religious pluralism, and the traditional problem of evil.

**PHIL 3610 (Cross-listed with: RLST 3610)**
**Introduction to Christian Theology**
**3**
* Prerequisite(s): PHIL 1610 and University Advanced Standing

Examines key developments and conceptions in Christian theology through historical and conceptual methodologies.

**PHIL 3620 (Cross-listed with: RLST 3620)**
**Mormon Theology and the Christian Tradition**
**3**
* Prerequisite(s): PHIL 1610 and University Advanced Standing

For students majoring in humanities-related disciplines and other students interested in the academic study of religion. Engages students in exploring the defining features of Mormon thought in relation to the broader Christian tradition. Examines traditional theological questions such as the problem of evil, the scriptural canon, the nature of God and humanity, and the role of ritual.

**PHIL 364G**
**Foundations of Buddhist Philosophy**
**3**
* Prerequisite(s): University Advanced Standing

Examines ancient and classical Indian Buddhist philosophy. Engages students in philosophical thinking about Buddhist philosophical topics such as personhood, knowledge, reality, and ethics. Introduces students to Buddhist meditation practices and the methodology of cross-cultural philosophy. Develops competence in cross-cultural philosophical thinking by placing ancient Buddhist philosophical views and methodologies into dialogue with the students' own world views.

**PHIL 3650 (Cross-listed with: RLST 3650)**
**Approaches to Religious Studies**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G or instructor approval) and University Advanced Standing

For students majoring in humanities-related disciplines and other students interested in the academic study of religion. Teaches methodological approaches and critical thinking strategies in the study of religion. Explores various disciplines in their approaches to religious belief and practice. Includes the study of such thinkers as David Hume, Immanuel Kant, Friedrich Schleiermacher, Rudolf Otto, William James, Ludwig Feuerbach, Soren Kierkegaard, Max Weber, Emile Durkheim, John Hick, and Rene Girard.

**PHIL 366R (Cross-listed with: RLST 366R)**
**Issues in Religious Studies**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G or instructor approval) and University Advanced Standing

For students majoring in humanities-related disciplines and other students interested in the academic study of religion. Addresses specific topics and theoretical approaches related to religious studies. Topics may include religion and violence, religion and public discourse, religious ritual, etc. Subject matter varies by semester and is repeatable for a total of 9 hours of credit.

**PHIL 3700**
**Social and Political Philosophy**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G) and University Advanced Standing

Addresses ethics on the social level by exploring a variety of answers to the question: What is the best social structure? Covers concepts of justice, equality, liberalism, communitarianism, capitalism, democracy, feminism, multi-culturalism, and other topics.

**PHIL 3710**
**Philosophy of Law**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Introduces topics in the philosophy of law, such as the role, nature, extent, and justification of law. Investigates challenging questions about the rule of law, civil disobedience, the relationship between law and morality, justice, equality, responsibility, and punishment.

**PHIL 3750**
**Marxist Philosophy**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Examines the political philosophy of Karl Marx and looks at Marx's legacy for 20th century and contemporary philosophy. Includes Marx's criticism of Hegel and Hegelian Idealism, Marx's philosophy as "ideology critique," Marx's "materialist" philosophy, Marx's critique of capital, and several of the following: early 20th-century Marxist political philosophy, critical theory, structuralist Marxism, phenomenological Marxism, materialist feminism, and post-Marxism.

**PHIL 3800 (Cross-listed with: HUM 3800)**
**Aesthetics**
**3**
* Prerequisite(s): University Advanced Standing

Studies aesthetics as perceived by the disciplines of philosophy, psychology, sociology, anthropology, history, and others. Analyzes art forms, including the visual arts, literature, music, and theater from the perspectives of philosophers such as Plato, Aristotle, Kant, Hume, Dewey, Danto, Bell, Collingwood, Thoreau, and Dickie.

**PHIL 3810**
**Existentialism and Phenomenology**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Explores two of the most important and influential traditions within modern and contemporary philosophy. Covers figures such as Kierkegaard, Nietzsche, Husserl, Heidegger, Sartre, Camus, Merleau-Ponty, de Beauvoir, Gadamer, Levinas, Ricoeur, and Derrida, and issues in epistemology, metaphysics, ethics and aesthetics. The course focuses in particular on the notions of subjectivity, agency, free-will, and truth.

**PHIL 3820 (Cross-listed with: HUM 3820)**
**Philosophy through Literature**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Provides students with an interdisciplinary approach to the study of philosophy through literature. Gives students the opportunity to read some of the most engaging thinkers and how they offer differing perspectives through a variety of texts. Breaks down some of the strict divisions placed between philosophical and literary texts.

**PHIL 3830**
**Deconstruction and Hermeneutics**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 2050H or PHIL 205G or PHIL 2110 or PHIL 2150 or Instructor Approval) and University Advanced Standing

Studies the interpretive methods of deconstruction and hermeneutics, two important traditions to emerge in late 20th century philosophy. Analyzes various works from the history of philosophy through the frameworks of deconstruction and hermeneutics. Tracks the difference between knowledge and understanding, particularly through the writings of Jacques Derrida and Hans-Georg Gadamer. Includes the study of other relevant traditions such as post-structuralism, French feminism, and literary criticism.

**PHIL 386R**
**Topics in Ancient Philosophy**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Provides students the opportunity to study aspects of ancient Greek philosophy intensively. Focuses on an aspect of the thought of a particular philosopher, such as Plato or Aristotle, or on a particular theme in Ancient philosophy, such as Ethics or Metaphysics. Emphasizes close study of primary texts. Develops strong critical thinking, writing and rhetorical skills. May be repeated up to 3 times for a total of 9 credits.

**PHIL 388R**
**Topics in Medieval and Early Modern Philosophy**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Provides students the opportunity to study aspects of medieval and early modern philosophy intensively. Focuses on the thought of a particular philosopher or set of philosophers or a particular theme in medieval and early modern philosophy. Emphasizes close study of primary texts. Develops critical thinking, writing, and comprehension skills. May be repeated up to 3 times for a total of 9 credits.

**PHIL 400R**
**Great Philosophers**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Provides an in-depth look at a great figure in Philosophy across the topics of metaphysics, epistemology, ethics, social and political philosophy, aesthetics, and other themes. Addresses the contribution of the thinker to the history of Philosophy. Repeatable up to 12 credit hours with different topics.

**PHIL 4120**
**Philosophy of Education**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005 or PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Examines history, issues, and philosophical theories of education with attention to associated metaphysical, epistemological, ethical, political, and ideological assumptions.

**PHIL 4130**
**Nineteenth Century European Philosophy**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Introduces students to the changes in 19th century European philosophy regarding the nature of truth, knowledge, human freedom, and nature. Focuses on the attempts of German Idealism to formulate a systematic science of reality. Discusses the possibilities and problems with conceiving truth as both complete and absolutely knowable. Analyzes the philosophies of nature, art, human freedom, society, and ethics.

**PHIL 4140**
**History of Analytic Philosophy**
**3**
* Prerequisite(s): (PHIL 2150 or instructor approval) and University Advanced Standing

Explores the history of Analytic Philosophy from the late 19th century to the present. Includes the study of such figures as Bertrand Russell, B. Bolzano, Gottlob Frege, Ludwig Wittgenstein, Rudolph Carnap, G.E. Moore, J.L. Austin, Gilbert Ryle, W.V.O. Quine, and Fredrich Waismann. Studies methods of movements such as Logical Empiricism, and Ordinary Language Philosophy. Explores views such as Logicism, Logical Atomism, Holism, Verificationism, Logical Behaviorism, Psychologism, Nominalism, and Realism.

**PHIL 4150**
**History of Continental Philosophy**
**3**
* Prerequisite(s): (PHIL 2150 or instructor approval) and University Advanced Standing

Explores continental European philosophy. Reviews Kant's critical philosophy. Examines Hegel's attempt to go beyond the limitations of critical philosophy by creating a systematic, dialectical philosophy. Examines the following traditions as responses to Hegel: Western Marxism, Existentialism, Phenomenology, Structuralism, Post-Structuralism and Deconstruction, Post-Modernism, Psychoanalysis, and Feminism.

**PHIL 4200**
**Symbolic Logic**
**3**
* Prerequisite(s): PHIL 3000 and University Advanced Standing

Discusses the philosophical motivation for the formalization of logic. Introduces the metatheory for propositional and quantificational logic. Includes proofs of the soundness and completeness of quantificational logic. Discusses the philosophical issues surrounding the results proved. May also include some discussion of important results in computability.

**PHIL 4300 (Cross-listed with: HUM 4300)**
**Environmental Aesthetics**
**3**
* Prerequisite(s): (PHIL 000, PHIL 100H, PHIL 2050, PHIL 205H, PHIL 205G, ENST 3000, HUM 1010, HUM 101H, HUM 101G, or HUM 3500) and University Advanced Standing

Introduces students to emerging themes in environmental aesthetics. Evaluates concepts and attitudes toward nature including, but not limited to, the concept of beauty in natural and human-made environments from a cross-cultural perspective. Studies environmental formalism, cognitivism and non-cognitivism, as well as divergent spiritual, ecological, religious, and moral approaches to the appreciation of nature.

**PHIL 430R**
**Topics in Epistemology**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Provides an opportunity for students to conduct an in-depth study of specific topics in epistemology. Topics may include the foundations of knowledge; the nature of justification; the problem of skepticism, and the nature of scientific, religious, and/or moral knowledge. Emphasizes the rigorous analysis of arguments and offers the opportunity for students to develop their own original critical analysis and argument. May be repeated for a maximum of 9 credits toward graduation.

**PHIL 4460**
**Philosophy of Psychology**
**3**
* Prerequisite(s): (PHIL 2050, PHIL 205G, PHIL 205H, PSY 1010, or PSY 101H) and University Advanced Standing

Offers an interdisciplinary exploration of questions that arise when psychologists explore cognition and behavior concerning philosophical issues and when philosophers explore questions that rely on empirical claims about cognition and behavior. Surveys topics such as situationism and virtue ethics, moral intuitions, well-being, emotions, moods, positive illusions and free will, automaticity, confabulation, mental illness and psychopathy.

**PHIL 4461 (Cross-listed with: PSY 4461)**
**Moral Psychology**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205G or PHIL 205H or PSY 1010 or PSY 101H) and University Advanced Standing

Analyzes questions about how people engage in moral thinking and in moral behavior from the perspectives of the philosophy of mind, ethics and psychology. Explores topics such as virtue and character, reason and passion, altruism and egoism, agency and responsibility, and moral intuitions.

**PHIL 4470**
**Philosophy of Mind**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Explores central questions concerning the nature of the mind. Includes such topics as personal identity, the mind-body problem, other minds, mental causation, and externalism.

**PHIL 4480**
**Philosophy of Language**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Explores the central issues in the philosophy of language. Includes the study of such issues as truth, meaning, reference and descriptions, names and demonstratives, speech acts, metaphor and private language. Includes the study of such philosophers as W.V.O. Quine, A Tarski, D. Davidson, J. Searle, J. Derrida, C. Levi-Strauss, F. Saussure, L. Wittgenstein, K. Donnellan, S. Kripke, D. Kaplan, H.P. Grice, B. Russell, and P.F. Strawson.

**PHIL 450R**
**Interdisciplinary Senior Ethics Seminar**
**3**
* Prerequisite(s): Instructor approval and University Advanced Standing

For integrated studies majors and other interested students. Addresses ethical issues dealing with discipline specific subject matter, i.e., nursing, behavioral, physical, social sciences, etc. Subject matter will vary each semester. Taught by Philosophy faculty in cooperation with faculty of appropriate departments. Repeatable three times for credit with different subjects. See Philosophy Department office for specific topics.

**PHIL 451R**
**Ethical Theory Seminar**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G or instructor approval) and University Advanced Standing

Offers detailed investigation of selected ethical theories central to the Western philosophical tradition. Repeatable up to 12 credit hours with different topics.

**PHIL 452R**
**Topics in Value Theory**
**3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Provides an opportunity for students to conduct an in-depth study of specific topics in value theory. Considers theoretical questions about the nature of value, meaning, and purpose in human life. Includes the objectivity or subjectivity of value; the sources of value in human life; the nature and importance of art; the value of relationships, community, humor, and/or play; and related theoretical inquiries into the value of particular human activities. Emphasizes the rigorous analysis of arguments and offers the opportunity for students to develop their own original critical analysis and argument. May be repeated for a maximum of 9 credits toward graduation.

**PHIL 480R**
**Philosophy Capstone Prep**
**1**
* Prerequisite(s): PHIL 1250 or PHIL 2110 or PHIL 2150, University Advanced Standing

Prepares students to successfully complete a Philosophy Research Capstone thesis. Provides resources for formulating a thesis, identifying faculty adviser(s), and completing a one-page thesis proposal and an annotated bibliography of works to be consulted for the thesis project. May be repeated for a maximum of 2 credits toward graduation.

**PHIL 481R**
**Internship**
**1 to 6**
* Prerequisite(s): Departmental chair approval and University Advanced Standing

Allows philosophy students to receive credit for service as an intern in a governmental, not for profit, or private agency apart from their regular employment. Provides practical and research development in selected areas of service related to students' academic and/or professional interests or goals. Internship must be supervised by agency representative. Must be approved by philosophy internship advisor and department chair and written contracts must be completed and signed. Repeatable for a maximum of 6 credit hours toward graduation. May be graded credit/no credit.

**PHIL 490R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Departmental Approval and University Advanced Standing

Provides independent study as directed in reading and individual projects. May be repeated for up to 6 total credits toward graduation.

**PHIL 4910**
**Philosophy Research Capstone WE**
**3**
* Prerequisite(s): (PHIL 1250 or PHIL 2110 or PHIL 2150), PHIL 480R, Senior Standing, and University Advanced Standing

To be taken during the student's last semester in the baccalaureate program. Includes writing a senior thesis, which points to post-baccalaureate career path or graduate school goals. Covers advanced Philosophy research and writing instruction. Encourages students to explore the ethical dimensions of their desired professional or graduate research interests. Involves the creation of a professional portfolio helpful in applying to graduate school or seeking employment.

**PHIL 492R**
**Advanced Topics in Philosophy**
**1 to 3**
* Prerequisite(s): (PHIL 1000 or PHIL 100H or PHIL 2050 or PHIL 205H or PHIL 205G or PHIL 2110 or PHIL 2150 or instructor approval) and University Advanced Standing

Examines advanced topics philosophy. Examples include ancient theories of political constitution, continental rationalism, empiricism, personal identity, free will, theories of truth and modal logic. May be repeated for a maximum of 9 credits toward graduation.

# Physical Science (PHSC)

**PHSC 1000** **PP**
**Survey of Physical Science**
**3**

Surveys the exciting world of science and explains the basic scientific laws and models by which the physical universe may be understood. Stresses historical aspects and the impact of physical science on modern society. Draws topics from the fields of physics, chemistry, geology, meteorology and astronomy. Uses lectures, dramatizations, audio-visual presentations, and demonstrations.

**PHSC 281R**
**Cooperative Work Experience**
**2 to 9**
* Prerequisite(s): Approval of Cooperative Coordinator

Designed for Physical Science majors. Provides paid work experiences in the student's major. Course content is individualized, with students setting objectives in consultation with their faculty coordinator and their on-the-job supervisor. Credit is determined by the number of hours a student works during the semester. May be graded credit/no credit.

# Physics (PHYS)

**PHYS 1010** **PP**
**Elementary Physics**
**3**
* Prerequisite(s): MAT 1010

For students interested in a one-semester survey physics course. Covers the fundamentals of classical and modern physics. Includes mechanics, fluids, heat, waves and sound, electricity and magnetism, light, optical, relativity, atomic and nuclear physics. Includes lectures, classroom interaction, demonstration, and problem solving. Canvas Course Mats $91/ Pearson applies.

**PHYS 1100**
**Introductory Math Techniques for Physics and Engineering**
**3**
* Prerequisite(s): Math 1050 or Math 1080

Is an application-oriented, hands-on introduction to physics and engineering mathematics. Teaches the tools needed to solve problems commonly encountered in the first two years of core physics and engineering courses. Presents topics within the context of a physics or engineering problem, and reinforces through extensive examples and computational tools taken from physics and engineering courses.

**PHYS 1600**
**Introduction to Nanotechnology and Cleanroom Processes**
**3**
* Prerequisite(s): MATH 1050

Surveys the principles and processes behind nanotechnology and nanomaterials, basic tools for fabrication and characterization of nano and microstructures, and applications of nanotechnology. Examines fundamental principles and laws of electronics, atomic physics, solid-state physics and chemistry that are essential to nanotechnology will be introduced. Includes conducting virtual reality training exercises for tools such as electron microscopy, atomic force microscopy, nanolithography, and sputter deposition, and they will then complete hands-on laboratory experiments with these instruments. Covers special topics such as graphene, carbon nanotubes, quantum dots and molecular electronics.

**PHYS 1700** **PP**
**Descriptive Acoustics**
**3**
* Prerequisite(s): MAT 1010

Introduces the science of sound, music and speech and the physical principles and technology used to manipulate, store and broadcast it.

**PHYS 1750** **PP**
**The Acoustics of Music**
**3**
* Prerequisite(s) or Corequisite(s): MAT 1030 or higher

Discovers the principles of physics that form the basis of music and provide the foundation for the design of musical instruments. Investigates the physics of music production, transmission and reception, and perception. Examines the five fundamental elements of the musical instrument, namely power supply, oscillator, resonator, amplifier, and pitch modifiers. Satisfies one general education physical science elective.

**PHYS 1800** **PP**
**Energy You and the Environment**
**3**

Answers the question, "Where does energy come from, and where does it go?". Examines the methods of energy production, distribution, and consumption in society and their environmental impacts. Examines the personal impact of energy use on the environment and explores alternatives, such as fuel cell cars, and a hydrogen economy. Examines prospects for alternative energy sources, such as solar, wind, nuclear and geothermal energy at length. Intended for non-science majors interested in energy use in society.

**PHYS 1850** **PP**
**The Physics of Aviation**
**3**

* Prerequisite(s): MAT 1030 or appropriate math placement score

Uses the medium and modes of flight and modern aviation to introduce elementary physics. Includes vectors, kinematics, forces, momentum, energy, torques, elementary fluid dynamics and thermodynamics. Uses Algebra extensively. Presents and develops concepts of physics as exercises in modeling constructed from examples used in aviation. May be delivered online. Canvas Course Mats $67/ Pearson applies.

**PHYS 2010** **PP**
**College Physics I**
**4**

* Prerequisite(s): MATH 1050 or MATH 1055
* Corequisite(s): PHYS 2015

For students desiring a two semester algebra based course in applied physics. Covers mechanics, fluids, waves, heat, and thermodynamics. Canvas Course Mats $78/ Pearson applies.

**PHYS 2015**
**College Physics I Lab**
**1**

* Prerequisite(s): MATH 1050 or MATH 1055
* Prerequisite(s) or Corequisite(s): PHYS 2010

Designed to accompany PHYS 2010. Provides firsthand experience with the laws of mechanics, fluids, waves, heat, thermodynamics, and data analysis. Course Lab fee of $15 applies.

**PHYS 2020** **PP**
**College Physics II**
**4**

* Prerequisite(s): PHYS 2010
* Corequisite(s): PHYS 2025

A continuation of PHYS 2010. Covers electricity, magnetism, waves, sound, optics, and nuclear physics.

**PHYS 2025**
**College Physics II Lab**
**1**

Designed to accompany PHYS 2020. Provides firsthand experience with the laws of electricity, waves, optics, nuclear physics, and data analysis. Course Lab fee of $15 applies.

**PHYS 2210** **PP**
**Physics for Scientists and Engineers I**
**4**

* Corequisite(s): PHYS 2215
* Prerequisite(s) or Corequisite(s): MATH 1210

A calculus-based treatment of introductory physics for scientists and engineers. Topics include mechanics, fluid physics, thermodynamics, vibrations, and waves. Includes 1 hour of recitation per week.

**PHYS 2215**
**Physics for Scientists and Engineers I Lab**
**1**

Designed to accompany PHYS 2210. Provides firsthand experience with the laws of mechanics, thermal physics, vibrations, and waves. Introduces methods of scientific data analysis. Course Lab fee of $15 applies.

**PHYS 2220** **PP**
**Physics for Scientists and Engineers II**
**4**

* Prerequisite(s): PHYS 2210
* Corequisite(s): PHYS 2225
* Prerequisite(s) or Corequisite(s): MATH 1220

A continuation of PHYS 2210. Covers electricity and magnetism, inclusive of Maxwell's equations. Develops theory of electromagnetic waves and optics. Presents introductory electronics and modern physics topics. Includes one hour of recitation.

**PHYS 2225**
**Physics for Scientists and Engineers II Lab**
**1**

Designed to accompany PHYS 2220. Verifies through laboratory experience the laws of electricity and magnetism, electric circuits, and optics. Principles of data collection and analysis are emphasized. Course Lab fee of $15 applies.

**PHYS 2500**
**Elementary Fluids and Thermal Physics**
**3**

* Prerequisite(s): PHYS 2220
* Corequisite(s): MATH 2210

Presents a mathematically rigorous introductory description of fluid mechanics, thermodynamics, and heat transfer beyond that presented in PHYS 2210. Presents applications in both physics and engineering.

**PHYS 2800**
**Introduction to Materials Physics**
**3**

* Prerequisite(s): PHYS 2220

Covers the atomic structure of materials and their properties, including electronic, thermal, and optical properties. Addresses experimental methods for creating and studying materials, and current topics in materials science including thin films, surface physics, metamaterials, and nanostructured materials.

**PHYS 295R**
**Introduction to Independent Research**
**1 to 3**

* Prerequisite(s): PHYS 2210, Departmental Approval

Working under faculty supervision, allows research on a project determined jointly with a faculty member and approved by the department chair. Emphasizes experimental technique, data collection, modeling, and analysis techniques. May be repeated for no more than six hours of elective credit.

**PHYS 3010**
**Physics Experiments for Secondary Education**
**1**

* Prerequisite(s): PHYS 2210, (MATH 1050 or MATH 1055), MATH 1210, PHYS 2220, MATH 1060, and University Advanced Standing

For secondary education students. Emphasizes physics or chemistry. Addresses pedagogical methods for student physics laboratory exercises and demonstrations. Studies currently available commercial laboratory equipment for teaching physics in a lab setting. Includes ideas and methods for building inexpensive demonstrations and lab exercises. Provides training in safe and effective use of lab equipment.

**PHYS 3040**
**Modern Physics for Secondary Education**
**3**

* Prerequisite(s): PHYS 2220, MATH 1220, and University Advanced Standing

Addresses topics of special relativity, development of quantum mechanics, physics of the atom, elementary solid state physics, and elementary particle physics.

**PHYS 3110**
**Modern Physics I**
**3**

* Prerequisite(s): PHYS 2220 and University Advanced Standing
* Corequisite(s): PHYS 3115

Addresses topics of error analysis and statistics, wave mechanics, special relativity, development of quantum mechanics, and atomic physics.

**PHYS 3115**
**Introduction to Experimental Physics I WE**
**2**
* Prerequisite(s): PHYS 2220 and University Advanced Standing
* Corequisite(s): PHYS 3110

Introduces selected experiments of classical and modern physics in a laboratory setting. Addresses topics of measurement, error analysis, data analysis, and report writing.

**PHYS 3120**
**Modern Physics II**
**3**
* Prerequisite(s): PHYS 3110 and University Advanced Standing
* Corequisite(s): PHYS 3125
* Prerequisite(s) or Corequisite(s): PHYS 3300

Covers topics in special and general relativity, and addresses applications of modern quantum mechanics including molecular physics, solid state physics, statistical mechanics, nuclear physics, particle physics, and cosmology.

**PHYS 3125**
**Introduction to Experimental Physics II WE**
**2**
* Prerequisite(s): PHYS 3110, PHYS 3115, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): PHYS 3120

Introduces selected experiments of classical and modern physics in a laboratory setting. Addresses topics of measurement, data analysis, report writing.

**PHYS 3230**
**Principles of Electronics for the Physical Sciences**
**3**
* Prerequisite(s): PHYS 2220, MATH 2210, and University Advanced Standing

Introduces electronic measurement instruments commonly used in experimental physics laboratories. Covers principles of electronic measurements using transducers, solid-state devices, circuit analysis, logic circuits, and computers. Includes lab experience.

**PHYS 3300**
**Mathematical Physics**
**3**
* Prerequisite(s): PHYS 2220, and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MATH 2210 or instructor consent. MATH 2280 is strongly advised as a pre- or corequisite.

Covers the applications of mathematical tools to experimental and theoretical research in the physical sciences. Introduces problems and systems common to physical science that can be modeled by the application of vector and tensor algebra, curvilinear coordinates, linear algebra, complex variables, Fourier series and transforms, differential and integral equations.

**PHYS 3310**
**Advanced Mathematical Physics**
**3**
* Prerequisite(s): PHYS 3300 and University Advanced Standing

Explores mathematics as applied to physics. Covers many families of orthogonal polynomials and the special functions of physics, such as the Gamma, Beta, and Error functions. Presents topics in contour integration and applications of conformal mapping. Investigates probability, random processes, statistical analyses, and probability distribution functions.

**PHYS 3330**
**Computational Physics**
**3**
* Prerequisite(s): PHYS 3300 and University Advanced Standing

Covers computational algorithms with specific applications to the description of physical systems. Covers iterative approximation methods, computations using matrices and vectors, numerical integration, solutions of differential equations. Uses a computer programming approach to problem solving.

**PHYS 3350**
**Applications of LabVIEW in Physics**
**3**
* Prerequisite(s): PHYS 3230 and University Advanced Standing

Develops programming skills in LabVIEW. Utilizes LabVIEW as the primary interface for analog and digital I/O for applications in physics experiments. Includes a student-directed group project that demonstrates effective use of LabVIEW in hardware interfacing in a physics experiment.

**PHYS 3400**
**Classical Mechanics**
**3**
* Prerequisite(s): PHYS 2220 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): PHYS 3300 recommended

Treats classical mechanics of particles and systems using advanced mathematical techniques. Covers conservation principles, Lagrangian dynamics, harmonic oscillators, motion of rigid bodies and non-inertial reference frames.

**PHYS 3500**
**Thermodynamics**
**3**
* Prerequisite(s): PHYS 2220, MATH 2210, and University Advanced Standing

Addresses topics of heat, temperature, ideal gases, laws of thermodynamics, entropy, reversibility, thermal properties of solids, phase transitions, thermodynamics of magnetism, and negative temperature.

**PHYS 3600**
**Optics**
**3**
* Prerequisite(s): PHYS 3300, PHYS 3110, and University Advanced Standing

Covers the phenomena of reflection, refraction, diffraction, interference, optical behavior in materials and lasers. Presents a mathematically rigorous description of optical phenomena. May Include equipment-based class projects.

**PHYS 3700**
**Particle Physics**
**3**
* Prerequisite(s): PHYS 3110 and University Advanced Standing

Introduces the Standard Model of particle physics, which enumerates the elementary particles that make up the universe and describes their interactions. Addresses particle accelerators and detectors. Examines unresolved questions in particle physics and possible extensions to the Standard Model.

**PHYS 3800 (Cross-listed with: CHEM 3800, ENVT 3800)**
**Energy Use on Earth**
**3**
* Prerequisite(s): (PHYS 1010 or PHSC 1000 or CHEM 1010 or GEO 1010 or GEO 2040 or METO 1010) and (MATH 1050 or MATH 1055) and University Advanced Standing

Covers the science of energy production and consumption. Quantitatively analyzes various methods of energy production, distribution, and end use in all sectors of our society, including transportation, residential living, and industry. Examines the impacts of our energy consumption on the environment and prospects for alternative energy sources. Intended for science majors interested in energy use in society or in an energy related career, and for students in other majors who feel that a technical understanding of energy use will help them to understand and mitigate its impact in our society.

**PHYS 4100**
**Biophysics**
**3**
* Prerequisite(s): (PHYS 3110, PHYS 3115, BIOL 1610, or instructor approval) and University Advanced Standing

Covers the thermodynamics and statistical mechanics of biological systems, the mechanics of biologically important molecules, and the laws of fluid mechanics as applied in biological systems. Uses calculus-based mathematical models to treat specific reactions, particularly those treating biological systems as molecular machines.

**PHYS 4150**
**Medical Physics**
**3**
* Prerequisite(s): PHYS 3110, PHYS 3115 and University Advanced Standing

Explores the theory and applications of physics to medicine. Covers signal analysis, ultrasound, X-rays, optical, nuclear, and X-ray imaging techniques, nuclear medicine, magnetic resonance imaging, and nanomedicine.

**PHYS 4200 (Cross-listed with: BIOL 4200, CHEM 4200, GEO 4200)**
**Teaching Methods in Science**
**3**
* Prerequisite(s): Acceptance into secondary education program, senior-level standing, instructor approval, and University Advanced Standing

Examines objectives, instructional methods and curriculum for teaching science in the secondary school. Includes developing, adapting, evaluating, and using strategies and materials for teaching biological and physical sciences, appropriate both to the special needs of the learners and the special characteristics of science discipline.

**PHYS 4210**
**Advanced Experimental Techniques**
**3**
* Prerequisite(s): (PHYS 3125, PHYS 3230, or instructor approval) and University Advanced Standing

Introduces fundamental skills required for conducting successful scientific research in a physics laboratory setting. Covers vacuum technology, basic machine shop practice, electronic instrumentation, electron microscopy, scanning probe microscopy, nuclear magnetic resonance, and x-ray diffractometry.

**PHYS 4250**
**Nuclear Physics**
**3**
* Prerequisite(s): PHYS 3110

Covers radiation, radioactive decay, nuclear structure, interactions of radiation with matter, radiation detection, nuclear reactions, fission, fusion, and applications of nuclear physics.

**PHYS 425R**
**Physics for Teachers**
**1 to 5**
* Prerequisite(s): Department Approval and University Advanced Standing

For licensed teachers or teachers seeking to recertify, an update course in physics and/or basic physics core courses for teachers needing physics or physical science endorsements from the Utah State Office of Education. Teaches principles of physics and pedagogy of teaching physics for teachers in public or private schools. Emphasis will be placed on correlation with the Utah Core Curriculum, the National Science Education Standards, and the Benchmarks of Project 2061. Topics will vary.

**PHYS 4350**
**Research Methods in Physics**
**3**
* Prerequisite(s): Instructor and Department approval and University Advanced Standing

Presents directed topics in research methods. Emphasizes practical methodologies in measurement, instrumentation, error analysis, statistical analysis and computational modeling. Requires a class project that may require MATLAB, LABView or other programming languages. Includes producing oral presentations, posters and journal articles using contemporary software and LaTeX.

**PHYS 4410**
**Electrostatics and Magnetism**
**3**
* Prerequisite(s): PHYS 3110, PHYS 3115, PHYS 3300, and University Advanced Standing

Explores the theory of electrostatic phenomena in a mathematically rigorous manner. Covers Gauss' Law, the Laplace and Poisson equations, boundary-value problems, and dielectrics.

**PHYS 4420**
**Electrodynamics**
**3**
* Prerequisite(s): PHYS 4410 and University Advanced Standing

Explores the theory of electrodynamic phenomena in a mathematically rigorous manner. Covers Ohm's and Kirchhoff's Laws, magnetic induction, the Biot- Savart Law, Ampere's Law, Ferromagnetism, Plasmas, Maxwell's Equations, and Special Relativity.

**PHYS 4510**
**Quantum Mechanics I**
**3**
* Prerequisite(s): PHYS 3110, PHYS 3115, PHYS 3300, and University Advanced Standing

Covers postulates of quantum mechanics, state functions of quantum systems, Hermitian Operators, the Schrodinger Equation, eigenfunctions of harmonic oscillators, and particles in potential wells.

**PHYS 4520**
**Quantum Mechanics II**
**3**
* Prerequisite(s): PHYS 4510 and University Advanced Standing

Covers general principles and applications of quantum mechanics. Addresses topics of three-dimensional problems, angular momentum operators, spin wavefunctions, perturbation theory, applications to atomic, molecular, solid-state, and nuclear physics.

**PHYS 4700**
**Acoustics**
**3**
* Prerequisite(s): PHYS 3110, PHYS 3115, PHYS 3300, and University Advanced Standing

Covers phenomena of sound, resonance, acoustics, and human hearing. Treats associated topics of waves, frequency, vibration and interference using appropriate mathematical tools.

**PHYS 4800**
**Solid State Physics**
**3**
* Prerequisite(s): PHYS 3120, 3125, PHYS 4510, and University Advanced Standing

Explores topics relevant to the structure, behavior, and properties of crystalline materials. Includes a study of lattice vibrations, free electrons, semiconductors, superconductivity, dielectric and ferroelectric materials and magnetism.

**PHYS 481R**
**Physics Internship**
**1 to 4**
* Prerequisite(s): PHYS 2220, Departmental Approval, and University Advanced Standing

Provides supervised, practical, and research experience for students preparing for careers in physics. May be repeated for a maximum of 6 credit hours. May be graded credit/no credit.

**PHYS 489R**
**Undergraduate Research in Physics**
**1 to 3**
* Prerequisite(s): PHYS 2220, Departmental Approval, and University Advanced Standing

Allows research on a project determined jointly with a faculty member and approved by the department chair. Emphasizes experimental technique, data collection, modeling, and analysis techniques. May be used as part of a senior thesis. May be repeated for a maximum of 9 credits toward graduation.

**PHYS 490R**
**Seminar**
**.5**
* Prerequisite(s): University Advanced Standing

Exposes students to current research topics in physics and related fields. Provides an opportunity for students to attend bi-weekly lectures presented by department faculty and invited speakers. Lectures are usually a summary of the speaker's recent research results presented at a level appropriate for junior and senior physics majors.

**PHYS 492R**
**Topics in Physics**
**3**
* Prerequisite(s): Departmental approval and University Advanced Standing

Studies a chosen topic in physics. Topics vary depending upon student demand. Possible topic may be the mathematics for quantum mechanics. May be taken for a maximum of 6 credits toward graduation, but is limited to 3 credits for the BS in Physics.

**PHYS 495R**
**Independent Readings**
**1 to 3**
* Prerequisite(s): PHYS 2220, Departmental Approval, and University Advanced Standing

Working under faculty supervision, allows research on a project determined jointly with a faculty member and approved by the department chair. Emphasizes experimental technique, data collection, modeling, and analysis techniques. May be used as part of a senior thesis. May be repeated for a maximum of 9 credits toward graduation.

**PHYS 499A**
**Senior Project**
**2**
* Prerequisite(s): Instructor approval, Departmental approval, and University Advanced Standing

Provides an opportunity for senior physics majors to participate in a current research project supervised by a department faculty member. Includes independent study and/or laboratory work as necessary. Culminates in the preparation of a written paper and oral presentation describing the results of the research project as required for PHYS 499B. May be taken concurrently with PHYS 499B.

**PHYS 499B**
**Senior Thesis**
**1**
* Prerequisite(s): Instructor approval, Departmental approval, and University Advanced Standing

Continues PHYS 499A. Provides an opportunity for senior physics majors to present the results of a current research project supervised by a department faculty member. Includes independent study as necessary. Culminates in the preparation of a written paper and oral presentation describing the results of the research project.

# Peace and Justice Studies (PJST)

**PJST 3000**
**Introduction to Peace and Justice Studies**
**3**
* Prerequisite(s): PHIL 2050 and University Advanced Standing

Introduces the student to the important literature, questions, and research programs of peace and justice studies. Explores personal, domestic, national, and international issues. Considers alternative conceptions of violence, war, terrorism, justice/injustice, and peace. Enables the student to become aware of various intellectual and professional disciplines that bear relationships to peace and justice, e.g., history, political theory, international relations, political economy, international law, environmental law, military science, mediation and negotiation.

**PJST 3020**
**The Ethics of War and Peace**
**3**
* Prerequisite(s): PHIL 2050 and University Advanced Standing

Introduces literature concerning the ethics of conflict, war, terrorism, and peace. Considers alternative conceptions of these phenomena, as will be alternative approaches and ethical theories in respect to how conflict of various kinds might most effectively and morally be preempted or diminished. Addresses various defense theories and religious traditions' teachings about conflict, violence, and peace.

**PJST 3030**
**The Scientific Study of War and Peace**
**3**
* Prerequisite(s): PJST 3000 and University Advanced Standing

Takes a multidisciplinary approach to the study of conditions under which the use of violence, terrorism, and war occur. Studies the use of non-violent approaches to conflict and their effectiveness. Examines the ways in which strategies for violent and non-violent approaches to conflict are developed and evaluated.

**PJST 3040**
**Peace in Historical Context**
**3**
* Prerequisite(s): University Advanced Standing

Explores peace from an historical perspective. Considers the history of peace movements and humanitarianism, warfare, slavery and abolition, colonization, and indigenous perspectives on peace. Introduces students to the field of peace history and the ways historians have defined and understood peace. Enables the student to historicize peace in relationship to violence.

**PJST 3100**
**Introduction to Human Security**
**3**
* Prerequisite(s): ENGL 2010 and (PHIL 2050 or PHIL 205G) and University Advanced Standing

Introduces the student, and brings him or her, to some depth in the field of human security. Engages the student in a wide range of interdisciplinary literature because this field of inquiry, discourse, and conception is contested, theoretically rich, and empirically rich. Analyzes matters that threaten human security, for example: hunger and malnutrition; disease; cultural, structural, and direct violence; ecological and environmental degradation; political and economic instability and hegemony. Analyzes the organizations, institutions, movements, and strategies assembled successfully against these threats.

**PJST 3200**
**Global Poverty Facts Causes and Solutions**
**3**
* Prerequisite(s): (ENGL 2010 or instructor approval) and University Advanced Standing
* Prerequisite(s) or Corequisite(s): PHIL 2050 or PHIL 205G or instructor approval

Analyzes global poverty as a serious and pressing worldwide problem that kills over 33,000 people each day. Interrogates questions of why poverty exists, as well as what is or can be done to diminish or eliminate it. Presents sophisticated and empirically-based information regarding global malnutrition, conflict, migration, lack of employment and healthcare, etc. Uses the most recent research and research methodologies to investigate both the causes of poverty and the most promising solutions. Examines literature about various moral perspectives and how they speak to the moral duty (or its absence) to address poverty.

**PJST 3300**
**Community Development**
**3**
* Prerequisite(s): PJST 3000 and University Advanced Standing

Surveys the nature of community and approaches to the building and strengthening of community. Analyzes needs in various communities and methods of implementing solutions to meet those needs. Explores policies and strategies that produce a high quality of life and maximum opportunity for all residents of local communities. Examines community development through case studies and direct student engagement.

**PJST 3400**
**Conflict Transformation Resolution and Sustainable Peace**
**3**
* Prerequisite(s): PJST 3000 and University Advanced Standing

Uses empirical data to interrogate and explicate organized death in the form of war, revolution, insurgency, or terrorism as a perennial, and one of the most complicated, problems. Uses empirical data and theory to investigate the means of conflict transformation that have been most successful. Presents a basic understanding of how conflict is transformed from (1) an active status to (2) resolution to (3) peaceful stalemate to (4) sustained peace. Explicates the process of moving from active violent conflict to sustainable peace. Explores the roles of peoples, state organizations, institutions, civil society, culture, religion, states, and multilateral organizations.

**PJST 4200**
**Advanced Poverty Studies:Global Problems and Policies**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205G) and University Advanced Standing

Analyzes the nature of poverty in diverse societies, techniques for its measurement and inaccurate measurement, and the causes and reasons for poverty and its intractability. Examines the ways in which local, national, and global factors are part of the nature of poverty. Surveys policies and institutions designed to confront the problem. Interrogates and explicates the ethical issues surrounding poverty and its alleviation.

**PJST 4300**
**Race Gender and Class in Peace and Justice**
**3**
* Prerequisite(s): PJST 3000 and University Advanced Standing

Analyzes the bases of discrimination and domination in societies. Addresses the multidimensional forms of social inequality by examining concrete examples of each dimension such as the wealth gap, gendered work, and poverty. Examines the nature of social class, race, and gender as they relate to issues of war, peace, injustice, and justice. Surveys the contributions that the perspectives of the dominated and victims of discrimination offer to the resolution of inequalities and the establishment of equity.

**PJST 475R**
**Issues in Peace and Justice Studies**
**3**
* Prerequisite(s): PHIL 2050, Junior Standing, and University Advanced Standing

Presents a selected topic from current issues in the area of Peace and Justice Studies which will vary each semester. May approach topics from a cross-disciplinary perspective. Requires a project demonstrating competence in the specific topic or issue. May be repeated for a maximum of 6 credits toward graduation.

**PJST 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Program Director Approval and University Advanced Standing

Provides opportunities for internship experience in the following types of agencies: political, governmental, corporate, private, news agencies or any non governmental organization (NGO) apart from regular employment. Encourages practical, research, and/or development experience in selected areas of service related to the student's academic or professional goals relevant to peace and justice studies concerns. Requires supervision by an agency representative and approval of the Peace and Justice Studies internship adviser and the program director. Requires that written contracts be completed and signed by all responsible parties. Credit is determined by the number of hours a student works during the semester. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**PJST 4900**
**Peace and Justice Studies Capstone**
**3**
* Prerequisite(s): ENGL 2010, Senior Standing, and University Advanced Standing

To be taken during the student's last semester. Includes writing a senior thesis which points to career or graduate school goals. Requires a significant research project, which may coincide with field work and/or internship experience. Covers advanced Peace and Justice Studies research and writing instruction. Involves the creation of a portfolio helpful in applying to graduate schools or seeking employment.

**PJST 491R**
**Independent Study**
**1 to 8**
* Prerequisite(s): Program Director Approval and University Advanced Standing

For self-directed students who wish to engage in a well-defined study or project in an area of special interest within the domain of Peace and Justice Studies. Requires individual initiative and responsibility with limited formal instruction and faculty supervision. Projects may include writing a publishable paper, giving an oral presentation, passing a competency exam, or completing any other options approved by the instructor and the program director. May be repeated for up to 9 credits toward graduation.

# Political Science (POLS)

**POLS 1000** **AS**
**American Heritage**
**3**

Studies the founding of American constitutional government. Considers the cultural, economic, legal, political, and social ramifications of the Constitution of the United States.

**POLS 1010** **SS**
**Introduction to Political Science**
**3**

Explores the nature of politics and power. Compares constitutional systems of government with closed totalitarian systems such as the Communist Bloc nations. Examines public opinion, political communications, interest groups, party politics, ideologies, governmental institutions, bureaucracies, and government legal systems. Studies the role of violence and revolution. Emphasizes the influence of these political elements on the average citizens.

**POLS 1020**
**Political Ideologies**
**3**

Surveys the major historical and current political ideologies including liberalism, Marxism, fascism and Islamism.

**POLS 1100** **AS**
**American National Government**
**3**

Studies history and structure of American National Government, rights and responsibilities of citizens, political institutions, political processes, and governmental policies.

**POLS 1440**
**Introduction to Middle East Politics**
**3**

Studies social, historical, political and religious influences affecting the Middle East. Explores forces that motivate policy and decision-making. Examines current issues such as the Arab-Israeli conflict, political Islam, petroleum power and U.S. foreign policy. Presents profiles of selected modern Middle East states and the balance of power in the region.

**POLS 1800**
**Our Global Community**
**3**

Examines geography, climate and topography of Western Europe, Asia, Latin America, Pacific Rim, sub-Saharan Africa and Middle/East Islamic regions. Studies the unique social, cultural, economic and political differences and resulting tensions and conflicts. Explores how historical experience affect the expectations and perceptions of selected populations.

**POLS 2100** **SS**
**Introduction to International Relations**
**3**

Discusses logic of power in international relations. Studies idealistic and realistic theories of international relations. Examines reasons why nations go to war. Compares geopolitical thrust and response.

**POLS 2200 SS**
**Introduction to Comparative Politics**
**3**

Studies comparative politics and looks at attitudes and causes of political problems. Examines methods and means employed by selected countries to solve political problems, and studies successes and failures of different approaches. Examines the means which different nations employ to deal with political problems. Explores the politics, institutions, and governments of seven selected nations.

**POLS 2220**
**Introduction to Chinese Commerce**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Surveys the current situation of the Chinese economy, starting with Chinese economic geography and the historical background of economic development in the post-1978 era. Concentrates on economic transition, development strategies, and basic situations of various sectors in the post-reform era, discussed in a comparative framework with the economic transition and development experience of other countries. Discusses some current eye-catching issues associated with economic development and having international impacts, such as international trade and investment transactions, energy competition, and environmental degradation of China.

**POLS 230G**
**Introduction to Political Theory**
**3**

Surveys major Western political theories, from Athenian democracy to the 21st century welfare state. Analyzes such ideologies as republicanism, liberalism, socialism, and fascism, and considers how these ideas have shaped the ways in which people think and nations act. Explores how global cultures have used and abused these ideas, and how students' own political beliefs fit into the history of political ideologies.

**POLS 2400**
**Peace and Justice Studies Basics**
**3**

Examines the complexities and consequences of efforts to deal with conflicts between individuals, groups, and nations through a variety of techniques, including violence, war, and peace building. Introduces techniques used in the non-violent resolution of conflicts. Promotes techniques to avoid resorting to violence as a means of conflict resolution.

**POLS 3000**
**Political Analysis**
**3**
* Prerequisite(s): (STAT 1040, STAT 1045, MATH 1050, MATH 1055 or higher) and University Advanced Standing

Covers the analytical and quantitative methodologies used in political science and public policy research. Includes statistical analysis, database research, and writing exercises.

**POLS 3010**
**Political Analysis II**
**3**
* Prerequisite(s): POLS 3000 and University Advanced Standing

Covers advanced political data analysis techniques, including: advanced multiple regression analysis and diagnostics, measurement reliability and validity, the use of statistical-analysis software and presentation of analysis results.

**POLS 3020**
**Public Program Analysis**
**3**
* Prerequisite(s): University Advanced Standing

Serves as an introduction to evaluation methodology and evaluation tools commonly used to assess publicly funded programs. Provides training and practice in the field of public program analysis. Familiarizes students with different types of program evaluation, including needs assessment, formative research, process evaluation, monitoring of outputs and outcomes, impact assessment, and cost analysis.

**POLS 3030**
**State and Local Government**
**3**
* Prerequisite(s): University Advanced Standing

Examines the operation and structure of American State and Local Government with special attention to the Utah experience. Explores the local political process, administrative practices, and intergovernmental relations.

**POLS 3040**
**Survey Research and Design Methods**
**3**
* Prerequisite(s): University Advanced Standing

Focuses on the role of polling in the political process. Introduces the theory and methods used in survey research. Includes how survey-research firms produce polls, analysis of polling for campaigns and public opinion, the psychology of survey response, survey construction, and sampling. Covers other data-collection techniques commonly used in politics and political science such as focus groups and experiments.

**POLS 3050**
**Experimental Methods in Political Science**
**3**
* Prerequisite(s): POLS 3000 and University Advanced Standing

Provides an overview of experimental methodology currently being utilized in the field of Political Science. Dissects the multiple stages of experimental research design and data analysis. Teaches critical thinking in terms of the benefits and dangers of causal inference using experimental research.

**POLS 3060**
**Qualitative Analysis**
**3**
* Prerequisite(s): POLS 3000 and University Advanced Standing

Offers a hands-on opportunity for students to experience the practice of qualitative research. Provides training and practice in a broad set of qualitative methods as applied to public sector organizations, such as state and federal agencies, municipalities, and nonprofit organizations.

**POLS 3070**
**Policy Analysis**
**3**
* Prerequisite(s): POLS 3310 and University Advanced Standing

Provides an introduction to the objectives, functions, and techniques of policy analysis in democratic societies, with an emphasis on the United States. Emphasizes policy analysis in government organizations. Considers policy analysis in nongovernmental settings, such as nonprofit organizations and think tanks.

**POLS 3100**
**Survey of International Terrorism**
**3**
* Prerequisite(s): University Advanced Standing

A survey course of political violence and terrorism in the modern world. Studies terrorism and other forms of political violence and how they relate to fundamentalism, such as the Shiite Islamic, and Christian identity movements in the United States and Western Europe. Examines the concept of religious and political terrorism, as well as the ideologies, tactics, and organizations common to most terrorist groups.

**POLS 3120**
**Political Parties**
**3**
* Prerequisite(s): (POLS 1100 or instructor approval) and University Advanced Standing

Examines the American political party system with special attention given to the history, structure, functions, and role of American political parties.

**POLS 3150**
**US Presidency**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Studies the executive branch of American national government. Examines the basic functions, tenets, and institutions of the federal executive branch. Special attention given to the powers, roles, and structure of the presidency. Analyzes the various complexities of executive politics and policies.

**POLS 3170**
**Political Psychology**
**3**
* Prerequisite(s): POLS 1000 or POLS 1100 or HIST 1700 and University Advanced Standing

Examines the integration of political science and psychology to better understand the political world. Analyzes the theories and methods that have been developed to explain political behavior. Studies how dynamic conscious and unconscious processes collectively shape political outcomes.

**POLS 3180**
**Public Opinion and Political Behavior**
**3**
* Prerequisite(s): University Advanced Standing

Explores the formation and role of public opinion in politics and its impact on political behavior. Topics covered are: how, and to what extent, individuals form their attitudes about politics; how researchers go about attempting to measure public opinion; the distribution and determinants of public opinion regarding a broad range of political issues; and how political attitudes affect political participation.

**POLS 3200**
**US Congress**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Examines the legislative branch of American national government. Explores concepts of legislative theory, examining basic structure, functions, powers and roles of Congress. Gives special attention to the legislative process, constitutional structure, and modern development of federal legislature.

**POLS 3210**
**World Diplomacy**
**3**
* Prerequisite(s): POLS 2100 and University Advanced Standing

Examines diplomacy as the conduct of relations between sovereign states through the medium of officials based at home or abroad. Explores processes and procedures of the diplomatic art that focuses chiefly on the recent past but is rooted in history. Emphasizes negotiation (the most important function of diplomats), as well as unconventional diplomatic methods.

**POLS 3220**
**Interest Groups**
**3**
* Prerequisite(s): University Advanced Standing

Provides an introduction to interest groups and their role in American politics. Examines the ways that citizens, firms, and institutions struggle to gain representation through organized interest groups in the United States. Includes the reasons why interest groups are formed, the reasons why people join organized interests groups, and the importance of leaders and leadership in attracting members and maintaining the stature of the group.

**POLS 3250**
**Introduction to Law and Politics**
**3**
* Prerequisite(s): POLS 1100 and University Advanced Standing

Examines the relationship between law and politics. Addresses the impact politics have on the judiciary and the strengths and weaknesses of law as a means of social order. Focuses on general issues of legal and political theory and the social and political function of law.

**POLS 3300**
**Introduction to Public Administration**
**3**
* Prerequisite(s): University Advanced Standing

Introduces basic concepts and principles in the implementation of public policy, as opposed to the formation of public policy. Includes concepts such as chain of command, hierarchy, and span of control.

**POLS 3310**
**Introduction to Public Policy WE**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 and University Advanced Standing

Provides an introduction to the process of public policy-making in the United States and to the substance of policy in areas like health policy, environmental policy, and education policy. Introduces students to the fundamental skills of policy analysis and to some of the difficult choices involved in identifying, addressing, and resolving public policy problems.

**POLS 3320**
**Nonprofits and The Public Sector**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Explores the historical background, development, role, and purposes of nonprofit organizations. Expands awareness of the scope and breadth of the nonprofit sector in the United States, and examines the inner workings of nonprofit organizations as the foundation for further study.

**POLS 3340**
**Public Innovation**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Presents an overview of the background, methods, and, techniques associated with public sector innovation. Equips students who wish to be innovators with the knowledge and skills necessary to imagine and implement innovative solutions to public problems.

**POLS 3370**
**Leading Cities**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Provides an introduction to and overview of what leadership is within the public sector. Examines the skills required to successfully lead and manage cities for both elected and appointed leaders (mayors, city managers, city council members, etc.). Considers related topics, including the diverse functions of a city and common challenges faced by city leaders.

**POLS 3380**
**Local Economic Development**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Introduces the context, theory, process, and practice of local economic development policy. Examines facets of local economic development such as tax increment finance, job creation, economic analysis, business expansion and retention, and economic gardening.

**POLS 3390**
**Urban Planning**
**3**
* Prerequisite(s): University Advanced Standing

Provides a broad introduction to the field of urban planning as a profession, a process of decision-making, and a government function. Explores the limitations and benefits of planning, primarily in areas such as climate adaptation, economic development, and natural disasters.

**POLS 3400**
**American Foreign Policy**
**3**
* Prerequisite(s): POLS 1100, POLS 2100, and University Advanced Standing

Examines the development and theories of American foreign policy with special emphasis on the twentieth and twenty-first centuries. Surveys the process by which American foreign policy is formulated and examines major events and trends in policy since World War II.

**POLS 3410**
**Globalization and Sustainable Development**
**3**
* Prerequisite(s): University Advanced Standing

Examines major measurements of sustainability indicators, approaches and institutions in disaster management, and the roles of environmental assessment, management and policy. Considers the impacts of infrastructure development, economics, and market failures, in addition to major approaches and linkages to poverty reduction. Examines the importance of governance, democratic institutions and civil society for sustainable development (SD). Considers the role of international financial and political institutions; international environmental agreements for SD.

**POLS 3420**
**Islam in World Affairs**
**3**
* Prerequisite(s): University Advanced Standing

Examines the history, traditions, and pillars of Islam as the latest among monotheistic religions in the world. Studies the role of women in Islam and its roots of diversity, including the historic split to Shia and Sunnis. Examines the influence of Islam in the politics and economies of Muslim nations around the world and examines the challenges presented by radical Islam for the modern world.

**POLS 3480**
**Race in Politics**
**3**
* Prerequisite(s): University Advanced Standing

Analyzes the role of race and ethnicity in global, national, and local politics. Focuses on the ways race has been socially constructed to promote the power of some and the domination of others.

**POLS 3490**
**Race and Politics in the U.S.**
**3**
* Prerequisite(s): POLS 1000 or POLS 1100 or HIST 1700 and University Advanced Standing

Examines the major theories that have attempted to explain the roles of race and ethnicity in American politics. Studies how race, ethnicity, and gender are used as resources for organization in the political development of the United States. Analyzes the political attitudes and behaviors of racial and ethnic populations in order to measure their contemporary political influences.

**POLS 3500**
**International Relations of the Middle East**
**3**
* Prerequisite(s): (POLS 2100 or instructor approval) and University Advanced Standing

Covers the impact of the West on the Middle East, the Arab-Israeli wars, the rise of Islamic fundamentalist terrorist groups and regimes, the Iran-Iraq war (1980-1988), the Iraq-Kuwait-US war (1990-1991), the Impact of 9/11, as well as the foreign policies of several major states in the Middle East.

**POLS 3510**
**Post Soviet Politics**
**3**
* Prerequisite(s): University Advanced Standing

Examines relations of the Russian Federation to its neighbors and other strategic international actors. Focuses on the dynamics of key bilateral relationships by highlighting such key areas as oil and energy, defense policy, economic policy priorities, and the role of international institutions.

**POLS 352G**
**Chinese Politics**
**3**
* Prerequisite(s): University Advanced Standing

Reviews the historical background in which Chinese Communist Party established its governance. Examines the politics of the People's Republic of China since 1949. Analyzes important aspects of Chinese political and economic institutions and governance, such as party-state, political economy, judicial system, military, dissent politics, and foreign policy. Explains Chinese geographic and demographic features and how those features affect Chinese politics and economy. Discusses significant effects and implications which China's political modernization and economic growth might have across its border.

**POLS 353G**
**Asian Politics**
**3**
* Prerequisite(s): University Advanced Standing

Explains the demographic features in India, China, and Japan and how those features affect politics in the three countries. Reviews the historical background in which India, China, and Japan established their national identities. Surveys and compares the state-building efforts and development strategies in India, China, and Japan. Examines and compares domestic political system and government structure in these three countries. Discusses significant effects and implications which Asian politics might have across their borders.

**POLS 356G**
**Comparative Politics of Central Asia**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Introduces students to the region of Central Asia with its complex nature and origins of instability. Places regional conflicts to the context of global political developments. Analyzes the historical background of its problems and challenges in combination with studies of its dynamically developing politics.

**POLS 3600**
**International Relations of East Asia**
**3**
* Prerequisite(s): University Advanced Standing

Studies the emergence, from the nineteenth century, of modern nations from the rich and varied cultures and societies of Pacific Asia. Focuses on China, Japan and Korea. Explores the historical and geographical context of the development of East and Southeast Asia. Examines the transformation between East and West as well as the persistence of tradition. Discusses the political, economic and cultural changes in a region whose economic output rivals that of any other area of the world.

**POLS 3610**
**International Organization**
**3**
* Prerequisite(s): POLS 2100 and University Advanced Standing

Focuses on the the role of international institutions in the modern state system. Analyzes procedures of international cooperation in key issue areas including: the peaceful settlement of disputes and international security, human rights, economic development, and the environment.

**POLS 3620**
**Latin American Politics**
**3**
* Prerequisite(s): University Advanced Standing

Studies the development of modern political institutions as an outcome of colonial practice in Latin America, such as slavery and economic dependency. Examines national politics in Latin America, focusing on issues such as political power, democratization, indigenous rights, border politics, neo-colonialism, and Latin American socialism. Explores the consequences for Latin America of neo-liberalism, Eurocentrism, narco-trafficking,and globalization on the international level.

**POLS 362G**
**Modern Chinese Political Economy**
**3**
* Prerequisite(s): University Advanced Standing

Examines the Chinese experience in economic transition and economic development in general and in several domestic sectors, which cross the conventional boundaries between political and economic analysis and through a comparative lens vis-à-vis other transition economies and developing economies. Presents the basic historical and current developments of Chinese economy. Probes the interaction between economic development and political institutions in China, and considers the international effects and implications of Chinese economic development in a critical way.

**POLS 3630**
**Sustainable Mountain Development**
**3**
* Prerequisite(s): University Advanced Standing

Considers the issues of sustainable mountain development (SMD) as a part of the globalization process and one of the important priorities of the multilateral agenda of the United Nations. Includes discussion of the problems of mountain ecosystems, such as sources of goods, food, and services for mountain populations. Examines special economic development issues in rural, isolated mountain communities in the contexts of recreation and tourism, biological and cultural diversity, and religious significance.

**POLS 3640**
**United Nations Sustainable Development Goals**
**3**
* Prerequisite(s): University Advanced Standing

Examines the United Nations Sustainable Development Goals and the role the UN Economic and Social Council plays in the implementation of Sustainable Development Goals. Considers the role of the sustainable mountain development agenda in the UN 2030 Development Agenda and in promotion of Utah as the model of economic development among mountain nations worldwide. Examines the practical aspects of the UN Sustainable Development Goals advocacy through an engaged learning activity by visiting the UN Economic and Social Council forums.

**POLS 3650**
**Model United Nations**
**3**
* Prerequisite(s): University Advanced Standing

Focuses on the issues, goals and procedures of the United Nations. Incorporates research on political, economic, and social issues of assigned countries in preparation for a simulation of the United Nations. Includes debate on important international political issues accompanied by negotiation and drafting of resolutions to address global problems.

**POLS 3680**
**International Political Economy**
**3**
* Prerequisite(s): POLS 2100 and University Advanced Standing

Focuses on the connection between politics and economics in international relations, including an overview of some of the major issues in the area of international political economy, the international trade and financial systems, the role of multinational corporations, economic development, and economic globalization.

**POLS 420R**
**Issues and Topics in Political Science**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Surveys a specific topic in political science. Topic varies each semester. May be repeated for a maximum of 6 credits toward graduation.

**POLS 4250 (Cross-listed with: HLTH 4250)**
**Public Health Organization and Policy WE**
**3**
* Prerequisite(s): HLTH 3200, University Advanced Standing, and matriculation into BS Public Health or BS School Health Education; or department approval

Focuses on U.S. health policy and policy analysis. Describes the basic machinery of policymaking and legal processes that underpin the individual health care and public health systems. Analyzes the fundamental problems and contemporary issues in health policy and teaches students how to properly develop and analyze health policy.

**POLS 4500**
**International Conflict and Security**
**3**
* Prerequisite(s): POLS 2100 and University Advanced Standing

Focuses on causes and theories of conflict in international relations. Includes traditional and emerging threats to international security, as well as policy responses to them.

**POLS 4610**
**International Law**
**3**
* Prerequisite(s): POLS 2100 and University Advanced Standing

Focuses on theories, sources, and foundations of international law. Includes discussion of rights and duties of states, the relationship between international and domestic law, interstate settlement of disputes, and extraterritorial jurisdiction. Explores international law in the areas of human rights, the environment, and the use of force.

**POLS 480R**
**Internship WE**
**2 to 9**
* Prerequisite(s): University Advanced Standing

Provides opportunities for internship experience in political organizations, government offices, and non-governmental organizations. Gives practical experience in oral and written communication in an applied professional setting. May be repeated for a maximum of 9 credits toward graduation.

**POLS 4850**
**State Legislative Internship Seminar**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Prepares students who have been selected to serve as interns to the Utah State Legislature. Focuses on legislative behavior and organization; bill and law making; research and policy; comparative state government and politics and internship requirements.

**POLS 490R**
**Independent Study**
**1 to 4**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Provides independent study for students unable to secure a desired class within regular semester curriculum offerings. With the approval of dean and/or department chair, student and instructor design and complete readings and other projects at the upper division level. May be repeated for a maximum of 6 credits toward graduation.

**POLS 4990**
**Senior Seminar WE**
**3**
* Prerequisite(s): POLS 3000, Senior standing in Political Science, and University Advanced Standing

Includes readings and discussions about fundamental political science problems and issues. Offers directed research project tailored to each student's special interests.

# Portuguese (PORT)

**PORT 1010** **LH**
**Beginning Portuguese I**
**4**

For those with no prior Portuguese. Emphasizes listening, speaking, and writing skills along with basic grammar, vocabulary and verb conjugations all within the cultural context of modern Brazil and Portugal. Use eclectic methodology requiring conversational exchanges. Lab access fee of $10 applies.

**PORT 1020** **LH**
**Beginning Portuguese II**
**4**
* Prerequisite(s): Students need equivalent knowledge of PORT 1010

Continuation of PORT 1010. Includes remaining first-year grammar and language concepts plus introduction to literature and cultural readings. Uses eclectic method of instruction, emphasizing conversational exchanges. Lab access fee of $10 applies.

**PORT 1050** **LH**
**Intensive Portuguese for Spanish Speaker**
**5**
* Prerequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050, native speaker, or permission of instructor

Intensive overview of basic Portuguese for Spanish speakers. Practices listening, speaking, reading, and writing skills as well as discusses cultural aspects of Portuguese-speaking societies. Uses an eclectic method of instruction, emphasizing conversational exchange.

**PORT 115R**
**Portuguese Conversation I**
**1**

Offers novice Portuguese speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen listening comprehension for natural conversational flow. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**PORT 2010** **LH**
**Intermediate Portuguese I**
**4**
* Prerequisite(s): Students need equivalent knowledge of PORT 1020

Reviews and builds grammar, reading, and conversation skills learned in the first year courses. Introduces readings and discussions on the history, culture, and literature of Brazil, maintaining a focus on oral proficiency. Lab access fee of $10 applies.

**PORT 202G** **HH**
**Intermediate Portuguese II**
**4**
* Prerequisite(s): PORT 2010

Continuation of PORT 2010. Includes remaining grammar and language concepts, literature and cultural readings. Emphasizes literary readings, conversational exchanges as well as creative writing. Lab access fee of $10 applies.

**PORT 215R**
**Portuguese Conversation II**
**1**
* Prerequisite(s): Students should have equivalent knowledge of PORT 1020

Offers lower division / novice speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, sharpen listening comprehension, and develop conversational strategies such as circumlocution and managing a conversation with useful expressions for starting a conversation, gaining time to think, helping the other speaker, seeking agreement, etc. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**PORT 3050** **LH**
**Advanced Portuguese**
**3**
* Prerequisite(s): It is recommended that students have either taken PORT 202G, at least a 18 months one year residency in a Portuguese-speaking country, or instructor approval

For non-native Portuguese speakers with a basic mastery of Portuguese. Overviews basic Portuguese grammar with special emphasis on major concepts. Overviews Luso-Brazilian literatures and cultures. May be delivered hybrid. Lab access fee of $10 applies.

**PORT 3118**
**Pop Culture**
**3**
* Prerequisite(s): A score of 3 or higher on the Portuguese NEWL test, with test taken in grade 9, 10, or 11 and department approval.

This course is part of the State of Utah Portuguese Bridge Program and it will be taught only in high schools and for high school students. Not to be taught on college campus for university students. Explores the roles that current popular media and entertainment play in the Portuguese-speaking world. Explores the historical and cultural perspectives presented through popular media. Taught in Portuguese.

**PORT 3200**
**Business Portuguese**
**3**
* Prerequisite(s): (PORT 3050 or equivalent knowledge) and University Advanced Standing

For those who plan to pursue a career in international business or related field, learn the business language for Portuguese, or understand Portuguese speaking cultures. Teaches Portuguese business terminology. Presents the role of Portuguese-speaking countries in a global economy. Explores how students can effectively do business with Brazilian and Portuguese companies within the framework of Lusophone cultures. Includes current materials dealing with today's issues. Taught entirely in the Portuguese language.

**PORT 3430**
**Masterpieces of Brazillian Film**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): PORT 3050 recommended

Develops listening comprehension and speaking skills through discussion of Brazilian films. Enhances understanding of Brazilian culture and contemporary society through analysis of cultural and social issues presented in Brazilian cinema. Conducted entirely in Portuguese.

**PORT 352G**
**Brazilian Culture and Civilization**
**3**
* Prerequisite(s): PORT 3050 and University Advanced Standing

Explores a multitude of aspects that construct Brazilian national identity. Completers should acquire an understanding of contemporary issues, and ethnic and economic development of Brazil, as well as historical interdependence with other nations. Presentations and class instructions conducted entirely in Portuguese.

**PORT 3610**
**Brazil through Literature and Film--1500-1900**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): PORT 3050 or equivalent

Examines the literary and filmic construction of Brazil 1500-1900. Requires students to reflect on the philosophical, social, and aesthetics issues that shaped Colonial and Old Republic Brazil. Conducted entirely in Portuguese, presentations and class instruction included.

**PORT 3620**
**Modern Brazil through Literature/Music/ Film--1900-1945**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): PORT 3050 recommended

Examines the literary, musical and filmic construction of Brazil in the beginning of the 20th century. Reflects on the aesthetics, social, and philosophical issues that shaped Brazil. Conducted entirely in Portuguese.

**PORT 3630**
**Post-Modern Brazil through Literature/ Music/Film--1945-today**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): PORT 3050 or equivalent

Examines the literary, musical and filmic construction of Brazil at the end of the 20th century. Reflects on the philosophical, social, and aesthetics issues that shape Brazil. Conducted entirely in Portuguese.

**PORT 490R**
**Special Topics in Brazilian Studies**
**3**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): PORT 3050

Engages students in critical analysis of discourse in Brazil. Develops language skills required to such analysis and specific to the topic. Possible topics include Brazilian Film, Brazilian Music, Lusophone Literature, Women's Texts, Advanced Business Portuguese. Conducted entirely in Portuguese. May be repeated for up to nine credit hours towards graduation.

# Paralegal Studies (PRLG)

**PRLG 1000** **SS**
**Introduction to American Law**
**3**

Studies the relationship between social values, culture and the law, with particular emphasis on current events. Examines the structure of the American court system, its processes, and the American constitutional framework and federalism, methods of alternative dispute resolution, and a survey of major areas in American law, including torts, business and contracts, intellectual property, family law and estate planning. Lab access fee of $25 for computers applies.

**PRLG 2200**
**Legal Research and Writing I**
**3**
* Prerequisite(s): ENGL 1010; PRLG 2000
* Prerequisite(s) or Corequisite(s): PRLG 1000

Introduces the student to the legal system and legal sources including case law, statutory law, administrative regulations, and secondary sources. Provides basic instruction in print research in the law library and to electronic research using Westlaw and government resources. Emphasizes legal analysis and introduces students to legal writing. Lab access fee of $25 for computers applies.

**PRLG 3100**
**Civil Litigation II**
**3**
* Prerequisite(s): PRGL 2100 and University Advanced Standing

Focuses on generation and creation of work product required in a civil case under the Utah and Federal Rules of Civil Procedure. Emphasizes initial pleadings, civil discovery processes, and pre-trial motion practice.

**PRLG 3300**
**Criminal Law and Procedure**
**3**
* Prerequisite(s): PRLG 1000 and University Advanced Standing

Examines the legal and procedural aspects of crime, including the elements and categories of criminal acts and jurisdictional considerations. Studies the procedure of criminal prosecution according to the Federal Rules of Criminal Procedure, from both a prosecution and defense perspective, including constitutional assurances, investigations, case preparation, motion processes, trials and appeals.

**PRLG 4200**
**Legal Research and Writing II**
**3**
* Prerequisite(s): PRLG 2100; PRLG 2200; University Advanced Standing

Reviews basic legal research in print resources and on Westlaw and government resources. Continues development of legal research and writing skills. Introduces student to writing office memoranda and select appellate documents with continued emphasis on legal analysis. Lab access fee of $25 for computers applies.

**PRLG 4400**
**Family Law**
**3**
* Prerequisite(s): PRGL 2100; PRLG 2200; University Advanced Standing

Covers family issues and drafting of legal documents relating to domestic litigation. Explores case law related to the marriage contract, divorce, adoption, guardianships, paternity, illegitimacy, and prenuptial agreements. Emphasizes family law document production in domestic cases. Lab access fee of $25 for computers applies.

**PRLG 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Approval Paralegal Director and University Advanced Standing; PRLG 2100, PRLG 2200, PRLG 2300

Provides actual, on-the-job work experience in a non-paying (volunteer) basis in a law office or other approved law-related situation. Emphasizes successful work experience, especially identifying and solving problems. Completers should be qualified to work in the Paralegal profession. May be repeated for a maximum of 8 credits. May be graded credit/no credit.

# Automotive Power Sports (PST)

**PST 1110**
**Two Stroke Engine Systems**
**2**
* Corequisite(s): PST 1115

Studies the theory, diagnosis, and repair of two stroke engines. Emphasizes design and capabilities of the two stroke engine. Includes engine rebuilding techniques and principles, basics of engine fasteners, sealants, and tightening methods.

**PST 1115**
**Two Stroke Engine Systems Lab**
**1**
* Corequisite(s): PST 1110

Enhances the technical theory covered in the PST 1110 course. Provides an engine laboratory experience by following industry task lists for two stroke engine systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists.

**PST 1120**
**Constant Velocity Transmissions and Drive Systems**
**2**
* Corequisite(s): PST 1125

Studies the theory, operation, diagnosis, and repair of Continuously Variable Transmissions (CVT) in snowmobiles, ATVs, and UTVs. Includes component identification and theory of tuning the CVT for optimal performance. Covers driveshaft and constant velocity boot inspection, diagnosis, and replacement.

**PST 1125**
**Constant Velocity Transmissions and Drive Systems Lab**
**1**
* Corequisite(s): PST 1120

Enhances the technical theory covered in the PST 1120 course. Provides a transmission laboratory experience by following industry task lists for continuously variable transmission (CVT) systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists.

**PST 1210**
**Four Stroke Small Engine Systems**
**2**
* Corequisite(s): PST 1215

Studies the theory, diagnosis, and repair of four stroke small engines. Emphasizes design and capabilities of the four stroke small engine. Includes engine rebuilding techniques and principles, basics of engine fasteners, sealants, and tightening methods.

**PST 1215**
**Four Stroke Small Engine Systems Lab**
**1**
* Corequisite(s): PST 1210

Enhances the technical theory covered in the PST 1210 course. Provides an engine laboratory experience by following industry task lists for four stroke small engine systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists.

**PST 2110**
**Snowmobile Systems**
**2**
* Corequisite(s): PST 2115

Studies the operation, diagnosis, and repair of snowmobile systems. Emphasizes design, capabilities, and uses of the snowmobile system. Includes instruction on individual systems and how these systems interrelate into the platform as a whole. Stresses safety procedures. Covers advanced repair techniques.

**PST 2115**
**Snowmobile Systems Lab**
**1**
* Corequisite(s): PST 2110

Enhances the technical theory covered in the PST 2110 course. Provides a laboratory experience for snowmobiles by following industry task lists for snowmobile systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists. Covers advanced repair techniques. Stresses safety procedures.

**PST 2120**
**ATV and UTV Systems**
**2**
* Corequisite(s): PST 2125

Studies the history, operation, diagnosis, and repair of ATV and UTV systems. Emphasizes design, capabilities, and uses of the ATVs and UTVs. Includes instruction on individual systems and how these individual systems interact on the machine as a whole. Stresses safety procedures. Covers advanced repair techniques.

**PST 2125**
**ATV and UTV Systems Lab**
**1**
* Corequisite(s): PST 2120

Enhances the technical theory covered in the PST 2120 course. Provides a laboratory experience for ATV and UTVs by following industry task lists for ATV and UTV systems. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the task lists. Covers advanced repair techniques. Stresses safety procedures.

**PST 2130**
**Small Motorcycles and Scooters**
**2**
* Corequisite(s): PST 2135

Studies the history, operation, diagnosis, and repair of small motorcycles including dirt bikes and dual purpose motorcycles and scooters. Emphasizes design, capabilities, and uses of the motorcycle systems. Examinies motorcycle systems and how these systems interact. Stresses safety procedures.

**PST 2135**
**Small Motorcycles and Scooters Lab**
**1**
* Corequisite(s): PST 2130

Enhances the technical theory covered in the PST 2130 course. Provides a laboratory experience for small motorcycles by following industry task lists for off-road bikes and dual purpose motorcycles and scooters. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual motorcycles and scooters and systems of major manufacturers in completing the task lists. Stresses safety procedures.

**PST 2230**
**Street and Sport Motorcycles**
**2**
* Corequisite(s): PST 2235

Studies the history, operation, diagnosis, and repair of larger street motorcycles including cruiser style and sport bikes. Emphasizes design, capabilities, and uses of the complex street motorcycle systems. Includes advanced diagnosis and repair of complex street bike systems. Examines motorcycle systems and how these systems interact. Stresses safety procedures.

**PST 2235**
**Street and Sport Motorcycle Lab**
**1**
* Corequisite(s): PST 2230

Enhances the technical theory covered in the PST 2230 course. Provides a laboratory experience for larger street motorcycles by following industry task lists for larger street motorcycles including cruiser style and sport bikes. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual vehicles and vehicle systems of major manufacturers in completing the tasks. Covers advanced repair techniques. Stresses safety procedures.

**PST 2240**
**Outdoor Power Equipment**
**2**
* Corequisite(s): PST 2245

Studies the operation, diagnosis, and repair of the most popular segments of the outdoor power equipment market. Emphasizes design, capabilities and uses of lawn mowers, chainsaws, trimmers, edgers, tillers, snow blowers, and generators. Includes instruction on basic maintenance and reliability of these units. Teaches rechargeable and electric outdoor power equipment. Stresses instruction of safety procedures.

**PST 2245**
**Outdoor Power Equipment Systems Lab**
**1**
* Corequisite(s): PST 2240

Enhances the technical theory covered in the PST 2240 course. Provides a laboratory experience for outdoor power equipment by following industry task lists for the most popular segments of the outdoor power equipment market. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual equipment of major manufacturers in completing the tasks. Includes the study of rechargeable and electric outdoor power equipment. Stresses safety procedures.

**PST 2250**
**Personal Watercraft**
**2**
* Corequisite(s): PST 2255

Studies the history, operation, diagnosis, and repair of personal watercraft systems. Includes the study of their unique drive systems and advanced cooling systems. Covers advanced diagnosis and repair of complex personal watercraft systems. Discusses hull repair and graphics installation. Stresses proper safety procedures.

**PST 2255**
**Personal Watercraft Systems Lab**
**1**
* Corequisite(s): PST 2250

Enhances the technical theory covered in the PST 2250 course. Provides a laboratory experience for personal watercraft by following industry task lists for the most popular segments of the personal watercraft market. Emphasizes demonstrations, observations, and hands-on participation. Utilizes actual equipment of major manufacturers in completing the tasks. Covers advanced repair techniques of complex personal watercraft systems. Stresses safety procedures.

# Psychology (PSY)

**PSY 1010** **SS**
**General Psychology**
**3**

An introductory course in modern scientific psychology. Covers major domains of scientific psychology including biological foundations, sensations, perception, learning, motivation, human development and abnormal psychology. Examines major psychological and professional applications. Canvas Course Mats $25/Lumen applies.

**PSY 101H** **SS**
**General Psychology**
**3**

Covers major domains of scientific psychology including biological foundations, sensation and perception, learning, motivation, human development, and abnormal psychology. Examines major psychological and professional applications. Students will be expected to write at least two papers and work collaboratively.

**PSY 1100** **SS**
**Human Development Life Span**
**3**

Explores genetic and environmental influences on human development and behavior from conception and birth through old age and death. Examines typical physical, cognitive, and psychosocial changes at each developmental stage throughout the life span. Explores major theoretical perspectives on human development. Canvas Course Mats $66/ McGraw applies.

**PSY 1250**
**Psychology Applied to Modern Life**
**3**
* Prerequisite(s): PSY 1010 with grade C- or higher and (ENGL 1010 or ENGH 1005 with a C+ grade or higher)

Examines knowledge about key concepts and findings from the science of psychology. Applies effective strategies, grounded in psychology, to their own lives in areas that will help them to be healthier and happier. Key topic areas include: stress, social influences and interpersonal communication, relationships and life transitions, and mental and physical health.

**PSY 2020**
**Psychology as a Science and Profession WE**
**3**
* Prerequisite(s) or Corequisite(s): PSY 1010

Exposes students to psychology as a field of study and as a career option and serves as a foundation of their undergraduate education. Teaches the basics of social science writing convention (scholarly tone, precise language, APA style, etc.). Shows how psychology can provide insight into important social and scientific requirements.

**PSY 2250**
**Psychology of Interpersonal Relationships**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 (with a C- grade or higher) and PSY 1010 (with a C- grade or higher)

Integrates cognitive psychological theory in an experiential setting to build personal communication skills. Helps students better understand their interactions with others. Teaches practical skills used in personal, professional, and social relationships. Studies problem-solving models and conflict resolution methods.

**PSY 2300**
**Abnormal Psychology**
**3**
* Prerequisite(s): PSY 1010 (with C- grade or higher) and (ENGL 2010 with a C+ grade or higher)

Examines the psychology, historical explanations, and current biological and psychological theories of abnormal behavior. Emphasizes the description of mental disorders according to the American Psychiatric Association Diagnostic and Statistical Manual. Canvas Course Mats of 31/Lumen applies.

**PSY 2400**
**Positive Psychology**
**3**
* Prerequisite(s): PSY 1010 (grade of C- or higher) and ENGL 1010 or ENGH 1005 (grade of C- or higher)

Provides an overview of the scientific study of human strengths and virtues. Examines topics such as happiness, optimism, gratitude, altruism, forgiveness, human strengths, optimal performance, and personal fulfillment. Knowledge gains are reinforced with personalized experiential learning activities.

**PSY 2710** **SS**
**Introduction to Brain and Behavior**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 with a C+ or higher

Introduces neuroanatomy and neurophysiology. Includes how neurons communicate to coordinate various functions and behaviors. Addresses research methods used to study the brain and the nervous-system mechanisms to control functions and behaviors.

**PSY 275R**
**Survey of Current Topics**
**1 to 3**
* Prerequisite(s): (ANTH 101G or PSY 1010 or SOC 1010) and (ENGL 1010 or ENGH 1005) with a C+ grade or higher

Presents selected topic in Psychology and will vary each semester. Approaches subjects from cross-disciplinary perspective. Requires a project demonstrating competency in the specific topic. May be repeated for nine credits toward graduation.

**PSY 2800 (Cross-listed with: HLTH 2800)** **SS**
**Human Sexuality**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Interdisciplinary course in human sexuality, exploring topics in biology, health, psychology, and sociology. Introduces basic concepts of human sexuality, including anatomy, reproduction, and sexual response across the life-cycle. Studies gender roles, sexual orientation, dysfunction, and sexually transmitted disease. Examines sexual behavior from the perspective of ethics, religion, the law, and education. Students assess their sexual attitudes and should be able to make responsible sexuality decisions.

**PSY 289R**
**Beginning Research Experience**
**1 to 3**
* Prerequisite(s): PSY 1010 with a C or higher; ENGL 1010 or ENGH 1005 with a C+ or higher; Instructor approval

Beginning course on research in psychology. Explores psychological literature to investigate topics of interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. Projects will vary based on the student's needs and interests but may include literature searches, materials creation, data collection, or other options as approved by the instructor. May be repeated for a maximum of six credits toward graduation.

**PSY 3030**
**Research Methods for Psychology**
**4**
* Prerequisite(s): (PSY 3110 with a C- or higher), (ENGL 2010 with a C+ or higher), and University Advanced Standing

Explains the logic of the classical true experiment and how it permits causal inferences. Compares and contrasts the benefits and drawbacks of quasi-experimental and correlational research designs. Includes the design of an empirical psychological study. Covers compliance with guidelines for ethical research as codified in law and the American Psychological Association's ethics code. Requires collection, analysis, and presentation of quantitative data for an empirical psychological study. Includes a lab.

**PSY 3100**
**Psychology of Gender**
**3**
* Prerequisite(s): PSY 1010 (with a C- grade or higher) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

For Behavioral Science majors and others interested in gender issues from a psychological perspective. Examines the topic of gender behaviors and attitudes that relate to (but are not entirely congruent with) biological sex. Discusses biological influences on gender, gender differences, gender development, and the influence of gender on various dimensions of daily life.

**PSY 3105**
**Health Psychology**
**3**
* Prerequisite(s): (PSY 1010 or PSY 1100) with grade C- or higher or (Community Health major and HLTH 2800 or HLTH 3260) with grade C- or higher, ENGL 2010 with grade C+ or higher, and University Advanced Standing

Examines underlying biological, psychological, and social factors, that interact and contribute to illnesses. Examines how beliefs, attitudes, and lifestyles contribute to overall health. Includes preventative strategies and techniques. Introduces motivational strategies to work productively with patients in healthcare settings.

**PSY 3110**
**Statistics for the Behavioral Sciences**
**4**
* Prerequisite(s): MAT 1000 or higher and University Advanced Standing

Introduces use of statistics for research purposes. Teaches descriptive and inferential statistics. Includes central tendency, variability, correlation and regression, probability (particularly probability distributions), and various inferential techniques such as t-test for independent and dependent samples, one-way and two-way analysis of variance, post-hoc tests, and non-parametric statistics.

**PSY 3200**
**Infancy and Childhood Development**
**3**
* Prerequisite(s): (PSY 1010 or PSY 1100) with grade C- or higher or (Community Health major and HLTH 2800 or HLTH 3260) with grade C- or higher, ENGL 2010 with grade C+ or higher, and University Advanced Standing

Teaches major theories of infant and child development. Identifies the sequence of development including physical, mental, and emotional conditions. Studies special needs and exceptional children. Examines parenting styles. Emphasizes development of the 'whole child'.

**PSY 3210**
**Adolescent Development**
**3**
* Prerequisite(s): PSY 1010 (with C- grade or higher) and (ENGL 2010 with C+ grade or higher) and University Advanced Standing.

Focuses on physical, social, mental and emotional development of adolescents. Examines current research regarding optimal conditions for healthy maturation and separation/individuation from parents. Addresses adjustment problems, prevention, and remedies.

**PSY 3220**
**Adult Development**
**3**
* Prerequisite(s): PSY 1010 (with C- grade or higher) and (ENGL 2010 with C+ grade or higher) and University Advanced Standing

Studies adult developmental stages (end of adolescence through old age). Examines stable patterns and predictable changes in physiological and psychological and cognitive processes, emphasizing current research in optimal adult functioning.

**PSY 3300**
**Motivation and Emotion**
**3**
* Prerequisite(s): PSY 1010, (ENGL 1010 or ENGH 1005 with a C+ or higher), and University Advanced Standing

Examines motivation and emotion that underlie thought and behavior from a variety of perspectives. Explores the various theoretical approaches to motivation and emotion such as biological, phenomenological, cognitive, developmental and social constructivist approaches. Examines the historical background of motivation and emotion research, as well as a number of current applied motivational approaches.

**PSY 3420**
**Cognitive Psychology WE**
**3**
* Prerequisite(s): PSY 1010 (with C- grade or higher) and (ENGL 2010 with a C+ or higher) and University Advanced Standing

Introduces the core concepts, theoretical perspectives, empirical findings, and historical trends in cognitive psychology. Includes perception, attention, memory, and higher cognitive processes. Explores animal as well as human research.

**PSY 3425**
**Cognitive Psychology Lab**
**1**
* Prerequisite(s): PSY 1010 (with C- grade or higher); (ENGL 2010 with a C+ or higher); and University Advanced Standing
* Corequisite(s): PSY 3420

Provides firsthand experience with core concepts and empirical practices within cognitive psychology. Creates opportunities for the application of practical research skills. Includes a discussion of topics such as sensation, perception, attention, memory, and higher-order cognition.

**PSY 3430**
**Psychopharmacology WE**
**3**
* Prerequisite(s): PSY 2710 (with C- grade or higher) or (ZOOL 2320 and ZOOL 2420 with C- grade or higher in both courses) and (ENGL 2010 with a C+ grade or higher); University Advanced Standing

Addresses basic principles of nervous system function with emphasis on communication between nerve cells. Focuses on therapeutic drugs as well as drugs of abuse to include mechanisms of action and behavioral effects.

**PSY 3450**
**Behavioral Neuroscience**
**4**
* Prerequisite(s): PSY 2710 (with C- grade or higher) or (ZOOL 2320 and ZOOL 2420 with C- grade or higher in both courses) and (ENGL 2010 with a C+ grade or higher); University Advanced Standing.

Identifies major interactions between physiology and behavior. Covers physiological analysis, structures, and functions of the nervous system. Investigates topics including sensory and motor function, states of consciousness, sexual behavior, psychopathology, learning and memory. Course lab fee of $15 for supplies applies.

**PSY 3460**
**Personality Theory**
**3**
* Prerequisite(s): PSY 1010 (with C- grade or higher) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Introduces the basic psychological theories attempting to answer the question 'What is Personality?' Examines the scientific study of the uniqueness of each of us as individuals. Explores how individuals develop personality similarities as well as differences by examining classical personality theories, societal influences, cultural variations, behavioral genetics, anatomy and biochemistry, sex and gender differences and family function. May be delivered hybrid and/or online. Canvas Course Mats of $66/McGraw applies. Course fee of $15 for materials.

**PSY 3480**
**Principles of Learning**
**4**
* Prerequisite(s): PSY 1010 (with C- grade or higher) and (ENGL 2010 with a C+ or higher) and University Advanced Standing

Examines major concepts, theoretical perspectives, empirical findings, and historical trends in the scientific study of behavior. Focuses on application of psychological principles to personal, social, and organizational issues, as appropriate. Stresses use of critical and creative thinking, skeptical inquiry, and the scientific approach to solve problems related to behavior.

**PSY 3490**
**Sensation and Perception WE**
**4**
* Prerequisite(s): (PSY 1010 and PSY 2710 both with C- grade or higher), ENGL 2010 (with a C+ grade or higher), and University Advanced Standing.

Provides a foundation in how sensory systems interpret the world. Explores each of the primary sensory systems by defining the physical energy that is detected. Examines how that energy is transduced into neural impulses, and samples how aspects of that information are encoded to provide a representation of our world. Takes a neuroscientific approach to the topic, beginning with an overview of the nervous system, including the organization of the brain and spinal cord, how neurons work, and how neurons communicate with each other. Course lab fee of $15 for supplies applies.

**PSY 350G**
**Social Psychology**
**3**
* Prerequisite(s): PSY 1010 (with grade C- or higher) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Studies the ways in which social context influences behavior. Reviews both social and psychological research. Includes culture and personality theory. Presents a multi-disciplinary approach to understanding human behavior. Requires a research project to observe and report individual or group behavior in a real life setting. May be delivered hybrid.

**PSY 3660**
**Neuroscience of Emotion**
**3**
* Prerequisite(s): PSY 2710, University Advanced Standing and Instructor approval

Explores the scientific investigation of the biological basis of emotion in human and non-human animals. Provides an overview of the neural correlates of emotional states. Examines the role of neurotransmitter systems, anatomical structures, and neural circuits. Requires collection, analysis, and presentation of current primary research.

**PSY 3710**
**Introduction to Forensic Psychology**
**3**
* Prerequisite(s): PSY 1010 (with grade C- or higher) and (ENGL 2010 with a C+ or higher) and (PSY 2300 or PSY 3500 with a C- or higher) and University Advanced Standing

Introduces the complex field of forensic psychology which involves the overlap between the science of psychology and the law. Builds a basic understanding of the psychological principles and concepts that are part of the legal system. Highlights how the science of psychology potentially contributes to improvements and changes in the legal system. Outlines the role of forensic psychologists with regard to the legal system. Emphasizes ideas regarding potential careers in the field. Provides students the opportunity to customize course activities to suit their learning needs and styles from a variety of choices.

**PSY 3850**
**Psychology of Good and Evil**
**3**
* Prerequisite(s): PSY 1010 and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Provides an integrated approach to understanding the roots of good and evil in human behavior. Explores theories and studies of human caring and destructiveness. Analyzes and develops psychological explanation of why individuals choose different courses of action under similar circumstances. Explores such concepts as attachment and parental discipline, bystander phenomena, response to authority, genocide, killing during war, group identity, bullying, views of the other and racism, forgiveness and reconciliation, and psychopathology and the biology of emotion.

**PSY 4150**
**Tests and Measurements**
**3**
* Prerequisite(s): (ENGL 2010 with a C+ grade or higher), PSY 3110 (with grade C- or higher), and University Advanced Standing

Introduces the history of psychological tests, examines tests in use at the present time and considers the appropriate roles of psychological testing in modern society. Studies individual and group assessment in the areas of intelligence, aptitude, achievement, personality and interest. Critically evaluates tests and other instruments of measurement for validity and reliability.

**PSY 4300**
**Introduction to Counseling and Psychotherapy**
**3**
* Prerequisite(s): PSY 1010 (with grade C- or higher) and PSY 2300 (with a C- grade or higher) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing.

Surveys concepts and practices of major therapeutic systems. Introduces students to the major psychotherapeutic models. Addresses basic counseling issues including ethics and professionalism. Develops skills in relationship development, interviewing, initial assessment and intake procedures.

**PSY 4400**
**Introduction to Group Psychotherapy**
**3**
* Prerequisite(s): PSY 1010 (with C- grade or higher), PSY 2300 (with grade C- or higher), (ENGL 2010 with a C+ or higher), and University Advanced Standing

Discusses group therapy theory, research applied to client assessment and outcomes, legal and ethical issues. Includes learning activities such as screening, assessment, treatment, evaluation, and termination of group members.

**PSY 4461 (Cross-listed with: PHIL 4461)**
**Moral Psychology**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205G or PHIL 205H or PSY 1010 or PSY 101H) and University Advanced Standing

Analyzes questions about how people engage in moral thinking and in moral behavior from the perspectives of the philosophy of mind, ethics and psychology. Explores topics such as virtue and character, reason and passion, altruism and egoism, agency and responsibility, and moral intuitions.

**PSY 4500**
**History and Systems of Psychology**
**3**
* Prerequisite(s): PSY 1010 (with C- grade or higher) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Identifies key contributors, historical systems and theories within the field of psychology. Includes contributions to present knowledge of affect, behavior, and cognition. Stresses similarities and differences between theories. Especially for students planning to take the Advanced Psychology Subject Test portion of the GRE.

**PSY 4666**
**East Meets West Psychology**
**3**
* Prerequisite(s): PSY 1010, ENG 2010, and University Advanced Standing

Examines Eastern and Western spiritualities and their application to mental health. Synthesizes these systems of belief with Western phenomenology. Critiques the theory and practice of psychology from this broader spiritual perspective. Applies these spiritual systems to the theory, research and practice of psychology. Provides experience of meditation, spiritual centering, and respectful spiritual discourse.

**PSY 4690**
**Human Intelligence**
**3**
* Prerequisite(s): PSY 1010 (with grade C- or higher), PSY 3110 (with grade C- or higher), and ENGL 2010 (with a C+ grade or higher); University Advanced Standing

Explores theories about human intelligence and how intelligence impacts health, social, and psychological outcomes. Considers how cognitive and biological variables are related to individual differences in human intelligence.

**PSY 475R**
**Current Topics in Psychology**
**1 to 3**
* Prerequisite(s): PSY 1010 and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Presents selected topic in Psychology and will vary each semester. Requires a project demonstrating competency in the specific topic. May be repeated with different topics for 9 credits toward graduation.

**PSY 480G**
**Cross-Cultural Psychology**
**3**
* Prerequisite(s): PSY 1010 and University Advanced Standing

Offers an opportunity to develop an appreciation for the interplay between psychological and cultural contributions to personal and group growth and well-being. Explores how culture influences the lived experience, particularly as it pertains to relationality. Gives consideration to both within and between culture variability.

**PSY 482R**
**Internship Seminar**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): BESC 481R

Provides integration of classroom learning with learning that takes place in an on-site internship. To be taken concurrently with BESC 481R, Senior Internship. May be repeated for a maximum of 8 credits toward graduation.

**PSY 483R**
**Psychology Internship**
**1 to 3**
* Prerequisite(s): PSY 1010 with grade C- or higher; PSY 3110 with grade C- or higher; and University Advanced Standing

Allows psychology students with non-clinical orientation to receive psychology credits for interning in a governmental, corporate, or private agency apart from their regular employment. Provides practical and research experience over the course of the 15-week semester. Requires professional supervision. May be repeated for a maximum of 8 credits toward graduation.

**PSY 4850**
**Introduction to Pedagogy**
**3**
* Prerequisite(s): PSY 1010; (ENGL 2010 with a C+ or higher); instructor approval; and University Advanced Standing

Builds a foundation for teaching at the college level through the study of best practices in college pedagogy via primary sources, review papers, and expert perspectives. Applies pedagogical knowledge through the delivery of multiple guest lectures on campus after creating appropriate course materials.

**PSY 488R**
**Advanced Research Experience in Psychology**
**1 to 3**
* Prerequisite(s): PSY 1010 with a C grade or higher; ENGL 2010 with C+ grade or higher; University Advanced Standing; Instructor approval

Expands research experience by either (1) significantly assisting on a faculty member's research project or (2) carrying out an independent research project of the student's design under faculty mentorship. May be repeated for a maximum of 6 credits toward graduation.

**PSY 490R**
**Independent Studies**
**1 to 3**
* Prerequisite(s): Instructor approval, department chair approval, and University Advanced Standing; for Behavioral Science Bachelor Degree students only

For qualified students who wish to undertake a well-defined project or directed study related to an area of special interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. Projects may include writing a publishable paper, passing a competency exam, producing an annotated bibliography, oral presentation, or other options as approved by instructor. May be repeated for a maximum of 6 credits.

**PSY 491R**
**Psychology Capstone Internship**
**1 to 3**
* Prerequisite(s): University Advanced Standing and instructor approval
* Corequisite(s): PSY 492R

Provides an in-depth experience applying knowledge from two or more of the following areas of psychology: statistics/ research methods, biological, developmental, cognitive, social/personality, and mental and physical health. May not be part of the student's regular employment. Requires professional supervision. Requires faculty approval and signed written contracts. May be repeated for a maximum of 8 credits toward graduation.

**PSY 492R**
**Psychology Capstone Seminar**
**1**
* Prerequisite(s): Advanced University Standing and instructor approval
* Corequisite(s): PSY 491R

Provides integration of classroom learning with the student's capstone internship. Reinforces learning outcomes of the psychology capstone internship. May be repeated for a maximum of 8 credits toward graduation.

# Recreation (REC)

**REC 1500**
**Canoeing I**
**1**

Teaches basic canoeing techniques including safety, technical information, equipment, paddling skills, and canoe maneuvering. Requires overnight camping. Requires the ability to swim 100 yards without stopping on the first day of class. Course fee of $88 for transportation, equipment applies.

**REC 1501**
**Canoeing II**
**1**
* Prerequisite(s): REC 1500 or Instructor Permission

Prepares students to quaifily to become instructors who will teach on water up to and including Class I on the International Scale of River Difficulty. Prepares students to teach the American Canoe Association's Intro to Canoe course on flat water, and the Basic River Canoe course in a river environment and to teach students fundamental river paddling skills including boat handling, paddling technique, identifying hazards, river reading and self-rescues in moving water.

**REC 1505**
**Whitewater Kayaking I**
**1**

Teaches basic kayaking skills to the beginning kayaker. Includes roll techniques, paddle strokes, eddy turns, ferrying, river hazards, and rescue techniques. Requires the ability to swim 100 yards without stopping first day of class. Course fee of $150 applies for transportation, equipment applies.

**REC 1506**
**Whitewater Kayaking II**
**1**
* Prerequisite(s): REC 1505

Builds on whitewater skills initially taught in Whitewater Kayaking I. Develops the skills and knowledge to assist in instruction and river rescue. Prepares students to help others learn to kayak, preparing them for ACA whitewater certification.

**REC 1512**
**Fly Tying I**
**1**

For students interested in learning or perfecting fly tying skills. Discusses and demonstrates necessary fly tying tools, materials, and knots. Introduces aquatic entomology. Studies various fly types including wet fly, dry fly, nymph, and streamer. Includes hands-on experience.

**REC 1513**
**Fly Casting I**
**1**

For students interested in learning or perfecting fly casting skills. Studies types and classification of fly rods and reels. Teaches the physics of casting and casting techniques. Includes hands-on experience. Course fee of $10 applies for materials, equipment applies.

**REC 1516**
**Ropes Course and Teambuilding**
**1**

Provides participants with the opportunity to participate in a group and personal development process which utilizes the ropes course as an educational tool. Consists of 3 phases. Phase I - game and exercises designed to help participants get to know and feel at ease with each other. Phase II - group initiative games/ problem solving activities which develop group communication skill, cooperation, and problem solving ability. Phase III - Ropes Course activities/individual challenge which allows class members to test their physical capabilities and individual limits. Course fee of $80 for transportation, equipment, and support.

**REC 1521**
**Indoor Rock Climbing I**
**1**

Teaches basic rock climbing skills to the beginning indoor rock climber. Includes knot tying, belaying, rappelling, fixed anchors, beginning indoor climbing, and rescue techniques. Prepares student for enjoyment of indoor climbing facilities, and introduces concepts related to sport climbing. Course fee of $90 for support, equipment applies.

**REC 1522**
**Indoor Rock Climbing II**
**1**
* Prerequisite(s): REC 1521

Builds on skills and experiences gained in Indoor Rock Climbing I. Focuses on lead climbing in the indoor sport context with emphasis on higher skill development, onsite and red point techniques. Course fee of $90 applies for support, equipment applies.

**REC 1525**
**Mountaineering**
**1**
* Prerequisite(s): REC 1535, REC 1527

Covers mountaineering subjects including hiking, rock climbing, mountain camping, and mountain survival. Requires good health and fair physical condition in order to enjoy the class. Provides technical climbing and safety equipment. Students provide camping equipment (this may be rented at a low cost at the Outpost on campus), boots or shoes, clothing and leather gloves suitable for hiking and climbing. Taught on block only. Course fee of $70 for transportation, materials, and equipment applies.

**REC 1527**
**Rock Climbing I**
**1**

Teaches basic rock climbing skills to the beginning rock climber. Includes knot tying, belaying, rappelling, top-rope anchors and site management, beginning lead climbing, and rescue techniques. Course fee of $20 for equipment applies.

**REC 1528**
**Rock Climbing II**
**1**
* Prerequisite(s): REC 1527 or Instructor Approval

Teaches intermediate rock climbing skills. Includes placing passive and active anchors on simulated lead climbs, multi-pitch belaying and rappelling. Teaches self- and partner-rescuing, ascending, route finding, crack and face climbing techniques, rock shoe resoling, and an introduction to aid climbing. Course fee of $90 for transportation, equipment applies.

**REC 1535**
**Backpacking**
**1**
* Prerequisite(s): Ability to carry a 40 lbs pack for 15-25 miles

Covers the basic aspects of backpacking, camping, and wilderness travel. Includes labs, lectures, demonstration, audio-visual and extended field trips. Teaches basic components of backpacking and lifelong values of outdoor recreation. Requires multi-night backpacking trip. Course fee of $88 for transportation, equipment, and support applies.

**REC 1542**
**Wilderness First Responder**
**2**

Teaches advanced emergency care specific to situations encountered in a wilderness context. Prepares students for certification exam in Wilderness First Responder (WFR) or Wilderness Emergency Medical Technician Module (WEMT). Experiential Learning Credit must be from a WFR course with at least 72 hrs of contact time.

**REC 1550**
**Mountain Biking**
**1**
* Prerequisite(s): Ability to carry a 40 lbs pack for 15-25 miles

Provides the students with knowledge of cycling techniques when traveling off the pavement. Teaches bicycle maintenance and tuning. Includes several off-road rides. Stresses the enjoyment and lifetime benefits of mountain biking riding. Taught on block only. Course fee of $16 for transportation, equipment applies.

**REC 1580**
**Kayak Touring**
**1**
* Prerequisite(s): Must be able to swim 100 yards without stopping

Introductory course which teaches basic skills necessary to safely enjoy flat water (non-tidal) kayak touring. Teaches equipment selection, strokes, safety and rescue techniques. Field trip required for course completion. Course fee of $84 for transportation, equipment applies.

**REC 1600**
**Winter Exploration**
**1**
* Prerequisite(s): REC 1535

Teaches basics of snowshoeing, cross-country skiing, and winter camping, including Leave No Trace, cooking, staying warm, and building shelters. Covers risks and hazards of the winter environment. Requires overnight camping. Course lab fee of $45 course fee for equipment applies.

**REC 1605**
**Skiing I**
**1**

For the beginning skier. Covers basic skiing concepts including straight runs, stops, turns, traverses, and beginning parallel. Includes demonstration and participation. Grading is based on attendance. Lessons are at the Sundance Ski Resort. (Transportation is not provided.) Uses UVU and Sundance instructors. Students are required to have own equipment and purchase a half-day pass each ski day.

**REC 1606**
**Skiing II**
**1**

For the intermediate skier. Designed for those with basic ski skills and who would like to improve their skiing technique. Instruction is given in parallel skiing over bumps and flat terrain, hockey stops, moguls and traversing steep terrain. Uses demonstration and participation. Grading is based on attendance. Lessons are at the Sundance Ski Resort. (Transportation is not provided.) Uses UVU and Sundance instructors. Students are required to have own equipment and purchase a half-day pass each ski day.

**REC 1615**
**Snowboarding**
**1**

Provides a fun challenge to snow boarders of every ability level, starting with the beginning novice to the advanced boarder. Gives instruction in straight runs, stops, turns (falling leaf, heel edge, toe edge), and carving. Includes skill demonstration and student participation. Grading is based on attendance, participation, demonstrating skills, and tests. Lessons are at the Sundance Ski Resort. (Transportation is not provided.) Uses UVU and Sundance instructors. Requires students to have their own equipment and purchase a half-day pass each ski day.

**REC 1625**
**Cross Country Skiing**
**1**

Presents basic ski touring techniques. Studies selection and utilization of winter touring equipment and clothing in relation to varying climatic and terrain conditions. Includes trail etiquette, avalanche avoidance, and other important factors for a successful winter tour. Includes classroom instruction and ski touring. Taught on block only.

**REC 2010**
**Avalanche Awareness**
**1**

Examines the relationship of people in the backcountry and their cause/effect relationship with ever-changing snow conditions. Prepares students to safely and effectively venture into the winter backcountry. Course fee of $53 for equipment applies.

**REC 2200**
**Foundations of Recreation**
**3**
* Prerequisite(s) or Corequisite(s): ENGL 1010 or ENGH 1005

Introduces the study of Recreation. Studies the history and philosophy of the field of Recreation. Analyzes problems in areas covered under the umbrella of Recreation. Explores the Recreation sub-disciplines and related career and employment opportunities in this area.

**REC 2400**
**Principles of Experiential Education in Recreation**
**3**
* Prerequisite(s): REC 2200, ENGL 1010 or ENGH 1005
* Prerequisite(s) or Corequisite(s): ENGL 2010 and MATH 1000 or higher

Introduces the principles and concepts of experiential education in the general context of recreation programming and prepares students for further study and skill development in context specific experiential education programming. Teaches history, theory, and ethics in the domain. Offers experience in the use of learning cycles, facilitation, feedback, processing, and effective communication techniques, risk management from both physical and emotional perspectives. Uses pedagogical lecture methods and experiential learning. Requires participation in experiential education programming and observation and participation in programs outside of class time.

**REC 2450**
**Rock Climbing Site Management and Facilitation**
**3**
* Prerequisite(s): REC 1527, REC 2400

Introduces the principles and concepts of experiential education in the general context of recreation programming and prepares students for further study and skill development in context specific experiential education programming. Teaches history, theory, and ethics in the domain. Offers experience in the use of learning cycles, facilitation, feedback, processing, and effective communication techniques, risk management from both physical and emotional perspectives. Uses pedagogical lecture methods and experiential learning. Requires participation in experiential education programming and observation and participation in programs outside of class time.

**REC 2500**
**Introduction to Adventure Recreation**
**2**

Explores the philosophy, meaning and value of outdoor adventure recreation. Studies planning, organizing and leading outdoor excursions. Includes hiking, canoeing, camping, scuba diving, cross-country skiing, snowshoeing, compass navigation, outdoor cooking, archery, golfing, etc.

**REC 2600**
**Principles of Outdoor and Adventure Education**
**3**
* Prerequisite(s): REC 1535 and REC 2400

Teaches leadership of outdoor and adventure education topics necessary for instructing the beginning student. Uses pedagogical lecture methods and experiential learning. Includes industry standard presentations and critiques of orienteering, map reading, packing, backcountry cooking, campsite set-up, food rationing, river crossing, proper clothing, water purification, hygiene, weather forecasting, backcountry travel, Leave NO Trace ethics, and personal risk management. Requires hiking or orienteering assignments outside of class. Prepares students to qualify for certification as Wilderness Stewards through the Wilderness Education Association. Addresses risk management from both physical and emotional perspectives. Uses pedagogical lecture methods and experiential learning. Requires observation and participation in programs outside of class time.

**REC 2650**
**Principles of Challenge Education**
**3**
* Prerequisite(s): REC 1516, REC 2400

Prepares students for employment in the challenge education and experientially-based training and development sectors. Teaches students functional aspects of challenge education, facility design and use, program design for specific populations, facilitation and processing; as well as, assessment and evaluation of programs. Addresses risk management from both physical and emotional perspectives. Utilizes pedagogical lecture methods, experiential learning, and participation in challenge education programming. Requires observation and participation in programs outside of class time. Course fee of $95 for transportation, support applies.

**REC 2700**
**Leave No Trace Trainer**
**1**
* Prerequisite(s): REC 1535

Designed to train environmental leaders and interpreters in the delivery of Leave No Trace (LNT) principles and practices. Emphasizes the skills and ethics necessary for low impacts on the environment.

**REC 2750**
**Principles of Water Based Adventure Education**
**3**
* Prerequisite(s): REC 2400, Swim equivalency test

Develops the principles and concepts of experiential education in the water-based context and prepares students for further study and skill development in context specific experiential education programming. Teaches history, theory, and ethics in the domain; as well as, develops experience in the use of learning cycles, facilitation, feedback, processing and effective communication techniques. Includes industry standard presentations and critiques of water safety, hydrology, paddling and stroke technique, self and group rescue techniques, decision-making and judgment, program planning, weather, leave no trace, personal risk managment, and equipment care and maintenance. Addresses risk management from both physical and emotional perspectives. Utilizes pedagogical lecture methods and experiential learning, and participation in experiential education programming. Requires observation and participation in programs outside of class time. Prepares students to seek professional certification.

**REC 3100**
**Recreation Program Planning**
**3**
* Prerequisite(s): (REC 2200 or instructor approval) and University Advanced Standing
* Prerequisite(s) or Corequisite(s):MATH 1000 or higher

Investigates program planning and development in outdoor programs, camps, agencies, and education organizations. Emphasizes writing of technical program plans that state goals, program organization, curriculum, budgets, marketing, and evaluation.

**REC 3200**
**Inclusive Recreation**
**3**
* Prerequisite(s): REC 2400, REC 3100, and University Advanced Standing

Recreation service delivery for individuals with disabilities and other under-represented groups. Presents solutions to full recreation participation for individuals with physical, sensory, emotional and/or intellectual impairments. Incorporates hands on experience working with diverse populations.

**REC 3300**
**Wilderness Skills**
**1**
* Prerequisite(s): REC 1535 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): REC 2200

Teaches tools and skills needed for surviving in the wilderness. Includes orienteering, map reading, packing, backcountry cooking, campsite set-up, food rationing, river crossing, proper clothing, water purification, hygiene, weather forecasting, backcountry travel, Leave NO Trace ethics, and personal risk management. Course fee of $30 for transportation, equipment, and support applies.

**REC 3400**
**Risk Management**
**3**
* Prerequisite(s): REC 2200 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MAT 1010

Studies outdoor recreation risk management. Focuses on applying models of risk management, negligence, torts, risk management planning, and outdoor recreation safety.

**REC 3500**
**Recreation Administration**
**3**
* Prerequisite(s): REC 3100 and University Advanced Standing

Analyzes the internal organization of a recreation department dealing with finances and accounting, records and reports, publicity and public relations, state and federal legislation, staff organization, coordination of community resources.

**REC 3700**
**Natural Resource Interpretation**
**3**
* Prerequisite(s): REC 2400 and University Advanced Standing

Investigates theories, principles, and techniques of interpreting park, cultural, and natural resources to the public. Emphasizes techniques for providing interpretive programs developed for natural resources.

**REC 385G**
**Ethical Concerns in Recreation**
**3**
* Prerequisite(s): REC 2400, PHIL 2050, and University Advanced Standing

Examines the complex and controversial world of ethics as it pertains to the fields of outdoor recreation and natural resource management. Examines these fields from numerous perspectives; anthropocentric, biocentric and ecocentric, and theocentric.

**REC 4000**
**Outdoor Leadership**
**4**
* Prerequisite(s): REC 1535, REC 3300, REC 2600, REC 1542, and University Advanced Standing

Examines principles and practices of leadership in outdoor recreation programs. Focuses on the examination of theories, practices, and problems of leadership in an adventure environment. Provides hand-on experiences with students required to plan and be in a leadership position. Requires 30 hours of volunteer work experience. Course fee of $126 for transportation, equipment, and support applies.

**REC 410R**
**Experiential Learning Expedition**
**1 to 6**
* Prerequisite(s): Department approval and University Advanced Standing

Teaches experiential learning and leadership in a expedition context. Includes but not limited to expedition planning, hard skills development, expedition behavior and group dynamics, team building, adventure tourism, and local cultural/ natural resources. Repeatable up to 12 credits. Course fee of $700 for transportation, activities applies.

**REC 420R**
**Outdoor Leadership and Management Practicum**
**2**
* Prerequisite(s): REC 2400, Instructor approval, and University Advanced Standing

Provides students with practical work experience (volunteer or paid) either through a program offered by the college or in an existing outdoor or experientially based agency. Includes participation in a 150 hour department approved supervised outdoor recreation service. Examines topics that vary by practicum experience. May be repeated for a total of 6 hours toward graduation. May be graded credit/no credit.

**REC 430R**
**Teaching Assistantship in Outdoor Recreation**
**1 to 4**
* Prerequisite(s): Instructor Approval and University Advanced Standing

Provides students who have demonstrated a high level of proficiency to serve as assistant instructors in selected Outdoor Recreation courses. Requires students to take active leadership roles. Includes planning, sequencing and teaching outdoor recreation topics and skills with faculty supervision. May be repeated for up to 8 credit hours toward graduation. Graded Credit/No Credit.

**REC 4350**
**Research Methods in Outdoor Recreation**
**3**
* Prerequisite(s): REC 2400 and (MAT 1000 or higher) and University Advanced Standing

Introduces students to key research in their field. Emphasizes analytical and interpretive skills. Develops scientific writing skills. Promotes design and utilization of comprehensive research methodologies commonly applied in Outdoor Recreation.

**REC 4400**
**Natural Resource and Protected Area Management**
**3**
* Prerequisite(s): REC 2200 and University Advanced Standing

Examines topics in the management of Nation Parks, National Forests, Bureau of Land Management, and other public lands and protected areas focusing on management strategies and techniques for addressing common resource and social problems in natural resource recreation management. Emphasizes case studies and problem analysis. Course fee of $30 applies for transportation, support applies.

**REC 4500**
**Wildland Recreation Behavior**
**3**
* Prerequisite(s): REC 4400 and University Advanced Standing

Studies behaviorally-based models and relevant research in wildland recreation. Provides an in-depth analysis of human behavior influences and topics including visitor satisfaction, crowding, carrying capacity, resource destruction, motivations, attitudes, preferences, norms, conflicts, and specialization. Using these theoretical concepts, visitor-based management models will be presented and criticized. Emphasis on critical problems affecting public land recreation management. Course fee of $20 applies for transportation, support applies.

**REC 4800**
**Professional Preparation in Recreation**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): REC 2400

Prepares the student to make the transition from student to professional in Outdoor Recreation. Includes discussion of internship selection, application materials, interviewing skills, job search, salary negotiation, and other professional issues. Provides mentoring during the internship search process.

**REC 481R**
**Senior Internship**
**1 to 8**
* Prerequisite(s): REC 4800, REC 420R, 80 credit hours completed, minimum 2.5 GPA, instructor approval, and University Advanced Standing

Provides supervised, hands-on field experience for excellent students preparing to take entry-level positions in recreation. May be repeated for a maximum of 12 credits toward graduation. May be graded Credit/No Credit.

**REC 489R**
**Undergraduate Research in Recreation**
**1 to 4**
* Prerequisite(s): REC 2200, Departmental approval of research proposal, and University Advanced Standing

Provides students the opportunity to conduct research under the mentorship of a faculty member. Students will put in practice the theoretical knowledge gained in prior major courses. Students will create a significant intellectual or creative product that is characteristic of the recreation discipline and worthy of communication to a broader audience. May be repeated for a maximum of 8 credits toward graduation.

**REC 490R**
**Topics in Recreation**
**1 to 3**
* Prerequisite(s): (REC 2200 or Instructor Approval) and University Advanced Standing

Focuses student reading, research, and discussion on specific areas of concentration within the field of outdoor recreation management. (Specific areas of focus will change as the instructor and his or her focus or expertise changes.) Analyzes how outdoor recreation affects and is affected by culture, ideology, socio-economic factors, history, etc. Focuses may include: Recreation and Popular Culture, Recreation and Diversity, and History and Philosophic Issues in Recreation, among others. May be repeated for up to 6 credits toward graduation.

**REC 4950**
**Senior Seminar**
**2**
* Prerequisite(s): REC 2400, REC 3100, REC 4800, STAT 1040 or higher, and University Advanced Standing

Examines current outdoor recreation topics that allow senior students the opportunity to relate academic studies to the latest problems, changes, and trends in the field.

# Respiratory Therapy (RESP)

**RESP 1540**
**Survey of Respiratory Therapy**
**1**

Introduces students to the profession of respiratory therapy. Includes field trips and limited lab activities. Open to all students.

**RESP 2145**
**Fundamentals of Respiratory Care Lab**
**3**
* Prerequisite(s): Acceptance into the Respiratory Therapy Program
* Corequisite(s): RESP 2300 and RESP 2520

Provides laboratory experiences to develop basic patient interaction and assessment skills required of an entry-level respiratory therapist. Emphasizes students' ability to carry out commonly ordered respiratory therapy procedures. Includes participation in respiratory care simulations. Course lab fee of $225 applies.

**RESP 2165**
**Mechanical Ventilation Lab**
**2**
* Prerequisite(s): RESP 2145
* Corequisite(s): RESP 2320

Provides laboratory experience with mechanical ventilation techniques and equipment. Emphasizes patient observation and assessment skills, as well as techniques in initiating, troubleshooting, monitoring, managing, and weaning ventilator parameters.Course lab fee of $217 applies.

**RESP 2210**
**Cardiopulmonary and Renal Anatomy and Physiology I**
**3**
* Prerequisite(s): Acceptance into the Respiratory Therapy Program

Introduces anatomy and physiology of the pulmonary, cardiovascular, and renal systems. Includes principles of fluid dynamics governing oxygen and carbon dioxide transport throughout the body.

**RESP 2230**
**Cardiopulmonary Pathophysiology I**
**2**
* Prerequisite(s): Acceptance into the Respiratory Therapy Program
* Corequisite(s): RESP 2210

Covers the underlying pathophysiology of medical and surgical cardiopulmonary diseases. Emphasizes abnormal physiological processes which result in the signs and symptoms of each cardiopulmonary disorder. Includes diagnosis, selection, and implementation of therapeutic modalities and the role of the respiratory therapist in treatment.

**RESP 2250**
**Basic Patient Assessment**
**2**
* Prerequisite(s): Acceptance into Respiratory Therapy Program.

Introduces basic patient assessment techniques, including respiratory therapy application of obtaining patient history and physical examination. Emphasizes integration of laboratory and imaging studies.

**RESP 2270**
**Application of Cardiopulmonary Diagnostics**
**3**
* Prerequisite(s): RESP 2210

Introduces theory and clinical application of basic cardiopulmonary diagnostic studies, including simple spirometry, arterial and mixed venous blood gases, and electrocardiograms. Emphasizes critical thinking skills in interpretation of diagnostic findings.

**RESP 2300**
**Fundamentals of Respiratory Care**
**3**
* Prerequisite(s): Acceptance into the Respiratory Therapy Program.
* Corequisite(s): RESP 2145 and RESP 2520

Examines principles and theory of clinical application of basic respiratory treatments and therapies, including indications, contraindications, hazards and complications, and equipment management. Includes principles and theory of clinical application of airway management and invasive and non-invasive ventilation. Emphasizes patient assessment and critical thinking skills.

**RESP 2320**
**Mechanical Ventilation I**
**3**
* Prerequisite(s): RESP 2300
* Corequisite(s): RESP 2165

Introduces basic principles of mechanical ventilation, including determining the need for ventilation support, as well as initiation, maintaining, monitoring, and weaning from mechanical ventilation.

**RESP 2330**
**Entry Level Respiratory Therapy Review**
**1**
* Prerequisite(s): RESP 2320

Provides a comprehensive review to integrate concepts and skills in Respiratory Therapy.

**RESP 2420**
**Critical Thinking in Respiratory Care**
**2**
* Prerequisite(s): RESP 2300

Provides learning experiences for students to develop a deep and broad understanding of respiratory care content based on sound clinical decision making. Requires students to solve practical problems in respiratory care.

**RESP 2520**
**Principles of Pharmacology**
**2**
* Corequisite(s): RESP 2300 and RESP 2145

Introduces pharmacology, including general principles, autonomic and central nervous system agents, cardiovascular agents, and immunotherapeutic agents. Includes the study of drugs used in managing renal, GI tract, endocrine, and infectious or neoplastic diseases and disorders.

**RESP 2705**
**Clinical Practice I**
**3**
* Prerequisite(s): RESP 2145

Provides clinical rotations in the hospital environment allowing for mentored practice of skills. Emphasizes application of assessment skills including medical chart reviews and patient observation and examination. Includes recommendation, performance, and modification of basic therapies.

**RESP 2715**
**Specialty Clinical Experiences**
**1**
* Prerequisite(s): RESP 2145

Provides opportunity to observe and participate in specialty areas of the respiratory care profession.

**RESP 2725**
**Clinical Practice II**
**3**
* Prerequisite(s): RESP 2705

Provides clinical rotations in selected medical settings, focusing on skills of initiation, management, and weaning of mechanical ventilation. Includes case studies as well as patient care.

**RESP 3210**
**Cardiopulmonary and Renal Anatomy and Physiology II**
**2**
* Prerequisite(s): RESP 2210 and University Advanced Standing

Addresses cardiopulmonary anatomy and physiology specifically for the advanced-level respiratory care practitioner focusing on the advanced physiologic considerations of the cardiovascular, pulmonary, and renal systems.

**RESP 3220**
**Cardiopulmonary Pathophysiology II**
**2**
* Prerequisite(s): RESP 2230 and University Advanced Standing

Examines pathophysiology and diagnosis of coronary artery disease, fungal lung diseases, neoplasms, HIV, adult respiratory distress syndrome (ARDS), chest trauma, shock, multiple organ dysfunction syndrome (MODS), and differentiation of extracellular and intracellular fluid compartments.

**RESP 3230**
**Advanced Cardiopulmonary Technology**
**2**
* Prerequisite(s): RESP 2270 and University Advanced Standing

Explores advanced diagnostic procedures and develops interpretive skill in cardiopulmonary function, lung dynamics, specialty gases, blood gas analysis, and metabolic assessment.

**RESP 3260**
**Neonatal/Pediatric Critical Care**
**3**
* Prerequisite(s): RESP 2320 and University Advanced Standing

Examines pediatric and neonatal respiratory care with emphasis on intensive care activities, therapeutic procedures, life support modalities, and fetal, neonatal, and pediatric pathophysiology. Course lab fee of $69 applies.

**RESP 3270**
**Adult Critical Care**
**2**
* Prerequisite(s): RESP 2725 and University Advanced Standing

Explores advanced level adult respiratory care in the intensive care setting. Emphasizes ventilation/perfusion monitoring, hemodynamic monitoring airway, assessment and critical patient management.

**RESP 3280**
**Extended Care Roles for Respiratory Therapists**
**2**
* Prerequisite(s): RESP 2270 and University Advanced Standing

Analyzes theory and principles of extended care roles for the respiratory therapist. Examines the respiratory therapist's role in quality management, pulmonary rehabilitation, sleep medicine, homecare, and hyperbaric medicine. Includes legal, ethical, and moral considerations of chronic and extended care.

**RESP 3510**
**Anatomy and Physiology of Sleep**
**3**
* Prerequisite(s): University Advanced Standing and Department approval. Requires (acceptance into the Respiratory Care Program or completion of a respiratory care program) or R.N. credential.

Introduces anatomy and physiology of the neurological, cardiac, and respiratory systems during the wake and sleep cycles. Emphasizes changes related to sleep disorders.

**RESP 3520**
**Introduction to Sleep Disorders**
**3**
* Prerequisite(s): RESP 3510 and University Advanced Standing

Provides an overview of the history of sleep medicine, normal sleep physiology, the effects of sleep-wake disruption, sleep disorders, and abnormal sleep physiology. Includes an introduction to polysomnography and the fundamentals of therapeutic interventions utilized to treat sleep disorders.

**RESP 3765**
**Clinical Practice III Neonatal/Pediatric Respiratory Care**
**3**
* Prerequisite(s): RESP 3260 and University Advanced Standing

Provides mentored participation in the clinical care of patients in the neonatal/pediatric critical care setting. Emphasizes cardiovascular and patient/ventilator monitoring and assessment and airway management.

**RESP 3785**
**Extended Roles in Respiratory Therapy Clinical**
**2**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): RESP 3280

Provides clinical experiences related to RESP 3280, such as rehabilitation, extended care, home care, polysomnography, patient assessment for discharge planning and quality management.

**RESP 4610**
**Advanced Patient Assessment WE**
**3**
* Prerequisite(s): RESP 3270 and University Advanced Standing

Emphasizes the diagnostic processes involved in assessing, evaluating, and treating patients with cardiopulmonary disease, with an intensive, mentored clinical experience.

**RESP 4630**
**Continuous Quality Improvement**
**2**
* Prerequisite(s): University Advanced Standing

Enhances understanding of how to construct and conduct quality improvement projects in the clinical workplace.

**RESP 4775**
**Clinical Practice IV Adult Critical Care**
**4**
* Prerequisite(s): RESP 3270 and University Advanced Standing

Provides mentored participation in the clinical care of patients in the adult critical respiratory care setting, with emphasis on hemodynamic monitoring and assessment, ventilation/perfusion monitoring, patient/ventilator monitoring and assessment, and airway management.

**RESP 4800**
**Respiratory Therapy Seminar**
**3**
* Prerequisite(s): RESP 3270 and University Advanced Standing

Explores problem-based clinical concepts. Includes a comprehensive program review and preparatory focus on the written and clinical simulation examinations of the NBRC. Covers resume writing and interviewing skills.

**RESP 480R**
**Health Education and Promotion**
**1 to 4**
* Prerequisite(s): University Advanced Standing and departmental approval.

Provides students an opportunity to pursue independent study in respiratory therapy with a faculty mentor. The health promotion project addresses the growing role of the Respiratory Care Practitioner (RCP) in patient education, public education, and health promotion in general. Requires preparation and presentation of oral and/or written reports. May be repeated for up to 4 credits toward graduation.

**RESP 4890**
**Principles of Respiratory Care Research and Management**
**3**
* Prerequisite(s): RESP 3270 and University Advanced standing

Examines research methods and the scientific approach to critical appraisal of researchliterature. Analyzes scientific data to support approaches to respiratory care. Introducestheories, principles, and skills needed to function in a leadership position. Addresses thekey issues confronting respiratory care leaders today.

**RESP 490R**
**Special Projects in Respiratory Therapy**
**1 to 4**
* Prerequisite(s): RESP 3210 and University Advanced Standing

Involves independent research projects related to the cardiopulmonary system and/or quality improvement. May be repeated for a maximum of 6 credits toward graduation.

**RESP 4940**
**Special Topics in Respiratory Therapy**
**2**
* Prerequisite(s): RESP 2320 and University Advanced Standing

Provides moderated discussion and/or laboratory experiences relating to current events inhealth care, legislative and ethical issues, and emergent technologies in respiratory care.

# Religious Studies (RLST)

**RLST 3540 (Cross-listed with: PHIL 3540)**
**Christian Ethics**
**3**
* Prerequisite(s): PHIL 1610 and University Advanced Standing

Examines key developments and conceptions in Christian ethics through historical and conceptual methodologies. Explores the relationship between religious and secular approaches to ethics in their approach to questions of war, economics, politics, and/or other relevant issues.

**RLST 3610 (Cross-listed with: PHIL 3610)**
**Introduction to Christian Theology**
**3**
* Prerequisite(s): PHIL 1610 and University Advanced Standing

Examines key developments and conceptions in Christian theology through historical and conceptual methodologies.

**RLST 3620 (Cross-listed with: PHIL 3620)**
**Mormon Theology and the Christian Tradition**
**3**
* Prerequisite(s): PHIL 1610 and University Advanced Standing

For students majoring in humanities-related disciplines and other students interested in the academic study of religion. Engages students in exploring the defining features of Mormon thought in relation to the broader Christian tradition. Examines traditional theological questions such as the problem of evil, the scriptural canon, the nature of God and humanity, and the role of ritual.

**RLST 3650 (Cross-listed with: PHIL 3650)**
**Approaches to Religious Studies**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G or instructor approval) and University Advanced Standing

For students majoring in humanities-related disciplines and other students interested in the academic study of religion. Teaches methodological approaches and critical thinking strategies in the study of religion. Explores various disciplines in their approaches to religious belief and practice. Includes the study of such thinkers as David Hume, Immanuel Kant, Friedrich Schleiermacher, Rudolf Otto, William James, Ludwig Feuerbach, Soren Kierkegaard, Max Weber, Emile Durkheim, John Hick, and Rene Girard.

**RLST 366R (Cross-listed with: PHIL 366R)**
**Issues in Religious Studies**
**3**
* Prerequisite(s): (PHIL 2050 or PHIL 205H or PHIL 205G or instructor approval) and University Advanced Standing

For students majoring in humanities-related disciplines and other students interested in the academic study of religion. Addresses specific topics and theoretical approaches related to religious studies. Topics may include religion and violence, religion and public discourse, religious ritual, etc. Subject matter varies by semester and is repeatable for a total of 9 hours of credit.

# Russian (RUS)

**RUS 1010** **LH**
**Beginning Russian I**
**4**

Offers an introduction to basic Russian. Uses various methods of instruction that focus on the development of functional competence in listening, speaking, reading, and writing. Provides comprehensive explanations of basic Russian grammar along with structural practice for building language accuracy. Lab access fee of $10 applies.

**RUS 1020** **LH**
**Beginning Russian II**
**4**
* Prerequisite(s): Students need equivalent knowledge of RUS 1010

Offers a continuation of basic Russian. Uses various methods of instruction that focus on the development of functional competence in listening, speaking, reading, and writing. Provides comprehensive explanations of basic Russian grammar along with structural practice for building language accuracy. Lab access fee of $10 applies.

**RUS 115R**
**Russian Conversation I**
**1**

Offers novice Russian speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen listening comprehension for natural conversational flow. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**RUS 135R**
**Russia in the Headlines**
**1**

Explores current issues in Russian headlines. Explains cultural, historical, political and social factors that contribute to positions taken by current Russian leaders. May be repeated for a maximum of 3 credits toward graduation.

**RUS 2010** **LH**
**Intermediate Russian I**
**4**
* Prerequisite(s): Students need equivalent knowledge of RUS 1020

Offers a continuation of basic Russian. Reviews and builds additional skills from 1000-level language courses. Uses various methods of instruction that focus on the development of functional competence in listening, speaking, reading, and writing. Introduces authentic texts and provides discussions based on reading. Provides comprehensive explanations of basic Russian grammar along with structural practice for building language accuracy. Lab access fee of $10 applies.

**RUS 202G** **HH**
**Intermediate Russian II**
**4**
* Prerequisite(s): Students need equivalent knowledge of RUS 2010

Studies fourth-semester conversational Russian that is used in daily settings. Includes culture study, speaking, listening, reading, and writing. Emphasizes conversation in real life situations. Uses the Natural and Total Physical Response teaching methods. Completers should be able to converse enough to visit or work in a Russian speaking country. Lab access fee of $10 applies.

**RUS 215R**
**Russian Conversation II**
**1**
* Prerequisite(s): Students should have equivalent knowledge of RUS 1020

Offers lower division / novice Russian speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, sharpen listening comprehension, and develop conversational strategies such as circumlocution and managing a conversation with useful expressions for starting a conversation, gaining time to think, helping the other speaker, seeking agreement, etc. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**RUS 266G**
**Introduction to Russian Culture**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005

Studies Russian culture (988-1900) within a historical, cultural, thematic, and aesthetic context.

**RUS 3030**
**Russian Conversation and Composition I**
**3**
* Prerequisite(s): (RUS 202G or instructor approval) and University Advanced Standing

Emphasizes production skills [speaking and writing], reviews and expands lexical depth and advances mastery of Russian grammar. Examines contemporary Russian culture topics through studying a variety of Russian sources: readings, film, lecture, individual research, etc. Analyzes topics through active class discussion in Russian. Conducted entirely in Russian.

**RUS 3040**
**Russian Conversation and Composition II**
**3**
* Prerequisite(s): (RUS 202G or instructor approval) and University Advanced Standing

Explores communicative skills in Russian. Provides opportunity for students to improve language production through extensive oral and written instruction and study of selected literary and cultural texts. Advances mastery of Russian grammar while emphasizing production skills of speaking and writing. Prepares students to participate fully in subsequent advanced courses. All course work conducted in Russian.

**RUS 3050** **LH**
**Advanced Russian**
**3**
* Prerequisite(s): It is recommended that students have either taken RUS 202G, had at least one year residency in a Russian-speaking country, or instructor approval

Designed for non-native Russian speakers, who, as a result of foreign residency or similar exposure to the language, have attained a fairly good mastery of basic Russian. Targets major grammatical concepts with a focus on oral proficiency development. Overviews Russian culture and gives an introduction to Russian literature. Lab access fee of $10 applies.

**RUS 3200**
**Business Russian**
**3**
* Prerequisite(s): RUS 3050 and University Advanced Standing

Teaches Russian business terminology and prepares students to take the Business Russian Proficiency Tests sponsored by the Russian Chamber of Commerce.

**RUS 3520**
**Russian Culture and Civilization**
**3**
* Prerequisite(s): (RUS 3050 or equivalent) and University Advanced Standing

Explores chronologically the evolution and development of Russia, and a multitude of aspects that construct Russian national identity. Completers should acquire an understanding of contemporary issues, ethnic and economic development of Russia, as well as historical interdependence with other nations. Presentations and class instructions conducted entirely in Russian.

**RUS 3620**
**Nineteenth-Century Russian Literature and Its Film Adaptations**
**3**
* Prerequisite(s): University Advanced Standing

Introduces Russian Realist literature from 1800 and explores how these classic texts have been adapted for film. Emphasizes literary and film analysis and criticism, explores literary history, develops skills in interpreting literary and filmic texts, and deepens understanding of Russian culture. All coursework conducted in English with select readings in Russian upon request.

**RUS 366G**
**Twentieth Century Russian Culture**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Explores the main Russian cultural influences of the 20th century. Examines the cultural, social and political movements developed from roughly 1880-1999 and considers the main figures who embody these movements. Focuses on individuals who exemplify cultural achievements in their given field or sphere of influence. Requires a research paper that focuses on an individual who contributed to the 20th century cultural milieu. Taught in English.

**RUS 367G**
**History of Russian Film**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and University Advanced Standing

Studies Russian cinema within the historical, cultural, thematic, and aesthetic context.

**RUS 4050**
**Special Problems in Grammar Usage and Style**
**3**
* Prerequisite(s): [(RUS 3030 and RUS 3040) or RUS 3050] and University Advanced Standing

Reviews Russian grammar focusing on problem areas. Explores grammar as deployed in different genres. Emphasizes writing in different styles. Identifies styles in readings and compose according to certain styles.

**RUS 4110**
**Translation and Interpretation**
**3**
* Prerequisite(s): (RUS 3050 or equivalent) and University Advanced Standing

Introduces translation as a discipline. Develops the special skills needed for translating and interpreting, and to achieve mastery of the contemporary spoken and written language. Discusses basic theory, principles and tools of translation. Employs the tools of translation: dictionaries, glossaries, grammars and computerized resources. Focuses on the extensive practice of translation and interpretation from English to Russian and from Russian to English.

**RUS 416G**
**Post Soviet Russian Media and Film**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Examines visual media with special attention paid to the embedded cultural discourse that can only be understood with references to Russian history, language, and cultural identity. Explores Russia's depiction of and relationship with its past, present and future. Explores certain questions about visual media in post-Soviet society: the function of cinema in the new Russia; how cinema offers what reality cannot -- a goal for people to live up to at a time when politics and ideology fail to provide direction; how cinema articulates the reality of contemporary Russian life.

**RUS 4170**
**Russia Under Putin**
**3**
* Prerequisite(s): University Advanced Standing

Examines the social, political and cultural institutions that have informed the evolution of contemporary Russia following the collapse of the Soviet Union.

**RUS 490R**
**Special Topics in Russian Studies**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Explores a variety of subjects relevant to the study of Russian language, literature and culture. Engages students in critical analysis and discourse. May be repeated for a maximum of 6 credits toward graduation.

# Student Leadership and Success (SLSS)

**SLSS 1000**
**University Student Success**
**3**
* Prerequisite(s): Appropriate reading skills

Introduces and integrates new students to the UVU community, both academically and socially. Teaches strategies for academic success, such as critical thinking skills, time and financial management, and effective collaboration techniques. Develops student awareness of campus resources and assists in exploring and establishing personal, academic, and career goals. Includes lectures, group interaction, online interaction with faculty and students, in class exercises, and projects which apply learning to real life situations.

**SLSS 101R**
**Student Success Topics**
**1 to 3**
* Prerequisite(s): Appropriate reading skills

Variable credit course that surveys essential skills for success in college. Topics covered include, but are not limited to: memory, note taking, test taking, textbook reading and study strategies, time management, writing processes, communication, and thinking skills. May be repeated for a maximum of 9 credits toward graduation. May be graded credit/no credit.

**SLSS 103R**
**Student Leadership Development I**
**1 to 4**

Provides an overview of leadership styles, personalities, and organizational dynamics for student leaders. Explores the structure and culture of Student Leadership, Utah Valley University, the governing boards of higher education, and the State of Utah relating to shared governance and student involvement in campus leadership. May be repeated for a maximum of 8 credits toward graduation. May be delivered hybrid.

**SLSS 104R**
**Student Leadership Development II**
**1 to 4**
* Prerequisite(s): Departmental Approval

Focuses on the nature of leadership, citizenship, and advocacy in a democracy. Provides an overview of leadership and civics as crucial to the success of any leader, including a student leader. May be repeated for a maximum of 8 credits toward graduation.

**SLSS 1050**
**Library Research**
**1**

Introduces information gathering strategies and processes. Teaches discovery of books, articles, and other information sources. Emphasizes critical evaluation and ethical use of information. Prepares students for in-depth research. May be delivered online.

**SLSS 1100**
**Stress Management**
**3**

Presents strategies to develop new attitudes for coping with stressful circumstances. Increases a broader perspective and deeper understanding of acute and chronic stress. Develops conflict resolution techniques through improved communication skills. Studies physiological signs of stress and strain. Emphasizes relaxation techniques to increase performance and reduce the effects of stressful situations. Presents how diet affects personal performance and stress reduction. Explores physical fitness and the effects a sound body can have on coping with stress. May be delivered online.

**SLSS 1120**
**Leadership and Civic Engagement**
**3**

Identifies how student leaders can impact the UVU community and the community which they live. Explores student leadership models in relation to change and discover community needs in a service-learning environment. Applies student leadership practices and understanding of civic engagement to inform the UVU community of a local, national or world-wide community need(s). Reflects on student leadership, civic engagement, and community. Practices life-long learning and advocacy for community change.

**SLSS 1190**
**Power Learning Strategies**
**3**

Introduces what successful college students do and invites students to begin implementing these research-based techniques and methods in their other courses. Focuses on developing a conceptual and strategic framework for effective learning at the college level. Includes attention to creating the conditions for effective learning, comprehension of academic texts, identifying and remembering key information, test preparation and test taking.

**SLSS 1195**
**Speed Reading**
**2**

For students with good reading skills who want to increase reading speed and flexibility while maintaining or increasing their level of comprehension. Also teaches methods of speed studying.

**SLSS 1200**
**The 7 Habits of Highly Effective People**
**3**

Provides the foundation for personal leadership by teaching fundamental principles of character and life-changing paradigms. Examines the personal and organizational components of effectiveness. Focuses on high leverage changes such as time management, communication skills, win/win negotiation, and principle-centered life choices. Prepares students for life-long success. Includes highly interactive class discussions, application exercises, videos, and group work. May be delivered hybrid and/or online. Course fee of $40 applies.

**SLSS 120H**
**The 7 Habits of Highly Effective People**
**3**

Provides the foundation for personal leadership by teaching fundamental principles of character and life-changing paradigms. Examines the personal and organizational components of effectiveness. Focuses on high leverage changes such as time management, communication skills, win/win negotiation, and principle-centered life choices. Prepares students for life-long success. Includes highly interactive class discussions, application exercises, videos, and group work. Engages in more complex personal leadership material and applies the concepts with a more comprehensive approach to meet honors requirements.

**SLSS 120R**
**Testing Strategies for Educators**
**1**

Provides prospective Elementary Education Majors an opportunity to acquire the study strategies and test taking skills necessary to pass examinations that allow them to be admitted into the education program and to receive state licensure. May be repeated for a maximum of 3 credits toward graduation.

**SLSS 1400**
**Dimensions of Engaged Learning**
**1**

Introduces students to theories and best practices related to engaged learning in higher education. Provides opportuities for students to collaborate, share ideas, and participate in common experiences.

**SLSS 141R**
**University Forum**
**1**

Encourages student participation in the academic and intellectual life of UVU through attendance and critical reflection on select academic and scholarly events. Integrates students' classroom learning with topical events through exposure to scholars and practitioners on a wide range of issues and from a variety of perspectives. May be repeated for a maximum of 6 credits toward graduation. Graded credit/no credit.

**SLSS 2100**
**Major and Career Exploration**
**3**

For students who are undecided about their major or career goals. Provides students with the opportunity to interact with career professionals; understand how to access internship, career preparation, and placement resources at UVU; and integrates understanding of self with knowledge of majors, careers, and the world of work. Utilizes an appropriate decision making model to identify possible major and career choices. May be delivered online. Course fee of $23 for materials applies.

**SLSS 2300**
**Leadership Mentoring II**
**3**

Provides the ongoing and further development of the theoretical base and hands-on training in leadership and mentoring techniques for peer mentors, and also assists them in further exploring and developing their own learning skills and strategies, and methods for mentoring these skills in others. Explores higher cognitive application and analysis of teaching/facilitating learning as a form of leadership.

**SLSS 240R**
**Mentoring Leadership Practicum**
**2**

Provides the theoretical base and hands-on training in leadership and mentoring techniques as well as an understanding of and ability to apply the UVU Student Core Leadership Competencies. Assists student leaders in further developing their own self-awareness, learning skills and strategies, and explores methods for facilitating these in others. Provides an avenue for student leadership program administrators to facilitate goal development, fulfillment and performance among student leaders and the individuals they serve. Emphasizes building relationships with students, teaching life skills and learning strategies, and guiding students through the college experience. Repeatable for a maximum of 8 credits towards graduation.

**SLSS 2500**
**Leader--Strengths-Based Leader/Coach**
**3**

Advances the study and practice of personal leadership by focusing on research-based character strengths. Uses strengths-based inquiry and assessment, identifies and examines character strengths as they relate to optimal functioning, well-being, and personal leadership (leadership of self and others). Draws upon the theories of positive leadership, positive paradigms and practices to develop a strengths-based core that they can transfer to diverse situations and a wide array of roles. Course fee of $10 applies.

**SLSS 281R**
**Internship**
**1 to 8**
* Prerequisite(s): Department Approval
* Corequisite(s): SLSS 2100 recommended

Provides supervised, practical, and professional experience for students exploring a variety of career areas. May be repeated for a maximum of 12 credit hours towards graduation. May be graded credit/no credit.

**SLSS 3200**
**Leader--Teacher and Mentor**
**3**

Provides concurrent theoretical and engaged learning experiences that invite students to explore the notion of leader as an effective facilitator of learning and as a coach for self and others. Engages a broad range of current academic literature exploring relevant intra- and interpersonal leadership principles and their interactions within micro and macro level settings. Develops adaptable philosophical and practical toolkit to more effectively navigate within and across multiple settings as a mentor, teacher, and coach to self and others.

**SLSS 402G**
**Global Professionalization**
**3**
* Prerequisite(s): University Advanced Standing

Underscores UVU's commitment to valuing global and intercultural opinions, backgrounds, traditions, perspectives, and experiences. Fosters an intercultural learning curriculum and an understanding of and an appreciation for, a variety of cultural perspectives and experiences is an essential element of higher education. Invites learners to move away from the view of "difference as deficiencies" which continues to be prevalent in society. Invites learners to become increasingly aware of the value and strength of diversity and to be more reflective of each person's role within education and society in general. Explores a growing body of literature and experience that implies a demanding personal and professional commitment. Examines deeper understanding that enhances learners' cultural awareness and prepare them for future employment in global and intercultural settings.

**SLSS 405G**
**Leader--Global Contributor**
**3**
* Prerequisite(s): Placement into ENGL 1010 or ENGH 1005 or higher

Examines what the world will look like in 25 years due to the influence of seven global dimensions or the 7 Revolutions (population, resource management, technology, information/ knowledge, economic integration conflict, and governance). Explores various global, political, economic, social, and behavioral systems; and examines underlying causes of those issues within students' lives. Introduces academic skills in research, communication, critical thinking, and personal leadership.

**SLSS 4800**
**Leader Capstone--Lifelong Change Agent**
**4**

Integrates three central components: experiential learning, service, and leadership. Provides the opportunity to demonstrate knowledge, application, and proficiency of the core Leadership Certificate content areas. Allows students to propose projects in areas related to their academic and/or professional interests or goals. Projects are subject to approval by department faculty.

**SLSS 481R**
**Advanced Internship**
**1 to 12**
* Prerequisite(s): Department approval and University Advanced Standing

Provides mentorship during professional internships in a variety of career areas. Internships will be focused on the student's major and future career and will require development of industry specific skills and abilities. Provides networking opportunities within the industry. May be Graded Credit/No Credit. May be repeated for a maximum of 12 credits towards graduation.

# Sociology (SOC)

**SOC 1010** **SS**
**Introduction to Sociology**
**3**

Studies and compares social groups and institutions and their inter-relationships. Includes culture, socialization, deviance, stratification, race, ethnicity, social change, and collective behavior.

**SOC 101H** **SS**
**Introduction to Sociology**
**3**

Studies and compares social groups and institutions and their inter-relationships. Includes culture, socialization, deviance, stratification, race, ethnicity, social change, and collective behavior.

**SOC 1020**
**Modern Social Problems**
**3**

Studies and analyzes modern social problems such as crime, delinquency, family dysfunctions and inequality and exploitation of people in contemporary society. Class requires volunteer experience in community agencies.

**SOC 107G** **SS**
**Multicultural Societies**
**3**

Examines the benefits and challenges of diversity in the United States. Explores history and life experiences of people from various racial and ethnic groups. Provides a forum for constructive interaction among people of different racial, ethnic, social, economic, and religious backgrounds.

**SOC 1200** **SS**
**Sociology of the Family**
**3**

Discusses the family in the context of society and its seven sociological institutions: family, media, government, economy, technology, education, and religion. Evaluates how changes in these institutions have facilitated many changes in the structure and function of the modern family. Examines traditional, current, and anticipated definitions of the family using core sociological theory and research tools. Evaluates cultural influence on the family. Focuses on strengthening marriages at the levels of dating, mate selection, marriage, newly wedded adjustment, parenting, finance, proactive family maintenance, and elderly family experiences. Emphasizes the application of one's own life and family experiences while maintaining scientific rigor and critical awareness.

**SOC 2370**
**Sociology of Gender**
**3**
* Prerequisite(s): ENGL 1010 or ENGH 1005 with a C+ or higher

Examines sociological perspectives on gender roles globally. Addresses the effect of social construction of gender roles in various cultures around the world. Investigates how roles have changed over time and the consequences of these changes to broader societal norms globally and in the United States.

**SOC 275R**
**Survey of Current Topics**
**1 to 3**
* Prerequisite(s): (ANTH 101G or PSY 1010 or SOC 1010) and ENGL 1010 or ENGH 1005 with a C+ grade or higher

Presents selected topics in Sociology. Approaches subjects from a cross-disciplinary perspective. Requires a project demonstrating competency in the specific topic. May be repeated for nine credits toward graduation.

**SOC 3030**
**Social Research Methods**
**3**
* Prerequisite(s): PSY 3110 (statistics) with a C- or higher and University Advanced Standing

Teaches how to conduct social science research. Introduces different research methods in social sciences, including experiments, surveys, field research, and unobtrusive research. Covers the following topics: steps in scientific research, the ethics of social research, research design, the logic of sampling, and strengths and limitations of each type of data collection method.

**SOC 320G**
**Race and Minority Relations**
**3**
* Prerequisite(s): ENGL 2010 with a C+ or higher and University Advanced Standing

Studies ethnic and racial minority groups and the development of formal and informal relationships shared by these groups and the majority group. Explores the roles and origins of these groups and the concepts of prejudice, ethnic inequalities, current minority group movements, cross-cultural issues, economic, political, and educational aspects of majority-minority relations.

**SOC 3400**
**Sociology of Religion**
**3**
* Prerequisite(s): ENGL 2010 with a C+ or higher, SOC 1010, and University Advanced Standing

Examines religion from a sociological perspective. Analyzes religion as a social phenomenon. Discusses religious organizations, religion and politics, and religion and social class.

**SOC 3430**
**Sociology of Education**
**3**
* Prerequisite(s): ENGL 2010 with a C+ or higher, SOC 1010, and University Advanced Standing

For students who desire a better understanding of United States and world education systems. Examines and investigates educational trends and issues such as private vs. public systems; dropout rates; desegregation; student achievement/failure; education policies; race; class; gender issues; the 'Hidden Curriculum'; and education reform using Sociological theory and empirical research.

**SOC 3460**
**Political Sociology**
**3**
* Prerequisite(s): ENGL 2010 with a C+ or higher, SOC 1010, and University Advanced Standing

Explores the distribution of political power at the national and international levels from a variety of theoretical perspectives. Pays particular attention to the power wielded by international media conglomerates and the influence of international institutions such as the World Trade Organization, the World Bank, and the International Monetary Fund.

**SOC 3501**
**Social Psychology**
**3**
* Prerequisite(s): SOC 1010 and University Advanced Standing

Examines individual's thoughts, feelings, and behaviors in social contexts. Analyzes human behaviors from a sociological perspective. Includes the history of sociological social psychology, perspectives and research methods in sociological social psychology, the social psychology of stratification, self and identity, socialization over the life course, social psychology of deviance, mental health and illness, social attitudes, sociology of emotions and relationships, and collective behavior.

**SOC 3510**
**Sociology of Work and Occupations**
**3**
* Prerequisite(s): ENGL 2010 with a minimum C+ grade, SOC 1010, and University Advanced Standing

Examines work and occupations in historical and contemporary contexts. Examines current employment patterns and trends, the nature of labor markets and jobs, the gendered arrangements of paid and unpaid work, the organization and management of work. Explores transformations in occupational settings resulting from changes in economy and labor market. Focuses on the macro level (the effects of advancements in technology, bureaucratization and unionization on the division of labor), the micro-level (job satisfaction and alienation), and on the interface between macro and micro levels (job prestige, rewards, effects of ethnicity, age, and other characteristics).

**SOC 3520 (Cross-listed with: ENST 3520)**
**Environmental Sociology**
**3**
* Prerequisite(s): SOC 1010 and ENGL 2010 with a C+ grade or higher and University Advanced Standing

Explores in detail several different approaches to understanding the social causes of and solutions to environmental degradation. Discusses the development of a wide variety of theory-based critiques of various social institutions (e.g., economic, political, religious) and how these institutions' values can create and perpetuate unsustainable practices.

**SOC 3560**
**Sociology of Deviance**
**3**
* Prerequisite(s): ENGL 2010 with a C+ or higher, SOC 1010, and University Advanced Standing

Examines the strengths and weaknesses of several different definitions of deviance. Explains deviant behavior from a variety of theoretical perspectives and summarizes the existing data on several different forms of deviance, i.e., individual violations of social mores, street level crime, corporate crime, and crimes committed by nation states.

**SOC 3690**
**Internet and Society**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005), SOC 1010, and University Advanced Standing

Traces the history of new media through a sociological approach. Utilizes sociological theories of mass media and new media, (internet, smartphones, social media, etc.) and their impact on identities and institutions. Refers to sociological theories created in the pre-internet era – such as symbolic interactionism – to explain the pervasive presence of new media in society as well as our use of them.

**SOC 3700**
**Social Inequality**
**3**
* Prerequisite(s): (ENGL 2010 with a C+ or higher), SOC 1010, and University Advanced Standing

Studies social structure, culture, environment (urban/rural axis), inequality, and poverty in American Society. Examines Spanish Harlem, Detroit, Appalachia, and the Bitterroot Valley of Montana.

**SOC 375G**
**Sociology of Aging**
**3**
* Prerequisite(s): University Advanced Standing

Explores the social aspects of aging at the personal, group, and larger social levels of society including the social implications of aging, the theories of aging, as well as formal and informal support of medical care, housing, and well-being of elderly persons. Includes the study of the identify the biological processes of aging and its impact on the roles and relationships elderly person experience in the later stages of life. Emphasizes the individual's experience in the context of national and global demographic trends, cultural and ethnic diversities and economic realities across the classes and across political boundaries.

**SOC 3800**
**Animals and Society**
**3**
* Prerequisite(s): ENGL 2010 with a C+ or higher, SOC 1010, and University Advanced Standing

Examines the roles that non-human animals play in human societies. Utilizes sociological approaches to study human-animal relationships and to critically evaluate the ideologies which justify these relationships. Pays particular attention to human relationships in North America to domestic pets, livestock, and wildlife.

**SOC 3850**
**Rural Life--Global and Local**
**3**
* Prerequisite(s): ENGL 2010 with a C+ or higher, SOC 1010, and University Advanced Standing

Introduces rural life across the globe. Discusses the views of agrarian writers and thinkers. Explores rural values, rural communities, rural race relations, and rural poverty. Evaluates how the rural perspective provides a platform for critique of modern societal transformations in the twentieth and early twenty-first centuries.

**SOC 4000**
**Classical Social Theory**
**3**
* Prerequisite(s): (ENGL 2010 with a minimum C+ grade), SOC 1010, and University Advanced Standing

Examines the contributions of key theorists such as Durkheim, Weber, Marx, DuBois, and Addams to the development of contemporary sociology. Applies key theoretical concepts and frameworks created and used by classical sociologists to current and historical social issues.

**SOC 4020**
**Survey Research Design**
**3**
* Prerequisite(s): University Advanced Standing

Teaches methods of conducting survey research. Explains how to construct, validate, and administer surveys, how to conduct interviews, how to report data, and how to interpret findings.

**SOC 4100**
**Contemporary Social Theory WE**
**3**
* Prerequisite(s): SOC 1010 and SOC 4000 and (ENGL 2010 with a C+ or higher) and University Advanced Standing

Examines major contemporary sociological theories that provide the basis for sociological research and the interpretation of social processes. Explores the nature of sociological theory and theory-building to understand the difference and connection between theoretical, methodological, and empirical works in sociology. Covers influential theoretical frameworks, such as structural functionalism, Frankfurt School, exchange and rational choice theories, symbolic interactionism, phenomenology, poststructuralism, postmodernism, feminism, and world systems theories.

**SOC 4400**
**Social Change**
**3**
* Prerequisite(s): ENGL 2010, SOC 1010, and University Advanced Standing

Analyzes societies and their component parts. Evaluates various endogenous and exogenous forces which bring about social change. Examines historical and contemporary processes of social change and stratification. Explores current social conditions and applicable methods of social change. Offered once every other year.

**SOC 475R**
**Current Topics in Sociology**
**1 to 3**
* Prerequisite(s): ENGL 2010 with a minimum grade of C+, SOC 1010, and University Advanced Standing

Presents selected topic in Sociology and will vary each semester. Requires a project demonstration competency in the specific topic. May be repeated 3 times with different topics.

**SOC 490R**
**Independent Studies**
**1 to 3**
* Prerequisite(s): Instructor approval, department chair approval, and University Advanced Standing; for Behavioral Science Bachelor Degree students only

For qualified students who wish to undertake a well-defined project or directed study related to an area of special interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. Projects may include writing a publishable paper, passing a competency exam, producing an annotated bibliography, oral presentation, or other options as approved by instructor. May be repeated for a maximum of 6 credits.

# Social Science (SOSC)

**SOSC 291H**
**National Honors Study Topic**
**3**

Sponsored and promoted by Phi Theta Kappa, national organization. Designed for an intellectual pursuit of National Honors Study topic. Discussion topic changes annually. Deals with current international issues that impact society and the quality of life. Students research and discuss the topic from several different perspectives and develop a knowledge base from which to formulate their own ideas.

# Spanish (SPAN)

**SPAN 1010** **LH**
**Beginning Spanish I**
**4**

Emphasizes listening, speaking, and writing skills along with basic grammar, vocabulary, and verb conjugations, all within the cultural context of modern Hispanic societies. Uses an eclectic method of instruction, emphasizing conversational exchanges. Requires weekly lab. May be delivered hybrid. Lab access fee of $10 applies.

**SPAN 1020** **LH**
**Beginning Spanish II**
**4**
* Prerequisite(s): Students need equivalent knowledge of SPAN 1010

Includes the remaining grammar and language concepts, literature, and cultural readings. Uses an eclectic method of instruction, emphasizing conversational exchanges. Conversational lab required. Computer and multimedia lab encouraged. May be delivered hybrid. Lab access fee of $10 applies.

**SPAN 115R**
**Spanish Conversation I**
**1**

Offers novice Spanish speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, and sharpen listening comprehension for natural conversational flow. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**SPAN 1500** **LH**
**Spanish Travel Study**
**3**

Introduces students to a Spanish-speaking foreign country for a minimum of 10 days of intensive language and culture study. Course entails several meetings prior to departure and at least one after the return home to facilitate observation and analysis of data to be gathered on the tour. An organized presentation of that data will be contained in a multimedia project due no later than one month after tour.

**SPAN 2010** **LH**
**Intermediate Spanish I**
**4**
* Prerequisite(s): Students need equivalent knowledge of SPAN 1020

Reviews and builds upon the grammar, reading, writing, and conversation skills learned in the first year courses. Introduces readings and discussions on the history, culture, and literature of the Spanish speaking world, maintaining a focus on oral proficiency. Lab access fee of $10 applies.

**SPAN 202G** **HH**
**Intermediate Spanish II**
**4**
* Prerequisite(s): Students need equivalent knowledge of SPAN 2010

Emphasizes reading, writing, and conversation skills through studies in literature. Media reading labs are available to help reading comprehension. Requires oral and written response. Lab access fee of $10 applies.

**SPAN 203G**
**Spanish for Heritage Speakers**
**4**
* Prerequisite(s): Must be a heritage Spanish speaker (heritage speakers are individuals who speak their first language, which is not English, at home).

For heritage speakers of Spanish with little knowledge of grammar and no formal training in the language. Emphasizes and develops the oral skills students already possess as well as the four language skills: listening, speaking, reading, and writing. Meets Global Intercultural requirements.

**SPAN 2100**
**Spanish for Social Workers**
**4**
* Prerequisite(s): Spanish 2010 or Department Approval

Teaches language terminology specific to the Spanish language in the field of Social Work. Examines the cultural issues present in the interactions with Spanish-speaking clients. Prepares students to work with Spanish-speaking clients in future careers in social work. Reviews and builds upon the grammar, reading, writing and conversation skills learned in the first years courses.

**SPAN 2110**
**Spanish for Nursing**
**4**
* Prerequisite(s): Spanish 2010 or Department Approval

Teaches Spanish-language terminology specific to the field of nursing. Examines the cultural issues present in the interactions with Spanish-speaking patients. Prepares students to work with Spanish-speaking patients in future careers in nursing. Reviews and builds upon grammar, reading, writing, and conversation skills learned in previous courses.

**SPAN 215R**
**Spanish Conversation II**
**1**
* Prerequisite(s): Students should have equivalent knowledge of SPAN 1020

Offers lower division / novice Spanish speakers opportunities to enhance their speaking proficiency in the target language by focusing on oral verbal production. Teaches how to improve authentic pronunciation, reduce errors in authenticity of language structure, generate thought in the target language spontaneously as a substitute for translation, sharpen listening comprehension, and develop conversational strategies such as circumlocution and managing a conversation with useful expressions for starting a conversation, gaining time to think, helping the other speaker, seeking agreement, etc. Contrasts with all other first year courses which must strive to produce mastery of the whole range of language acquisition components, including writing, grammar, etc. Facilitates lowering the affective filter when conversing in the target language by increasing the frequency of speech opportunities and defusing concern for such matters as spelling, etc. Increases mastery of lexical items through increased frequency of oral usage. May be repeated for a maximum of 3 credits toward graduation.

**SPAN 3030**
**Spanish Conversation and Composition I**
**3**
* Prerequisite(s): (SPAN 202G or equivalent) and University Advanced Standing

Explores communicative skills in Spanish. Provides opportunity for students to improve language production through extensive oral and written instruction and study of selected literary and cultural texts. Reviews grammar topics such as verb tenses, use of adjectives, and object pronouns.

**SPAN 3040**
**Spanish Conversation and Composition II WE**
**3**
* Prerequisite(s): (SPAN 202G or equivalent) and University Advanced Standing

Explores communicative skills in Spanish. Provides opportunity for students to improve language production through extensive oral and written instruction and study of selected literary and cultural texts. Reviews grammar topics such as the subjunctive, relative clauses, and future and conditional tenses.

**SPAN 3050** **LH**
**Advanced Spanish WE**
**3**
* Prerequisite(s): It is recommended that students have passed SPAN 202G, have had one year residency in a Spanish-speaking country, or instructor approval

Overviews the basic grammar of Spanish. Emphasizes major concepts including mastery of verb forms, object pronouns, preterite vs. imperfect, use of the subjunctive, etc., both orally and in writing. Intended for non-native Spanish speakers who have attained competency in basic Spanish as a result of foreign residency or similar exposure to the language.

**SPAN 3060**
**Oral Proficiency**
**1**
* Prerequisite(s): University Advanced Standing
* Prerequisite(s) or Corequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050

Designed to help students understand the standards for oral proficiency as defined by the American Council on the Teaching of Foreign Languages (ACTFL) and to improve their oral proficiency skills. Is required of all Spanish and Spanish Education majors, who should achieve minimally the Intermediate High level as per the ACTFL guidelines. Requires Oral Proficiency Interview (OPI).

**SPAN 3116**
**Pop Culture-Film/Media/Entertainment**
**3**
* Prerequisite(s): High-school students have to pass the AP Spanish Language or AP Spanish Literature & Culture test with a 3 or higher.

This course is part of the State of Utah Spanish Bridge Program and it will be taught only in high schools and for high school students. Not to be taught on college campus for university students. Explores the role that current film, media, and entertainment play in the Spanish-speaking world. Examines the historical and cultural perspectives presented through these media through a variety of approaches. Taught in Spanish.

**SPAN 3117**
**Breaking Down Walls-Building Identities**
**3**
* Prerequisite(s): High school students have to pass the AP Spanish Language or AP Spanish Literature & Culture test with a 3 or higher

This course is part of the State of Utah Spanish Bridge Program and it will be taught only in high schools and for high school students. Not to be taught on college campus for university students Explores how critical moments of change in the Spanish-speaking world have shaped the present. Analyzes crucial social and historical events that affected Spain, Latin America, and the Hispanic people in the United States.

**SPAN 3118**
**Literature and Film-Contemporary issues**
**3**
* Prerequisite(s): High school students have to pass the AP Spanish Language or AP Spanish Literature & Culture test with a 3 or higher

This course is part of the State of Utah Spanish Bridge Program and it will be taught only in high schools and for high school students. Not to be taught on college campus for university students. Explores works of literature and film in Spanish to analyze contemporary societal issues. Emphasizes literary analysis and criticism. Develops knowledge of literary history, skills in interpreting literary texts, and deepens understanding of the Spanish language.

**SPAN 315R**
**Advanced Spanish Conversation**
**1**
* Prerequisite(s): (SPAN 202G or instructor approval) and University Advanced Standing

Provides speaking opportunities for upper-division Spanish learners to expand their conversational skills. Promotes authentic Spanish pronunciation and helps students reduce grammatical and structural errors. May be repeated for a maximum of 3 credits toward graduation.

**SPAN 3200** **LH**
**Business Spanish**
**3**
* Prerequisite(s): SPAN 3050 and University Advanced Standing

Teaches language structures and terminology specific to Spanish language in the field of Business. Examines the cultural issues present in the interactions with Spanish-speaking clients. Prepares students to work with Spanish-speaking clients in future careers in business, marketing, banking or translation/interpreting. Lab access fee of $10 applies. Canvas Course Mats $44/Cengage applies.

**SPAN 3220**
**Pronunciation Phonetics and Phonology**
**3**
* Prerequisite(s): SPAN 3050 and University Advanced Standing

Explores comparatively the articulatory system of English and Spanish, not only to help students identify and correct anomalies or inaccuracies in their own speech or the speech of others, but also to strengthen their understanding of the nature of oral speech. Provides extensive laboratory involvement for practice and analysis.

**SPAN 3310**
**Spanish for Healthcare Professionals**
**3**
* Prerequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050, and University Advanced Standing

Teaches language structures and terminology specific to Spanish language in the field of healthcare. Examines the cultural issues present in the interactions with Spanish-speaking patients. Prepare students to work with Spanish-speaking patients in future careers in medicine, nursing, or translation/ interpretation.

**SPAN 3320**
**Spanish for Mental Health Professionals**
**3**
* Prerequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050, and University Advanced Standing

Teaches language structures and terminology specific to Spanish language in the field of Psychology. Examines the cultural issues present in the interactions with Spanish-speaking patients/clients. Prepares students to work with Spanish-speaking patients/clients in future careers in healthcare, social work, education, or translation/interpreting.

**SPAN 3340**
**Spanish for Tourism and Hospitality Management**
**3**
* Prerequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050 and University Advanced Standing

Teaches language terminology specific to Spanish language in the field of Tourism and Hospitality Management. Examines the cultural issues present in the interactions with Spanish-speaking clients. Prepares students to work with Spanish-speaking clients in future careers in the tourist and hospitality industry.

**SPAN 3350**
**Spanish for Legal Professions**
**3**
* Prerequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050 and University Advanced Standing

Teaches language structures and terminology specific to Spanish language in the legal field. Explores political and legal institutions in the Spanish-speaking countries. Examines the cultural issues present in the interactions with Spanish-speaking clients. Prepares students to work with Spanish-speaking clients in future careers in law, administration and government, business, translation and interpreting.

**SPAN 351G**
**Culture and Civilization--Spain**
**3**
* Prerequisite(s): (SPAN 3050 or equivalent) and University Advanced Standing

Explores chronologically the cultural formation and development of Spain. Completers should acquire an understanding of the ethnic development and linguistic history of Spain. Presentations and class instruction conducted entirely in Spanish.

**SPAN 352G**
**Culture and Civilization--Spanish America**
**3**
* Prerequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050 and University Advanced Standing

Explores chronologically the cultural formation and development of Spanish America. Completers should acquire an understanding of the ethnic development and linguistic history of Spanish American countries and societies. Presentations and class instruction conducted entirely in Spanish.

**SPAN 3610**
**Spanish Peninsular Literature to 1800**
**3**
* Prerequisite(s): [(SPAN 3030 and SPAN 3040) or (SPAN 3050 or equivalent)] and University Advanced Standing

Introduces chronologically to 1800 representative Spanish authors. Emphasizes literary analysis and criticism. Completers should develop knowledge of literary history, acquire skills in interpreting literary texts, and deepen understanding of the Spanish language. Presentations and class instruction conducted entirely in Spanish.

**SPAN 3620**
**Spanish Peninsular Literature from 1800**
**3**
* Prerequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050, and University Advanced Standing

Studies and analyzes chronologically from 1800 representative Spanish authors to focus on the relevance of their writings to the student's own life. Emphasizes literary analysis and criticism. Develops knowledge of literary history, skills in interpreting literary texts, and deepens understanding of the Spanish language. Analyzes works of diverse genres such as fiction, poetry, and essay. Provides students with enough exposure to each author to develop a feeling for his or her work.

**SPAN 3630**
**Spanish American Literature to 1880**
**3**
* Prerequisite(s): [(SPAN 3030 and SPAN 3040) or SPAN 3050] and University Advanced Standing

Introduces chronologically to 1880 representative Spanish American authors. Emphasizes literary analysis and criticism. Completers should develop knowledge of literary history, acquire skills in interpreting literary texts, and deepen understanding of the Spanish language. Presentations and class instruction conducted entirely in Spanish.

**SPAN 3640**
**Spanish American Literature from 1880**
**3**
* Prerequisite(s): [(SPAN 3030 and SPAN 3040) or SPAN 3050] and University Advanced Standing

Introduces chronologically from 1800 representative Spanish American authors. Emphasizes literary analysis and criticism. Completers should develop knowledge of literary history, acquire skills in interpreting literary texts, and deepen understanding of the Spanish language. Presentations and class instruction conducted entirely in Spanish.

**SPAN 3690**
**Spanish and Latin American Cultures through Cinema**
**3**
* Prerequisite(s): SPAN 3050 OR (SPAN 3030 and SPAN 3040), and University Advanced Standing

Explores contemporary issues in the cultures and societies of Latin America and Spain by analyzing, interpreting and critically reading film and visual texts. Provides opportunities to improve students´ proficiency in Spanish through oral and written interaction and production. Conducted entirely in Spanish.

**SPAN 380R**
**Community Engagement in Spanish**
**1 to 3**
* Prerequisite(s): [(SPAN 3030 and SPAN 3040) or SPAN 3050 or instructor approval] and University Advanced Standing

Offers students the opportunity to volunteer in projects involving the local Hispanic community. Addresses the linguistic and cultural aspects of community volunteering. Requires from 2 to 6 hours of volunteering weekly in local schools, clinics, social service agencies, or civic organizations. Repeatable for a maximum 6 hours credit toward graduation.

**SPAN 4050**
**Topics in Grammar Usage and Style WE**
**3**
* Prerequisite(s): [(SPAN 3030 and SPAN 3040) or SPAN 3050] with a grade of C or higher and University Advanced Standing

Reviews Spanish grammar focusing on problem areas. Explores grammar as deployed in different genres. Emphasizes writing in different styles. Lab access fee of $10 applies.

**SPAN 4100**
**Teaching Spanish Grammar**
**3**
* Prerequisite(s): Admission to a Secondary Education teacher licensure program or departmental approval; [(SPAN 3030 and SPAN 3040) or SPAN 3050] and University Advanced Standing
* Corequisite(s): LANG 4200 recommended

Enables prospective Spanish educators to acquire the strategies, methodology and techniques of how to present deductive and inductive principles of Spanish grammar. Discusses basic theory, principles and tools of Spanish linguistic issues. Includes extensive principle development and microteaching used as an assessment tool.

**SPAN 4110**
**Introduction to Translation and Interpreting English and Spanish**
**3**
* Prerequisite(s): (SPAN 3030 and SPAN 3040) or SPAN 3050; and it is highly recommended to take previously 6 credits from the Spanish for the Profession courses (Medical Spanish, Business Spanish, Legal Spanish, Spanish for Psychology, Spanish for Tourism, etc.)

Teaches basic concepts from Translation Studies. Provides practice on translation and interpretation between the pair of languages English and Spanish. Describes professional opportunities in the translation and interpretation field. Includes class discussion, translation and interpreting practice, analysis of translations, oral presentations and a portfolio. Lab access fee of $10 applies.

**SPAN 4120**
**Advanced Translation English and Spanish**
**3**
* Prerequisite(s): SPAN 4110 and University Advanced Standing

Provides opportunities for Spanish/English translation of texts in different fields (health, law, business, science, etc.). Examines the characteristics and terminology used in specialized texts. Introduces key concepts in the different areas of professional expertise and the differences they present in Spanish speaking countries compared to English speaking countries. Identifies job opportunities as a bilingual professional. Includes class discussion, translation practice, analysis of translations, presentations and a portfolio.

**SPAN 412R**
**Spanish for the Professions**
**3**
* Prerequisite(s): (SPAN 3050 or departmental approval) and University Advanced Standing

Offers Medical Spanish, Legal Spanish, or Spanish for Tourism according to student demand. Focuses on the practical needs of students who seek careers in the applicable areas. Addresses the specialized vocabulary and communicative ability necessary for a professional in a bilingual English-Spanish or monolingual Spanish environment. Introduces interpretation in professional situations. May be repeated for a maximum of 6 credits toward graduation with different topics.

**SPAN 4130**
**English Spanish Interpreting**
**3**
* Prerequisite(s): SPAN 4110 and University Advanced Standing

Teaches skills for interpreting in Spanish and English with an emphasis on the mode of liaison or bilateral interpreting. Introduces key concepts on language interpretation and the profession of interpreter. Teaches basic skills for interpreting like discourse analysis and oratory skills. Teaches general interpreting strategies like synthesis and anticipation, and specific strategies for liaison or bilateral interpreting. It emphasizes professional standards and self-monitoring. Includes class discussion, practice, observation and analysis of practice, oral presentations, a student portfolio, reflection papers, and a final paper or project.

**SPAN 4200**
**Advanced Business Spanish**
**3**
* Prerequisite(s): SPAN 3200 and University Advanced Standing

Focuses on Spanish business terminology, documentation, case studies and transactions. Explores grammar in different genres, emphasizing composition in different writing styles. Prepares students to take the Advanced Business Certification test offered by the Chamber of Commerce of Madrid, Spain. Canvas Course Mats $44/Cengage applies.

**SPAN 4310**
**Advanced Spanish for Healthcare Professionals**
**3**
* Prerequisite(s): SPAN 3310 and University Advanced Standing

Teaches language structures and terminology specific to Spanish language in the field of healthcare. Examines the cultural issues present in the interactions with Spanish-speaking patients. Focuses on advanced topics, terminology and language structures not covered in Medical Spanish. Prepare students to work with Spanish-speaking patients in future careers in medicine, nursing, or translation/ interpretation.

**SPAN 4410**
**Spanish Linguistics**
**3**
* Prerequisite(s): [(SPAN 3030 and SPAN 3040) or SPAN 3050] and University Advanced Standing

Provides a comprehensive introduction and overview of the different areas of Spanish Linguistics. Designed for students with a focus in Pedagogy, Business Spanish, Translation, Spanish for the Professions or Literature and Culture. Focuses on the core concepts of the various sub-fields of linguistics applied to Spanish: Phonetics and Phonology, Morphology, Syntax, Semantics, Sociolinguistics, the History of the Language, Dialectology and Pragmatics.

**SPAN 460R**
**Topics in Hispanic Literature**
**3**
* Prerequisite(s): SPAN 3610 or SPAN 3620 or SPAN 3630 or SPAN 3640 and University Advanced Standing

Addresses key texts representative of the development of genres, themes, or individual authors' works. Engages students in critical textual analysis. May be repeated for a maximum of six credits toward graduation with different topics.

**SPAN 4660**
**Contemporary Spanish American Literature**
**3**
* Prerequisite(s): (SPAN 3610 or SPAN 3620 or SPAN 3630 or SPAN 3640) and University Advanced Standing

Introduces the major works of Spanish American writers in the latter part of the 20th and early 21st centuries. Involves close reading and textual analysis through class discussion, written projects, examinations, and oral presentations. Conducted entirely in Spanish.

**SPAN 484R**
**Special Topics in Hispanic Studies**
**1 to 3**
* Prerequisite(s): (SPAN 3050 or departmental approval) and University Advanced Standing

Presents selected topics in Hispanic Studies. Reflects the interdisciplinary nature of the Hispanic Studies field. May be repeated for a maximum of 6 credits toward graduation with different topics.

**SPAN 4900**
**Capstone Seminar**
**3**
* Prerequisite(s): (Spanish 4050 and 15 credits of upper-division Spanish courses) or instructor approval; University Advanced Standing

Engages students in independent, directed research and writing. Encourages further exploration of topics covered during courses in the major program through advanced research methods and peer review of others' work. Requires public exposition of research findings in Spanish.

# Statistics (STAT)

**STAT 1040** **QL**
**Introduction to Statistics**
**3**
* Prerequisite(s): One of the following: MAT 1000 or MAT 1010 with a grade of C or better within the past two years; an ACT mathematics score of 23 (assuming the test has been taken within the last two years); appropriate placement by the Accuplacer test score

A quantitative literacy course with a statistical theme. Includes descriptive statistics, sampling, and inferential methods. Emphasizes problem solving and critical thinking. Canvas Course Mat $72/Macmillan applies.

**STAT 1045** **QL**
**Introduction to Statistics with Algebra**
**5**
* Prerequisite(s): One of the following: MAT 1000 or MAT 1010 with a grade of C or better within the past two years; an ACT mathematics score of 23 (assuming the test has been taken within the last two years); appropriate placement by the Accuplacer test score

A quantitative literacy course with a statistical theme. Includes descriptive statistics, sampling, and inferential methods. Emphasizes problem solving and critical thinking.

**STAT 2040** **QL**
**Principles of Statistics**
**4**
* Prerequisite(s): Within the past two years, MATH 1050 or MATH 1055 or MATH 1080 with a grade of C or higher or appropriate math placement test score.

Includes summarizing data, measures of central location, measures of variation, probability, mathematical expectation, probability distributions, sampling and sampling distributions, estimation, hypothesis testing, analysis of variance, regression analysis, and correlation. Canvas Course Mats of $66/Wiley applies.

**STAT 2050**
**Introduction to Statistical Methods**
**4**
* Prerequisite(s): Within the past two years, MATH 1050 or MATH 1055 or MATH 1080 with a grade of C or higher or appropriate math placement test score.

Is an introductory statistics course for statistics majors. Applies discrete and continuous probability distributions to real data sets. Teaches confidence intervals and hypothesis testing for both one and two sample problems. Covers introductory topics in experimental design, linear regression, nonparametric statistics, and categorical data analysis.

**STAT 2060**
**Introduction to Statistical Computing**
**1**
* Prerequisite(s) or Corequisite(s): STAT 2040 or STAT 2050 with a grade of C or higher

Familiarizes students with the SAS statistical software package. Teaches how to organize, input data, and be able to use reference books to figure out the appropriate way to run the analysis needed using SAS.

**STAT 3040**
**Probability and Statistics for Engineering and the Sciences**
**3**
* Prerequisite(s): (STAT 2040 or STAT 2050 and MATH 2210 each with a grade of C or higher) and University Advanced Standing

Introduces mathematical statistics for scientists and engineers. Includes counting techniques, random variables, expected values, joint and marginal distributions, point estimation, hypothesis testing, analysis of variance, and regression.

**STAT 4000**
**Applied Regression and Time Series WE**
**3**
* Prerequisite(s): STAT 2040 or STAT 2050 with a grade of C or higher and University Advanced Standing

Provides students in non-mathematical disciplines the ability to answer typical research questions for their senior projects or graduate-level research. Includes linear regression, transformations, variable selection techniques, logistic regression, indicator variables, multicollinearity, and ARIMA time series. Satisfies the VEE statistics requirement for the Society of Actuaries. Introduces standard software as a tool for statistical analysis.

**STAT 4100**
**Design of Experiment**
**3**
* Prerequisite(s): STAT 2040 or STAT 2050 with a grade of C or higher and University Advanced Standing

Introduces the design and analysis of randomized comparative experiments. Includes single factor ANOVAs, randomized block designs, latin squares, factorial designs, and nested and split plot designs. Covers mixed models including random effects and computation of expected mean squares to form appropriate F-ratios. Uses SAS statistical program software to perform statistical analysis.

**STAT 4200**
**Survey Sampling**
**3**
* Prerequisite(s): STAT 2040 or STAT 2050 with a grade of C or higher and University Advanced Standing

Introduces survey sampling including simple random sampling, stratified random sampling, systematic and cluster sampling. Discusses ratio and difference estimators, weighting for non-responses, eliminating sources of bias and designing the questionnaire.

**STAT 4300**
**Stochastic Processes**
**3**
* Prerequisite(s): STAT 3040 or STAT 4710 with a grade of C or higher and University Advanced Standing

Teaches how to perform statistical inference on Markov chains, including classifying states, computing mean and variance of recurrence times, and investigating long-run limiting behavior to model physical systems uses the Poisson process. Teaches how to calculate and analyze queuing characteristics of each of the popular queuing models.

**STAT 4400**
**Multivariate Analysis WE**
**3**
* Prerequisite(s): MATH 2270 and STAT 4710, both with a grade of C or higher, and University Advanced Standing

Introduces multivariate data analysis. Covers inference on data arising from the multivariate normal distribution using MANOVA, principal component analysis, factor analysis, canonical correlation analysis, discriminant analysis, and cluster analysis. Uses statistical software throughout.

**STAT 4500**
**Nonparametric Statistics**
**3**
* Prerequisite(s): STAT 2040 or STAT 2050 with a grade of C or higher and University Advanced Standing

Introduces nonparametric statistical procedures to apply in situations when parametric statistics (usually based on normality) are not appropriate. Covers types of nonparametric analyses that includes one and two sample hypothesis tests, goodness-of-fit tests, contingency tables, block designs, and regression analysis.

**STAT 4600**
**Statistical Process Control**
**3**
* Prerequisite(s): STAT 2040 or STAT 2050 with a grade of C or higher and University Advanced Standing

Presents the theory and methods of quality monitoring including process capability, control charts, acceptance sampling, quality engineering, and quality design.

**STAT 4710**
**Mathematical Statistics-Probability and Statistics**
**3**
* Prerequisite(s): STAT 2040 or STAT 2050 with a grade of C or higher and University Advanced Standing
* Prerequisite(s) or Corequisite(s): MATH 2210 or MATH 221H

Introduces mathematical statistics including random variables, set theory, transformations, expectation, joint and marginal distributions, moment generating functions, and order statistics.

**STAT 4720**
**Mathematical Statistics: Statistical Inference**
**3**
* Prerequisite(s): STAT 4710 with a grade of C or higher and University Advanced Standing

Is a continuation of STAT 4710. Includes estimation, sufficiency, completeness, hypothesis testing, statistical inference with the normal distribution, and Bayesian statistics.

**STAT 6010**
**Theory of Statistics I**
**3**
* Prerequisite(s): Matriculation into the Mathematics Education, M.S. program or Matriculation into the Mathematics Graduate Certificate program, or approval of graduate program director

Covers probability theory, random variables, functions of random variables, probability distributions and their characteristics, transformations of random variables, Pearson's correlation coefficient, and bivariate normal distribution and regression.

**STAT 6020**
**Theory of Statistics II**
**3**
* Prerequisite(s): STAT 6010 with C or better

Emphasizes theoretical statistical inference. Includes concept sufficiency, theory of estimation, testing of statistical hypothesis, the Neyman-Pearson lemma, Bayesian inference, sequential testing, and large sample theory for inference.

# Substance Use Disorder Counsel (SUDC)

**SUDC 3430**
**Psychopharmacology for the Substance Use Disorder Counseling Field**
**3**
* Prerequisite(s): Admission to the UVU SUDC program and University Advanced Standing

Addresses basic principles of nervous system function with emphasis on communication between nerve cells. Focuses on therapeutic drugs as well as drugs of abuse to include mechanisms of action and behavioral effects. Includes content on dynamics of addiction.

**SUDC 3470**
**Dynamics of Addiction**
**3**
* Prerequisite(s): Admission to the UVU SUDC program and University Advanced Standing

Explores processes contributing to development and maintenance of addiction. Addresses internal (genetics, motivation) and external (family dynamics, peer pressure) contributors. Includes issues related to drug policy, costs of addiction, and prevention/ treatment of drug addiction.

**SUDC 4300**
**Introduction to Substance Use Disorder Counseling**
**3**
* Prerequisite(s): Admission to the UVU SUDC program and University Advanced Standing

Surveys concepts and practices of major therapeutic systems, with a focus on substance use disorder counseling. Introduces students to the major psychotherapeutic models of both individual and group therapy. Addresses basic counseling issues including ethics and professionalism. Develops skills in relationship development, interviewing, initial assessment and intake procedures.

**SUDC 4400**
**Advanced Substance Use Disorder Counseling**
**3**
* Prerequisite(s): Admission to the UVU SUDC Program, completion of SUDC 4300 with a C- grade or higher, and University Advanced Standing

Expands concepts and practices of major therapeutic systems, with a focus on advanced substance use disorder counseling. Continues coverage of major psychotherapeutic models of both individual and group therapy. Elaborates on basic counseling issues including ethics and professionalism. Continues to develop skills in relationship development, interviewing, initial assessment, and intake procedures.

**SUDC 4710**
**Introduction to Professional Development**
**2**
* Prerequisite(s): Admission to the UVU SUDC program and University Advanced Standing

Defines the scope of practice and legal and ethical obligations of substance abuse counselors. Examines the knowledge, skills, attitudes, legal obligations, and limitations of practice of professional substance abuse counselors. Introduces the 12 core functions.

**SUDC 4720**
**Advanced Professional Development**
**3**
* Prerequisite(s): Admission to the UVU SUDC program, completion of SUDC 4710 with a C- grade or higher, and University Advanced Standing

Expands on professional issues in Substance Use Disorder Counseling. Focuses on the 12 core functions of substance abuse, ethics, theories of substance abuse, and theory and practice of individual and group counseling.

**SUDC 481R**
**Internship**
**1 to 8**
* Prerequisite(s): Admission to the UVU SUDC program, completion of SUDC 4710 with a C- grade or higher, instructor approval, and University Advanced Standing

Provides practical and research experience in the substance use disorder counseling field with a focus on the 12 core functions of substance use disorder counseling. Supervised by agency representative. Internships must be approved by the UVU SUDC program and written contracts must be signed. Requires students pursuing the SUDC license to complete a minimum of 200 hours of field experience. Requires students pursuing the ASUDC license to complete a minimum of 350 hours of field experience. May be repeated for a maximum of 8 hours toward graduation.

# Land Surveying (SURV)

**SURV 1020**
**Introduction to Surveying and Mapping WE**
**1**

Provides an orientation to the field of Surveying and Mapping including Boundary Surveying, Geodesy, Forensic Surveying, Construction Surveying, Geographic Information Systems (GIS), and other types of surveys. Involves presentations by community/industry professionals encompassing the surveying and mapping occupations. Covers college success principles and practices for the Surveying and Mapping program. Lab access fee of $45 for computers applies.

**SURV 1030**
**Fundamentals of Geodesy and Control Surveys**
**3**

Explores the science of geodesy or the size and shape of the earth. Involves Global Positioning Systems theory for computing a position on the earth using three-dimensional coordinate systems, reference coordinate systems, state plane coordinates, transformations, geoid datums, orthometric heights and leveling. Introduces basic properties and characteristics of the most common map projections. Explains principles and theories used to establish control surveys and survey networks based on geodesy. Introduces traverse, triangulation, and elevation adjustment computations along with random and systemic errors in measurement. Offers field application assignments of typical survey control networks using GPS and Total Stations to collect GPS data. Includes post processing coordinate transformation, creation, and report generation using the NGS OPUS system. Requires verifiable demonstration of field skills and techniques. Lab access fee of $45 applies.

**SURV 1220**
**Remote Sensing and Photogrammetry**
**3**
* Prerequisite(s): MAT 1010 or appropriate math placement score

Introduces and describes digital imagery, aerial triangulation, Remote Sensing and their history. Covers principles of Remote Sensing and the integration of Remote Sensing with Geographic Information Systems (GIS). Teaches a fundamental knowledge of aerial photography, photogrammetry, multispectral, Hyperspectral, Thermal, RADAR, LiDAR image analysis. Identifies various equipment and instrumentation used in producing Remote Sensing products. Describes image preprocessing and image enhancements as well as differentiating and classifying various accuracy assessment techniques. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**SURV 1340**
**Fundamentals of Boundary Law**
**3**

Explains the fundamental responsibilities of a land surveyor in recognizing, locating and creating land boundaries, including sequential and simultaneous conveyances, easements and reversions, riparian and littoral rights. Presents basic rules of evidence. Provides exposure to principles and procedures used to establish new boundaries and locate existing boundaries.

**SURV 2010**
**Land History of America**
**3**

Discusses how, what, and why certain countries, events, and individuals have significantly impacted the history of the lands of America. Describes how the contributions of the various inventions, instruments, individuals, conditions, and events impacted the lands of America. Identifies how current land conditions, policies, and laws in the State of Utah have been impacted by Utah land history. Lab access fee of $45 for computers applies.

**SURV 2030**
**Geodesy**
**3**
* Prerequisite(s): EGDT 2400, MATH 1060 or EGDT 1600 and 1610 or appropriate math placement score

Examines the science of geodesy. Includes size and shape of the earth, spherical and ellipsoidal geometry, the celestial sphere, and astronomical trigonometry. Involves Global Positioning Systems theory for calculating position on the earth using three-dimensional coordinate systems, reference coordinate systems, state plane coordinates, transformations, spheriod, ellisoid, geoid datums, celestial sphere, orthometric heights and leveling. Covers basic properties and characteristics of the most common map projections with emphasis on the projections used in State Plane Coordinates such as Lambert Conformal, Universal Transverse Mercator (UTM). Exposes the student to survey applications of practical astronomy including time systems, astronomical azimuth, and Solar/Polaris observations and calculations. Lab access fee of $45 applies.

**SURV 2100**
**Mapping From Field to Finish**
**3**
* Prerequisite(s): EGDT 1400, EGDT 1040, GIS 2640

Teaches how to identify, operate, and maintain common instrumentation used to collect field data including GPS, Total Stations, and Drones. Integrates survey field data, Geographic Information Systems (GIS) data, and Computer Aided Drafting (CAD) data to develop static and dynamic maps and plans often used by public and private entities. Demonstrates best practice field and office procedures and techniques commonly used by federal, state, and local governments and private industry. Explains potential field safety considerations, problems, and issues, as well as the development of a safety plan. Includes written and oral presentations. Lab access fee of $45 applies.

**SURV 2310**
**Surveying US Public Lands**
**3**
* Prerequisite(s): EGDT 1400, MATH 1060 or EGDT 1600 and 1610 or appropriate math placement score

Studies U.S. Public Land Survey System (PLSS) as described in the current official Department of the Interior-Bureau of Land Management (BLM) Manual of Instructions for Surveying Public Lands with emphasis on federal, state, and other applicable laws, evidence, resurveys, and subdivision of sections. Covers a detailed study of general and special instructions, irregularities in subdivisions, lost and obliterated corners, single and double proportion methods, monumentation, riparian boundary laws and rights, hiatuses, mineral surveys, and official survey documents. Introduces Spanish and Mexican land grants, as well as state and national boundaries. Lab access fee of $45 for computers applies.

**SURV 2320**
**Property Descriptions and Public Land Records**
**3**
* Prerequisite(s): (ENGL 1010 or ENGH 1005) and EGDT 1400

Involves analysis, interpretation, and writing of legal descriptions with proper form, controlling elements, metes-and-bounds, sectionalized land descriptions, easements, and rights-of-way. Discusses different types of descriptions, junior-senior rights in descriptions, latent & patent ambiguities, basis of bearing and interpretation, easements, and reversions. Applies practical exercises and case studies. Studies the responsibilities of the professional land surveyor regarding due diligence in searching public land records and performing applicable legal research. Examines public records and recording laws. Emphasizes title search to patent and includes zoning laws relating to land. Involves tour(s) of local record systems and/or public offices..

**SURV 3010**
**Measurement Analysis and Adjustments**
**4**
* Prerequisite(s): EGDT 2400, MATH 1060 or (EGDT 1600 and 1610) or appropriate math placement score; and University Advanced Standing

Examines observation theory, and observational error analysis. Discusses the theory of measurement errors, principles of error propagation, variance and covariance, and the theory of the least squares method. Studies variances and co-variances of observed, derived, and adjusted quantities; regression analysis, and polynomial curve fitting. Involves systems of linear equations, linearization, and iteration of nonlinear equations; adjustment validation using hypothesis testing; modeling of surveying problems using different techniques of least squares and also presents several methods used to fit survey data to mathematical and survey models. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**SURV 3030**
**Land Development Planning, Platting, and Mapping**
**3**
* Prerequisite(s): EGDT 1040, EGDT 1400, matriculation into the Geomatics BS degree, and University Advanced Standing

Discusses land use planning techniques for residential and commercial developments. Subdivisions, industrial parks, and commercial complexes are studied along with the associated governmental regulations, codes, rules, and approval processes and procedures. Requires a mock public presentation on course projects. Uses current surveying/engineering software to develop and plot drawings including; subdivision plats, records of survey, ALTA surveys, topographic site surveys, and other maps. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**SURV 3210**
**Advanced Photogrammetry**
**3**
* Prerequisite(s): EGDT 1400, MATH 1060, or (EGDT 1600 and 1610), or appropriate math placement score; and University Advanced Standing

Examines principals of photogrammetry as applied to surveying and mapping. Analyzes geometry of vertical and aerial photographs, stereoscopic parallax, geometry of tilted photographs, and stereoplotter mapping. Discusses close-range photographic analysis, planimetric and topographic maps, flight planning, digital photogrammetry, aerial cameras and camera calibration. Involves the theory and techniques of photo orientation, digital imagery, and aerial triangulation. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**SURV 3220**
**Control Surveys**
**3**
* Prerequisite(s): SURV 2030, SURV 3010, matriculation into the Geomatics BS degree, and University Advanced Standing

Applies principles and theories presented in prerequisite courses and moves the student to an advanced applications level. Studies the establishment of control surveys and survey networks. Reviews compass rule adjustment computation, matrix methods and least squares adjustment methods, random and systemic errors in measuring, and error propagation. Offers field applications of Radial and GPS surveying systems: static, kinematic and RTK procedures, data collection, post processing coordinate transformation, creation, and report generation. Teaches practical applications of network adjustment, control surveys, triangulation, and precision traverses with precise elevation control. Requires demonstration of field skills and techniques. Software fee of $18 applies. Lab access fee of $45 for computers applies.

**SURV 3230**
**Construction and Route Surveys**
**3**
* Prerequisite(s): EGDT 2400, MATH 1060 or EGDT 1600 and 1610, or appropriate math placement score; and University Advanced Standing

Applies principles and theories presented in prerequisite courses. Develops computations, standard practices and practical applications for common construction and route surveys. Includes survey staking of pipes, curbs, streets, parking lots, buildings, and other typical land development and infrastructure project elements. Develops volume and area calculations. Requires computer derived solutions and applications from plans and specifications using modern data collection and coordinate geometry (COGO) computer software. Lab access fee of $45 for computers applies. Software fee of $18 applies.

**SURV 3340**
**Boundary Law**
**3**
* Prerequisite(s): Matriculation into the Geomatics BS degree required and University Advanced Standing

Studies the responsibilities of the land boundary surveyor in protecting rights, title, and interest of the land; riparian and littoral rights, bona-fide rights, boundary easements and reversions, conveyances; sequential and simultaneous. Presents principles and rules of evidence. Includes monuments and monumentation, boundary locations, and procedures used to establish new boundaries and locate existing boundaries. Lab access fee of $45 for computers applies.

**SURV 3400**
**Surveying Applications and Field Techniques III**
**3**
* Prerequisite(s): EGDT 2400, GIS 3600, and University Advanced Standing

Focuses on state of the art surveying applications and field survey techniques often employed by surveyors for various field and office tasks some of which may include horizontal and vertical networks and traverses, route surveys, and topographic/site surveys, and machine control methods. Teaches the construction, care, maintenance, calibration, effective setup and observation methods used for the latest in surveying instrumentation often including; global positioning systems (GPS), total robotic stations, 3D laser scanners, automatic levels, modern data collectors, coordinate geometry (COGO), computer-aided drafting (CAD) software, Drone surveying, and other geospatial surveying systems and instruments. Lab access fee of $45 applies. Software fee of $25 applies.

**SURV 4340**
**Surveying Legal Principles**
**3**
* Prerequisite(s): SURV 2320, SURV 3340, ENGL 2310, matriculation into the Geomatics BS degree, and University Advanced Standing

Focuses on researching the body of law as it applies to the practice of surveying. Covers common law associated with the Statute of Frauds, Constructive Notice, and Surveyor/ Attorney interaction and roles. Discusses principles and concepts of dispute and conflict resolution as well as the specific role of the expert witness. Reviews the fact finder role of the surveyor in research/investigation techniques and sources while focusing on facts of a case and the applicable laws. Completers will work on case studies and prepare a final legal research paper. Involves tour(s) of a law library.

**SURV 4400**
**Surveying Applications and Field Techniques IV**
**3**
* Prerequisite(s): SURV 3400 and University Advanced Standing

Focuses on projects both lab/office and field work. Uses a mentor based teaching model to engage in several projects from inception to final deliverables. Requires students to make project decisions individually and as a team regarding each aspect of the various assigned projects. Requires each team member to demonstrate their own ability to perform all tasks required to complete the assigned projects within a given time frame resulting in deliverables that meet a pre-professional level of competency. Lab access fee of $45 applies. Software fee of $25 applies.

**SURV 4500**
**Professional Services Practicum**
**3**
* Prerequisite(s): University Advanced Standing

Examines the planning, organizing, and application of field and office practices, and develops a practical business plan including policies and procedures associated with a typical professional services firm providing civil engineering, architectural, and surveying services to the public and private sector. Reviews and applies a myriad management principles and functions including: operations, financial, marketing, human resource, project, and risk management. Exposes the student to the functions of typical financial software. Explores business concepts specific to professional services; pricing, fees, bidding, proposals, contracts, and professional liabilities. Involves developing a business plan for a professional services firm. Lab access fee of $45 for computers applies.

**SURV 451R**
**Surveying and Mapping Lecture Series**
**.5 to 2**
* Prerequisite(s): University Advanced Standing

Consists of lectures presented by guest speakers or faculty on various topics in Surveying and Mapping including but not limited to: land surveying, mapping, remote sensing, geodesy, legal issues, photogrammetry, and various new and emerging technologies. May be repeated for a maximum of 2 credits toward graduation.

**SURV 455G**
**Global Professional Ethics and Liabilities**
**3**
* Prerequisite(s): PHIL 2050 and University Advanced Standing

Teaches the code of ethics adopted by the various professional services state and national organizations and/or associations. Explains meaning and attributes of professionalism along with the ethical, moral, and social responsibilities of professional engineers, architects, and surveyors. Integrates laws for practicing as a professional service with professional ethics as well as the roles of multi-culturalism and globalization. Includes model standards (international, national, and state), professional liability cases, safety, risks, professional client relationships, bribery, global engagement, contracts, and intellectual property. Involves lecture, readings, case studies, and other media.

**SURV 481R**
**Surveying and Mapping Internship**
**1 to 8**
* Prerequisite(s): Junior or Senior Standing, departmental written approval, matriculation into the Surveying and Mapping BS degree, and University Advanced Standing

Provides opportunities to apply classroom theory and principles to actual on-the-job work experience, on a paid or non-paid basis, in the field of Surveying and Mapping. Emphasizes the establishment of goals, learning objectives, and expected outcomes with their Faculty Sponsor at the beginning of the internship and/or semester. Involves the submittal of a comprehensive written report at the end of the semester consisting of an evaluation of original goals and objectives and reflects on the achieved outcomes gained from the work experience. May be repeated for a maximum of 8 credits toward graduation. May be graded credit/no credit.

**SURV 490R**
**Professional Topics in Surveying and Mapping**
**2 to 4**
* Prerequisite(s): University Advanced Standing

Studies a chosen topic in Surveying and Mapping. May include research, experimentation, analysis, and reporting. May be taken more than once for different topics and for a maximum of 9 credits toward graduation.

**SURV 4930**
**Senior Surveying and Mapping Capstone WE**
**4**
* Prerequisite(s): University Advanced Standing, Senior Standing

Provides an opportunity for a senior Surveying and Mapping student to participate in a significant and current research project which may advance the field of Surveying and/or Mapping. Includes independent study and laboratory/field work as necessary and must be approved and supervised by assigned faculty and technical mentors. Culminates in the preparation and presentation of a written paper describing the results of the research and/or completed project to project stakeholders, interested students, faculty, administration, the professional community, or the broader general audience. Lab access fee of $45 applies. Software fee of $25 applies.

# Social Work (SW)

**SW 1010**
**Introduction to Social Work**
**3**

Introduces social work theory and practice. Examines the relationship between policy and practice in the context of nine major fields of social work. Considers challenges faced by today's practitioners. Explores current career opportunities in the field.

**SW 2100**
**Human Behavior and the Social Environment I**
**3**
* Prerequisite(s): Admission into the BSW program

Presents major theoretical concepts about human development and environmental factors influencing development from the social and behavioral sciences and their applications to micro, mezzo, and macro social work practice. Focuses on the first half of the life cycle, the prenatal period through adolescence. The first in a two-course human behavior and the social environment sequence.

**SW 275R**
**Survey of Current Topics**
**3**
* Prerequisite(s): (ANTH 101G or PSY 1010 or SOC 1010 or SW 1010) and ENGL 1010 or ENGH 1005

Presents selected topic in Social Work and will vary each semester. Approaches subjects from a cross-disciplinary perspective. Requires a project demonstrating competency in the specific topic. May be repeated for nine credits toward graduation.

**SW 3000 (Cross-listed with: FAMS 3000)**
**Social Work Practice I**
**3**
* Prerequisite(s): Admission to the BSW program or declared major in Family Science and University Advanced Standing

Introduces the basic knowledge, values, and skills needed for generalist social work practice. Focuses on working with individuals using the planned change process within the strengths perspective. Assists students in understanding the social and environmental conditions that negatively affect clients and empowering clients to take steps to enhance their own well-being. Provides content on the evaluation of social work practice.

**SW 3100**
**Social Work Practice II**
**3**
* Prerequisite(s): SW 3000, Admission to the BSW program, and University Advanced Standing

Focuses on generalist social work practice with emphasis on small groups. Uses the planned change process to assist oppressed groups within the values and ethics of the profession. Includes content on evaluation of practice.

**SW 3200**
**Social Work Practice III**
**3**
* Prerequisite(s): SW 3000, SW 3100, Admission into the BSW program, and University Advanced Standing

Explores how generalist practice relates to the various levels of practice and how it particularly relates to macro practice. Emphasizes macro issues such as community organization and development, socio-cultural interactions, legislative matters, and other areas related to policy practice. Particular attention will be given to areas of practice that involve disenfranchised groups and how to promote social justice for these groups at the macro level.

**SW 3400**
**Human Behavior and the Social Environment II**
**3**
* Prerequisite(s): SW 2100, Admission into the BSW program, and University Advanced Standing

Presents major theoretical concepts about human development and environmental factors influencing development from the social and behavioral sciences and their applications to micro, mezzo, and macro social work practice. Focuses on the second half of the lifecycle, young adulthood through older adulthood.

**SW 3500**
**Social Welfare Policies and Services**
**3**
* Prerequisite(s): Admission into the BSW program and University Advanced Standing

Analyzes current social policy within the context of historical and contemporary factors that shape policy. Examines major social forces and institutions as they relate to and determine social policy emphasizing social welfare services in an industrialized society. Evaluates social welfare frameworks in light of the principles of social and economic justice. Identifies effect of social policy on generalist social work practice.

**SW 3510**
**International Social Work**
**3**
* Prerequisite(s): ENGL 2010 with a C+ grade or higher, SW 1010, and University Advanced Standing

Investigates ways in which micro and macro skills can be integrated via a social development model to address social welfare issues in international settings. Includes the development of interventions beginning at the community level and moving toward global as well as individual practice. Focuses on the enhancement of practice knowledge and skills in program design, development, implementation and evaluation. Addresses basic resources such as food, shelter, potable water and sanitation, as well as sustainable economic development, inter-ethnic conflict, global indebtedness, ethnoconscious organizational development, and empowerment/conscientization as a method of intervening in social challenges.

**SW 355G**
**Thanatology--Death and Dying**
**3**
* Prerequisite(s): (PSY 1010 or SW 1010) and (ENGL 2010 with a C+ grade or higher) and University Advanced Standing

Introduces students to the subject of thanatology. Reviews theories and research associated with death and dying. Examines death systems, cultural norms, taboos and rituals. Studies the health care system, public policy, laws, and customs. Addresses death from a developmental perspective. Explores life-threating illness, suicide, and end-of-life issues. Reviews grief and loss themes. Familiarizes students with vocabulary and explores related human service occupations such as bereavement counseling and hospice care. May be delivered hybrid.

**SW 3600**
**Ethics and Values in Social Work Practice**
**3**
* Prerequisite(s): Admission into the BSW program and University Advanced Standing

Acquaints students with the values of the field of social work and the Code of Ethics of the National Association of Social Workers and to help them begin to develop the ability to effectively deal with the ethical issues they will be confronted with in professional practice. Increases students awareness of new and emerging ethical issues and provide tools and methodologies for ethical decision-making. Addresses ethical dilemmas involving conflict between personal values, agency guidelines, professional standards, and cultural differences. Includes discussion of models for ethical decision-making, the NASW Code of Ethics, as well as the codes of ethics of other human services professional organizations.

**SW 371G**
**Diversity Issues in Social Work Practice**
**3**
* Prerequisite(s): Admission into the BSW program and University Advanced Standing

Increases understanding and appreciation of diverse client populations, the nature of cultural identity, group membership and differential access to resources, and strategies to combat discrimination, oppression and economic deprivation and to promote social and economic justice. Examines socio-identities including: race, ethnicity, religion, gender, social class, sexual orientation, abilities, and age. Includes discussion of oppressive and discriminatory experiences as well as resilience and strengths encountered by different groups. Explores similarities, differences, and controversies between diverse populations in the context of their personal values and professional policy and practice.

**SW 3750**
**Child Abuse Neglect and Domestic Violence**
**3**
* Prerequisite(s): SW 1010 and University Advanced Standing

Reviews definitions of child abuse and neglect and other forms of domestic violence using a multidisciplinary perspective. Explores theories explaining the causes of abuse/neglect and domestic violence. Identifies indicators of abuse/neglect and aids students in making assessments and intervening in situations of abuse/neglect and domestic violence. Educates students in mandatory reporting laws and the workings of the child welfare system in efforts to intervene and prevent abuse/neglect. Addresses current policy issues pertinent to child abuse/neglect and domestic violence and identifies effective methods in which students can advocate for social change within the social and child welfare system.

**SW 3760**
**Post Traumatic Growth--Beyond Survival**
**3**
* Prerequisite(s): PSY 3110 and BESC 3020 or equivalent, and University Advanced Standing

Examines post-traumatic growth from an ecological perspective and across various at-risk populations. Emphasizes traditional and non-traditional approaches in dealing with physically and psychologically traumatic issues. Explores the characteristics of trauma from a strengths-based perspective and how to best provide services to people that have experienced traumatic events at the micro, mezzo, and macro levels. Considers events within their ecological context. Discusses sensitivity to a variety of circumstances and cultural patterns.

**SW 3860**
**Interviewing Skills**
**3**
* Prerequisite(s): ENGL 2010 with C+ or better and University Advanced Standing; PSY 2300 with a C- grade or higher recommended

Develops knowledge of and skill in clinical interviewing across cultures. Familiarizes students with a broad range of clinical interviewing skills. Uses class discussions, video clips of master clinicians, instructor modeling, in-class practice, videotaped role plays, and class and instructor evaluations of role plays.

**SW 4450**
**Introduction to Child Welfare I**
**3**
* Prerequisite(s): SW 1010 and (ENGL 2010 with C+ or higher) and University Advanced Standing

Prepares students to be effective interventionists in family systems where children are at risk of abuse, neglect, or dependency. Examines four-part Child Welfare CORE Competency-based series. Provides students with the basic knowledge, skills, and abilities necessary for successful performance as child welfare workers.

**SW 4460**
**Introduction to Child Welfare II**
**3**
* Prerequisite(s): Admitted to BS in Social Work, SW 1010, (ENGL 2010 with C+ or higher) and University Advanced Standing

Addresses the basic effects of abuse, neglect, and separation on child development. Focuses on the knowledge and skills required for child welfare workers to provide services related to child placement, including risk assessment, attachment, separation, loss, grief, family intervention, and reunification and reintegration services. Teaches strategies to reduce trauma and promote effective child placement. Explains the foster-care system, including how to work with foster caregivers.

**SW 4500**
**Crisis Intervention**
**3**
* Prerequisite(s): [SW 1010 and (ENGL 2010 with a minimum C+ grade) or instructor approval] and University Advanced Standing

Introduces the student to the philosophy, knowledge, techniques, and skills of crisis intervention. Provides opportunities through projects, written assignments, role playing, and first-hand interaction with professional crisis workers by which the students may deepen their understanding of this demanding method of social work practice.

**SW 4600**
**The DSM of Mental Disorders**
**3**
* Prerequisite(s): SW 1010, PSY 2300, ENGL 2010 with a C+ grade or higher, and University Advanced Standing

Provides an overview of the Diagnostic and Statistical Manual of mental disorders (DSM) based on clinical diagnosis. Teaches DSM based clinical diagnosis. Teaches DSM diagnoses including diagnostic criteria, prevalence rates, gender and cultural differences in prevalence and symptomatology, disease course, and differential diagnosis. Uses class discussions, videotapes of individuals with different DSM diagnoses, and case scenarios.

**SW 4700**
**Case Management in Social Work Practice**
**3**
* Prerequisite(s): SW 1010 and University Advanced Standing

Provides the conceptual foundation for providing case management services and crisis intervention to individuals in various population groups.

**SW 475R**
**Current Topics in Social Work**
**3**
* Prerequisite(s): SW 1010 and ENGL 2010 and University Advanced Standing

Presents selected topic in Social Work and will vary each semester. Requires a project demonstrating competency in the specific topic. May be repeated with different topics for 9 credits toward graduation.

**SW 4800**
**Integrated Seminar I**
**1**
* Prerequisite(s): SW 3000, admission to the BSW program, and University Advanced Standing
* Corequisite(s): SW 481R

Provides a generalist base for social work practice that involves an on-site, supervised field agency practicum and a weekly seminar. Assists the student to integrate classroom learning with learning that takes place in the on-site field practicum. First of two courses in field practicum sequence. Graded Credit/No Credit.

**SW 481R**
**Field Placement**
**1 to 8**
* Prerequisite(s): Admission to the BSW program and University Advanced Standing
* Corequisite(s): SW 4800 or SW 4850

Provides a generalist base for social work practice that involves an on-site, supervised field agency practicum. Assists the student to integrate classroom learning with learning that takes place in the on-site field practicum. Performs a minimum of 225 hours of supervised social work in a local agency setting. May be repeated for a maximum of 10 credits toward graduation. May be graded credit/no credit. Course fee of $84 applies for practical experience applies.

**SW 4850**
**Integrated Seminar II**
**1**
* Prerequisite(s): Senior Standing in the BSW program, SW 4800 with B- or higher, and University Advanced Standing
* Corequisite(s): SW 481R

Provides a generalist base for social work practice that involves an on-site, supervised field agency practicum and a weekly seminar. Assists the student to integrate classroom learning with learning that takes place in the on-site field practicum. Provides an integrative classroom experience for students with a clinical interest currently working in related jobs or volunteer experiences in human service agencies or work sites. Second of two courses in the field practicum sequence.

**SW 489R**
**Advanced Research in Social Work**
**1 to 3**
* Prerequisite(s): (SW 1010 and BESC 3020 with a C grade or higher); ENGL 2010 with C+ grade or higher; University Advanced Standing; Instructor approval

Expands research experience by either (1) significantly assisting on a faculty member's research project or (2) carrying out an independent research project of the student's design under faculty mentorship. Requires individual initiative and responsibility. Includes limited formal instruction. May include literature searches, completion of the IRB application process, materials creation, data collection, data analysis, writing a publishable paper, preparing a poster, preparing an oral presentation, or other options as approved by the instructor. May be repeated for a maximum of 6 credits toward graduation.

**SW 490R**
**Independent Studies**
**1 to 3**
* Prerequisite(s): Instructor approval, department chair approval, and University Advanced Standing; for Behavioral Science Bachelor Degree students only

For qualified students who wish to undertake a well-defined project or directed study related to an area of special interest. Requires individual initiative and responsibility. Includes limited formal instruction and faculty supervision. Projects may include writing a publishable paper, passing a competency exam, producing an annotated bibliography, oral presentation, or other options as approved by the instructor. May be repeated for a maximum of 6 credits.

**SW 6000**
**Social Work Practice I-- Individuals and Families**
**3**
* Prerequisite(s): Admission to the MSW program

Provides an overview of clinical social work and the practice, knowledge, and skills needed to effectively treat clients. Covers topics such as interpersonal and interviewing skills, the generalist planned change process, strengths perspective utilization, values and ethics, and cultural competence.

**SW 6020**
**Social Work Practice II-Groups**
**3**
* Prerequisite(s): SW 6000

Introduces the theory and practice of social work in groups. Prepares students for practice by helping them develop the knowledge, values, and skills needed for generalist social work practice with groups. Utilizes evidence-based practice in developing group leadership skills.

**SW 6030**
**Social Work Practice III-Advanced Practice with Individuals and Families**
**3**
* Prerequisite(s): SW 6000

Examines clinical approaches most often used with clients. Emphasizes the theoretical basis of treatment modalities and how to apply them in practice.

**SW 6050**
**Social Work Practice IV-Advanced Practice with Organizations and Communities**
**3**
* Prerequisite(s): SW 6300

Analyzes multiple approaches social workers use to influence groups, organizations, communities, and systems. Examines concepts, theories, and models of macro level practice and skills for addressing complex practice and organizational situations.

**SW 6200**
**Human Behavior and the Social Environment I**
**3**
* Prerequisite(s): Admission to the MSW Program

Presents biological and social science concepts and how they influence human behavior, particularly regarding social environments. Analyzes human behavior by understanding how people process information, what motivates them, how they respond to stress, and what conditions bring about successful change. Applies this information to properly assess the person, their environment, and how that environment has influenced their actions.

**SW 6210**
**Human Behavior and the Social Environment II**
**3**
* Prerequisite(s): Admission to the MSW Program

Explores biological and social science concepts and how they influence human behavior, particularly regarding social environments. Investigates varying social environment factors, such as culture, ethnicity, stress, adaptation, and gender. Examines biological, psychological, social, and spiritual theories to develop accuracy in assessments.

**SW 6300**
**Social Welfare Policy and Analysis**
**3**
* Prerequisite(s): Admission to the MSW program

Analyzes current social policy within the context of historical and contemporary factors. Examines major social forces and institutions as they relate to and determine social policy emphasizing social welfare services within current U.S. society. Evaluates social welfare frameworks in light of the principles of social and economic justice and how this impacts individual, group, and community well-being.

**SW 6320**
**Social Work Practice with Diverse Groups and Populations**
**3**
* Prerequisite(s): SW 6000

Emphasizes and evaluates the historical trends and policies around the oppression and marginalization of diverse groups and population in the U.S. Teaches culturally competent social work practice with individuals, families, organizations and communities.

**SW 6400**
**Social Work Research Methods**
**3**
* Prerequisite(s): Admission to the MSW Program

Addresses advanced quantitative and qualitative methods to prepare students for carrying out research in agencies. Includes critical analysis of scholarly literature and applying it in clinical practice. Explains the importance of both practice and program evaluation in a clinical setting.

**SW 6407**
**Advanced Social Work Ethics**
**3**
* Prerequisite(s): Admission to the MSW Program

Provides an overview of the NASW Code of Ethics. Emphasizes the application of the Code to social work practice situations among various client systems and populations. Addresses the relationships between the Code and the client's basic legal rights.

**SW 6490**
**MSW Advanced Standing Bridge Course**
**4**
* Prerequisite(s): Acceptance into the MSW Advanced Standing program

Supplements the knowledge, skills, and values foundation developed in participants' BSW programs. Reviews content learned at the baccalaureate level and material that will be helpful in preparing students for the concentration year of the MSW program. Prepares MSW students to transition from the foundation year to the advanced concentration courses. Addresses topics necessary for advanced MSW- level practice and to support effective and ethical micro- and macro-level interventions. Covers key content addressed in SW foundation courses within the BSW program. This course is open to Advanced Standing students only.

**SW 6491**
**MSW Advanced Standing Skills Course**
**4**
* Prerequisite(s): Acceptance into the MSW Advanced Standing program, SW 6490

Develops students' applied skills in Social Work practice. Integrates foundational social work approaches to practice, such as empowerment, strengths-based, and collaborative/person-centered skills. Assures that incoming Advanced Standing students have mastered foundational competencies in social-work practice skills with various types of human systems. Prepares MSW students to transition from the foundation year to the advanced concentration courses. Open to Advanced Standing students only.

**SW 6500**
**Addictions**
**3**
* Prerequisite(s): SW 6000

Teaches how to reduce or eliminate the detrimental impact of substance use disorders at multiple levels, such as families, groups, organizations, and communities. Teaches the knowledge and skills that assist in reducing and eliminating addiction. Enables students to identify, assess, and evaluate those struggling with substance abuse and dependency throughout the life span and how to intervene when necessary.

**SW 6530**
**Psychopharmacology**
**3**
* Prerequisite(s): Admission to MSW program

Addresses principles of nervous system function with emphasis on communication between nerve cells. Focuses on therapeutic drugs as well as drugs of abuse to include mechanisms of action and behavioral effects. Teaches content on dynamics of addiction within a pharmacological context.

**SW 6610**
**Spirituality in Social Work**
**3**
* Prerequisite(s): Admission to MSW program

Addresses a theistic model for social work clinical practice. Examines various religious and spiritual world views and their application to counseling and psychotherapy. Emphasizes the need for increased sensitivity and competence in working with clients for whom faith-based interventions are desired.

**SW 6620**
**Family Therapy**
**3**
* Prerequisite(s): SW 6000

Introduces a skills-based course in the field of family therapy. Trains prospective clinicians to work with families from a systems focus. Reviews the history of family therapy and the predominant models of the field. Emphasizes ethical and cultural issues in the realm of family therapy.

**SW 6630**
**Mental Health Diagnosis**
**3**
* Prerequisite(s): Admission to MSW program

Explains the major issues in the area of psychopathology and diagnosis of mental disorders from a bio-psycho-social perspective. Covers influences on the incidence, manifestation, and course of the most commonly presented mental disorders and the differential effect of these factors on diverse populations. Examines mental illness through the experience of family members and significant others.

**SW 6640**
**Crisis Intervention**
**3**
* Prerequisite(s): Admission to MSW program

Introduces the philosophy, knowledge, techniques, and skills of crisis intervention. Provides opportunities through projects, written assignments, role playing, and first-hand interaction with professional crisis workers to deepen understanding of this demanding method of social work practice.

**SW 6650**
**Couples Therapy**
**3**
* Prerequisite(s): SW 6000

Trains prospective clinicians in working with couples in a therapeutic capacity. Teaches the basic skills, dominant models, and unique challenges of couples therapy. Examines essential skills and techniques in working with dating, cohabiting, premarital, and marital couples. Examines unique situations of therapy such as addictions, affairs, and sexual issues. Addresses issues of diversity in couples therapy.

**SW 6660**
**Family Violence Across the Lifespan**
**3**
* Prerequisite(s): Admission to the MSW program

Examines interpersonal violence within the context of familial role and across at-risk populations. Emphasizes a variety of family systems and the impact that issues such as divorce, substance abuse, child abuse, and incarceration have on the various units in the family system. Considers issues and builds practice skills related to family support services, child maltreatment, and substitute care.

**SW 6670**
**Post Traumatic Growth--Practice and Clinical Considerations**
**3**
* Prerequisite(s): Admittance to the MSW Program

Examines post-traumatic growth across various at-risk populations. Considers several clinical and therapeutic issues in addition to other practice skills related to supportive services from a variety of theoretical frameworks that promote individual, familial, and community growth. Discusses diagnostic criteria and treatment differences in post-traumatic stress and post-traumatic growth. Explores events within their ecological context and works to build sensitivity to a variety of circumstances and cultural patterns. Emphasizes traditional as well as non-traditional approaches in dealing with physically and psychologically traumatic issues such as cancer, interpersonal violence, divorce, child abuse, etc. Discusses characteristics of trauma from a strengths-based perspective and how to best provide services to people that have experienced traumatic events at the micro, mezzo, and macro levels.

**SW 6700**
**Advanced Practice with Communities of Color and Other Diverse Populations**
**3**
* Prerequisite(s): SW 6000, SW 6320

Explains diversity and difference, power and privilege, and oppression. Encourages self-examination within these systems as an essential foundation for culturally competent social work practice. Introduces issues related to service utilization within communities of color and providing effective interventions for historically under-served populations.

**SW 679R**
**Special Topics in Social Work Practice**
**3**
* Prerequisite(s): Admission into the MSW Program, or approval from Program Director.

Presents selected topics in the field of social work at the master's level that may vary by section and/or semester. Provides students in-depth education and training in specialized topics within the field of social work practice. May be repeated with different topics for up to 9 credits toward graduation requirements.

**SW 6810**
**Integrative Seminar I**
**1**
* Prerequisite(s): Admission to the MSW program
* Corequisite(s): SW 6910

Integrates and applies the knowledge and skills obtained from coursework to a social service agency setting. Examines practice experiences such as experiences with people of different cultures/races/ages, ethical dilemmas, emotional and cognitive responses to agency experience, etc. Processes issues that may arise during students' field experiences.

**SW 6820**
**Integrative Seminar II**
**1**
* Prerequisite(s): SW 6810
* Corequisite(s): SW 6920

Builds on Integrated Seminar I. Integrates and applies the knowledge and skills obtained from coursework to a social service agency setting. Examines practice experiences such as experiences with people of different cultures/races/ages, ethical dilemmas, emotional and cognitive responses to agency experience, etc. Processes issues that may arise during students' field experiences.

**SW 6830**
**Integrative Seminar III**
**1**
* Prerequisite(s): SW 6820
* Corequisite(s): SW 6930

Provides opportunities for integration of social work course work and field practicum experiences. Features in-depth analysis of specific social work competencies within the students' domains of practice. Teaches the domains of social work practice that include: assessment, interventions, program policies, and service delivery and leadership in the chosen practice area. Provides guidance in practicum and seminar.

**SW 6840**
**Integrative Seminar IV**
**1**
* Prerequisite(s): SW 6830
* Corequisite(s): SW 6940

Builds on Integrative Seminar III. Provides opportunities for integration of social work course work and field practicum experiences. Features in-depth analysis of specific social work competencies within the students' domains of practice. Teaches the domains of social work practice that include: assessment, interventions, program policies, and service delivery and leadership in the chosen practice area. Provides guidance in practicum and seminar.

**SW 6910**
**Foundation Field Practicum I**
**4**
* Prerequisite(s): Admission to the MSW program
* Corequisite(s): SW 6810

Offers engaged field education as the central form of instruction and learning to socialize students to become practitioners. Integrates social work theory with practice. Reinforces the purposes, values, and ethics of the social work profession. Fosters the integration of empirical and practice-based knowledge to promote the development of professional competence.

**SW 6920**
**Foundation Field Practicum II**
**4**
* Prerequisite(s): SW 6910
* Corequisite(s): SW 6820

Provides opportunity to apply classroom learning and to integrate theory with practice. Aligns with Council on Social Work Education standards for field education. Reinforces the purposes, values, and ethics of the social work profession. Promotes the development of professional competence.

**SW 6930**
**Advanced Field Practicum I**
**4**
* Prerequisite(s): Admission to the MSW program
* Corequisite(s): SW 6830

Provides agency-based field instruction for advanced learning and practice opportunities relevant to social work. Provides opportunity to integrate and apply advanced generalist practice theory within field experiences. Advances knowledge and skills in practice, research, and evaluation across multi-level systems. Combines field experience, traditional classroom, field supervision, online activities and assignments, and self-directed learning per the field practicum manual.

**SW 6940**
**Advanced Field Practicum II**
**4**
* Prerequisite(s): SW 6930
* Corequisite(s): SW 6840

Continues agency-based field instruction and classroom seminar for advanced learning and practice opportunities relevant to social work. Provides opportunity to integrate and apply advanced generalist practice theory within field experiences. Increases knowledge and skills in practice, research, and evaluation across multi-level systems. Combines field experience, traditional classroom, field supervision, online activities, assignments, and self-directed learning per the field practicum manual.

**SW 6945**
**Supplemental Field Practicum**
**1 to 4**
* Prerequisite(s): SW 6940 or departmental approval

Agency-based field instruction for advanced learning and practice opportunities relevant to social work. Provides opportunity to integrate and apply advanced generalist practice theory within field experiences. Increases knowledge and skills in practice, research, and evaluation across multi-level systems. Combines field experience, field supervision, and self-directed learning per the field practicum manual. May be repeated for a maximum of 4 credits toward graduation.

**SW 6950**
**MSW Capstone**
**2**
* Prerequisite(s): SW 6000, SW 6300, SW 6400

Synthesizes course work and field practicum into a final capstone project. Emphasizes readiness for graduate level employment through networking, developing a resume, practicing interviewing skills, and preparing for the advanced clinical social work exam.

# Technology Management (TECH)

**TECH 1000**
**Experiential Credit Portfolio Development and Assessment**
**2**
* Prerequisite(s) or Corequisite(s): TECH 110R

Introduces basic concepts, theories and principals of a professional portfolio to demonstrate prior learning experience. Includes the identification of prior professional experience, certifications, licenses, etc. to document professional competencies for assessment by a committee of appropriate faculty and technology professionals to determine experiential credit granting equivalences in courses TECH 110R. Introduces the value of continuous learning and the process of learning how to learn.

**TECH 1010** **PP**
**Understanding Technology**
**3**

Covers the principal technologies that are important and prevalent today and their associated science principles. Explores how technology applies to, affects, and interacts with various fields, environments and workplaces. Develops an appreciation for how technology evolves and what possible new and exciting technologies are on the horizon

**TECH 1050**
**Manufacturing Processes and Systems**
**3**

Covers a wide variety of manufacturing processes, including: casting, welding, sheet metal forming, machining, composites fabrication, injection molding, extrusion, thermoforming, rotational molding, and electronics fabrication. Covers understanding of manufacturing systems and all the components required to work together, including: the production system, ERP software system, quality system, business structure, supply chain, and delivery.

**TECH 110R**
**Technical Experiential Credit**
**1 to 8**
* Prerequisite(s): TECH 1000

Allows students to obtain technical experiential credit through an approved portfolio. Portfolio is developed and approved in TECH 1000. May be repeated for a maximum of 15 credits toward graduation.

**TECH 200G** **SS**
**Technology and Human Life**
**3**

Acquaints students with the major technologies affecting our culture and the global community, such as biotechnology, nanotechnology, information technology, and military technology. Places special emphasis on the moral, social, economic, legal, and political consequences of these technologies. Covers summary descriptions of various technologies, some of the major issues associated with them, and the underlying philosophical foundations of our encounters with them. May be delivered online.

**TECH 2010**
**Supervision in Technology**
**3**

Addresses employee motivation and the impact of the workplace environment (both physical and intangible). Presents various techniques of leadership and management (addressing different motivational theories and contemporary research on worker motivation). Teaches how to build and work in effective teams to inspire good performance and use conflict and negotiation effectively. Practices good communication skills both written and oral. Teaches how to understand the organizational structure, how to manage and assess performance, and how to be aware of opportunities and challenges when managing employees in a technological environment, including strategies for training and evaluation. May include hybrid or online delivery.

**TECH 2020**
**Operational and Product Safety Management**
**3**

Presents fundamentals of safety in the workplace including ergonomic, environmental, and other risk factors associated with new technology. Examines the role of technical managers through case studies and observation of local work places and businesses. Studies the impact of governmental agencies and regulations on workplace and product safety. Compares various communication and human factors techniques to prevent and mitigate human error.

**TECH 2050**
**Introduction to Quality Management**
**3**
* Prerequisite(s): STAT 1040, STAT 1045, or EGDT 1600 with a grade of C- or higher

Introduces quality management. Includes ISO 9000, application of Lean Six Sigma, continuous process/product improvement, basic statistical methods, performance measurements, cost of poor quality, employee empowerment, and global quality initiatives. Covers requirements for relevant professional certifications for career enhancement.

**TECH 281R**
**Internship in Technology**
**1 to 3**
* Prerequisite(s): Department Approval

Obtains work experience for lower-division students in their technical field. Provides supervised, practical, and professional experience. Demonstrates accountability regularly with a School of Technology and Computing coordinator. May be repeated for a maximum of 3 credits toward graduation. May be graded credit/no credit.

**TECH 290R**
**Current Topics in Technology**
**3**

Demonstrates current developments in technology fields and how they apply to business and industry processes. Prepares students to use contemporary technologies in their professions. May be repeated for a maximum of nine credits toward graduation. May be delivered hybrid.

**TECH 297R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Department approval

Requires individual initiative and responsibility. For qualified students who wish to undertake an independent project or directed study related to an area of technology or manufacturing. The topic must be approved by the instructor and the Department Chair. May be repeated for a maximum of 4 credits toward graduation.

**TECH 3000**
**Introduction to Technology Management**
**3**
* Prerequisite(s): University Advanced Standing

Addresses the special characteristics of managing and leading technology dependent organizations. Covers the leading influential technologies, technology's impact on organizational structure and the policy process, strategic technological planning, futures studies, leadership, global aspects of technology management, performance assessment, technology life cycles and financing, and some of the major ethical implications of managing technology dependent organizations. Canvas Course Mats $78/ McGraw applies

**TECH 3010**
**Creativity Innovation and Change Management**
**3**
* Prerequisite(s):ENGL 1010 or ENGH 1005, Sophomore Standing, and University Advanced Standing

Focuses on principles of creativity and innovation as they apply to technological enterprises. Covers theoretical and practical concepts of both creativity and innovation. Studies both concept and practice of structured methods of creative problem solving. Examines "Appreciative Inquiry" as an alternative management of change technique. Examines inventors and the invention process, including the patent process. Uses lecture, discussion, group projects, case studies, class activities, presentations, videos and guest lecturers.

**TECH 301R**
**Technology Lecture Series**
**1**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Presents lectures from external speakers in various technology related subjects. Requires a written reaction paper for most of the lectures. May be repeated for a maximum of 2 credits toward graduation.

**TECH 3400**
**Project Management WE**
**3**
* Prerequisite(s): University Advanced Standing

Covers the fundamental principles, processes, and techniques of project management. Includes a systems approach to planning, scheduling, and controlling projects. Focuses on effective processes for managing projects across multiple disciplines/industries and varying management structures. Introduces project management tools that can be used to guide and manage individual and multiple projects. This is a writing intensive course.

**TECH 3700**
**Materials Management**
**3**
* Prerequisite(s): TECH 3000 and ENGL 2010 and University Advanced Standing

Involves a comprehensive approach to purchasing, raw and finished goods inventories, and determining and managing capacity and workers. Includes Just-in-time, Kanban, scheduling and emerging technologies. Assists in preparing students for national certifications.

**TECH 3850**
**Quality Management in Technology**
**3**
* Prerequisite(s): [(TECH 3000 and (STAT 1040 or STAT 1045) or advisor approval] and University Advanced Standing

Involves a comprehensive approach to Quality Management related to technical professions. Covers Lean and Six Sigma approaches, continuous improvement/Kaizen, Voice of the Customer (VOC), Statistical Process Control (SPC), cost of poor quality, leadership, employee empowerment, teamwork, change management, and quality standards. Assists in preparing students for the relevant professional certifications for career enhancement.

**TECH 4000**
**Reliability Management**
**3**
* Prerequisite(s): TECH 3000, TECH 3850, (STAT 1040 or STAT 1045), and IM 2010 each with a grade of C- or higher and University Advanced Standing

Introduces reliability as a component of successful business strategies. Covers processes for design for reliability in the context of quality management and product development. Presents the most common tools and techniques used to test and interpret reliability data. Examines the role of managers and reliability engineers to ensure product reliability and safety. Uses a mix of case studies, student research, and current events to examine the business impact of reliability intechnical enterprises. Software fee of $15 applies.

**TECH 405G**
**Global Ethical and Professional Issues in Technology**
**3**
* Prerequisite(s): PHIL 2050 with a grade of C- or higher and University Advanced Standing

Examines professional, ethical, and cultural issues related to the leadership of technological organizations. Studies the impact of emerging technologies, conflicting values, multiculturalism, and globalization on management practices in the workplace. Reviews current ethical theory and professional codes of conduct with special emphasis on global and intercultural issues. Includes lectures, readings, case studies and other media. May be delivered online.

**TECH 4200**
**Technology Marketing and Customer Relationship Management**
**3**
* Prerequisite(s): TECH 3000 and IM 2010 both with the grade of C- or higher; and University Advanced Standing

Examines marketing theory and customer relationship management (CRM) theory, as well as the application of CRM technology in marketing, sales, and service operations. Includes exploration of CRM software. Covers the basic marketing processes, such as identification, acquisition, growth and retention of desired customers. Highlights the basics of how contemporary CRM software can help manage these processes.

**TECH 4400**
**Advanced Project Management**
**3**
* Prerequisite(s): TECH 3400 with a C- or higher; University Advanced Standing

Presents advanced tools and techniques which build on the concepts presented in introductory project management class. Covers principles for managing multiple projects. Studies best practices for project management. Introduces the activities of Program Management, Project Portfolio Management and Strategic Project Leadership and Management. Analyzes basic cost justification techniques for making economic decisions in technical organizations. May be delivered online.

**TECH 4420**
**Organization Information Technologies**
**3**
* Prerequisite(s): TECH 3000 and IM 2010 and (ACC 3000 or ACC 2020) all with a C- or higher; and University Advanced Standing

Introduces how information, and the management of that information, can affect the structure and operations of organizations. Covers technical and organizational foundations of information systems along with contemporary approaches to building, managing, and protecting information systems including hands-on work with a modern Enterprise Resource Planning (ERP) system. Emphasizes how information technology affects decision-making. Uses Excel as a decision support tool. Examines the ethical and legal issues raised by the capabilities of information technology. May be delivered online. Lab access fee of $45 for computers applies.

**TECH 481R**
**Internship**
**1 to 3**
* Prerequisite(s): TECH 3400, Technology Management Department Chair Approval, and University Advanced Standing

Provides opportunities to apply classroom theory while students work as employees in a job that relates to their careers. May be repeated for a maximum of 9 credits toward graduation. May be graded credit/no credit.

**TECH 489R**
**Undergraduate Research in Technology Management**
**1 to 3**
* Prerequisite(s): Department approval and University Advanced Standing

Provides the opportunity to conduct research under the mentorship of a faculty member. Practices the theoretical knowledge gained in prior major courses. Requires the creation of a significant intellectual or creative product that is characteristic of the Technology Management discipline and worthy of communication to a broader audience. May be repeated for a maximum of 3 credits toward graduation.

**TECH 490R**
**Current Topics in Technology Management**
**3**
* Prerequisite(s): (Senior Status or Instructor Approval) and University Advanced Standing

Designed to show developments in business and industry professions in the short- and mid-term future. Acquaints students with the newest technological developments in their fields. Prepares students for the changes that various technologies will bring their professions. May be repeated for a maximum of 9 credits toward graduation.

**TECH 4910**
**Senior Capstone Project WE**
**3**
* Prerequisite(s): TECH 3010, TECH 3400, and TECH 3850 each with a grade of C- or higher; Senior Status and University Advanced Standing.

Is for senior Technology Management majors. Provides a leadership transition from academic to applied/real-life work experience. Includes student, company liaison, and coordinator evaluation, on-site work visits, written assignments and oral presentations. Offers experience in establishing and accomplishing team objectives that improve their ability to add real value in their future employment. This is a writing intensive course.

**TECH 497R**
**Independent Study**
**1 to 3**
* Prerequisite(s): Technology Management Department Chair Approval and University Advanced Standing

Offers independent study as directed in reading or individual projects at the discretion and approval of the department chair. May be repeated for a maximum of 4 credits toward graduation.

**TECH 6000**
**Strategic Management of Technology and Innovation in Engineering**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Presents contemporary concepts and frameworks of strategic management and technological innovation. Develops competence in analyzing novel technologies and business strategies through the exposure to strategy frameworks and historical and contemporary cases. Explores the relationship between technological innovation and strategy in the context of technology-based business firms.

**TECH 6010**
**Engineering Law and Patents**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Explores legal topics relevant to engineering and technology managers. Focuses on intellectual property. Covers contracts, torts, labor law, property, and environmental law. Emphasizes legal principles necessary to provide engineers with the ability to recognize issues that are likely to arise in the engineering and technology management profession.

**TECH 6400**
**Six Sigma Project Management**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Presents a range of advanced topics on how to define, plan, and execute a project whether your goal is simple or complex. Emphasizes the necessary skills to lead process improvement, and learn systematic methods used to improve performance efficiencies and to reduce variations in business operations to achieve productivity and profitability gains.

**TECH 6420**
**Finance for Technical Systems**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Presents financial management and information systems concepts relevant to managing business firms. Develops ability to analyze and produce financial management information using information systems. Explores future trends at the intersection of financial management and technology.

**TECH 6430**
**Product Management Processes**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Presents contemporary product design and development concepts and frameworks. Develops competence in analyzing different categories of technological products as well as different product design and development processes. Explores future trends in managing technological product design and development.

**TECH 6450**
**Engineering Economics and Project Evaluation**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Presents concepts, methods, and tools of economic analysis and managerial decision-making from a cash flow perspective. Emphasizes the time value of money, present worth analysis, annual equivalent worth, rate of return, depreciation, and inflation analyses. Covers the evaluation of projects, and comparison and selection among alternatives addressed. Interprets general accounting principles and basic financial analysis.

**TECH 6500**
**Resource Management in Engineering and Technology**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Enhances the ability to analyze and successfully implement resource management techniques in areas of asset, information, and data management. Develops ability to implement optimal processes and procedures in resource estimation and planning, cost and billing, scheduling, and execution. Analyzes resource management responsibilities from a broad level of resource capacity though resource allocation and specific work management.

**TECH 6700**
**Data Driven Decision Making**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Critiques management practices for decision making within business. Defines appropriate uses of quantitative and visual data to influence the decision process. Presents engaging case studies drawn from publications, local business managers, and the experiences of faculty. Develops data analysis and presentation skills using appropriate software.

**TECH 6710**
**Materials Management**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Presents a comprehensive list of topics in materials management. Places special emphasis on materials flow improvement and waste reduction. Covers production planning, capacity management, purchasing, demand forecasting, inventory management, and lean production.

**TECH 679R**
**Special Topics in Engineering**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Presents a range of advanced topics of current interest in the fields of engineering management and technology management. Emphasizes new management practices that are emerging as a result of rapid technological advancements. Critiques theory and practice from the point of view of local guest speakers who present their unique management perspectives. May be repeated for a maximum of 6 credits toward graduation

**TECH 690R**
**Independent Study**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Offers independent study as directed in reading or individual projects at the discretion and approval of the graduate program director. May be repeated for a maximum of 6 credits toward graduation.

**TECH 6950**
**Engineering and Technology Projects I**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Interprets the nature of strategic thinking and the challenges of strategic alignment. Includes the development of a strategic planning process and methods for assessing strategic success. Describes organizing a proposal to summarize scope of work, work plan, team charter, and identified project outcomes based on ideas supported by a literature review.

**TECH 6960**
**Engineering and Technology Projects II**
**3**
* Prerequisite(s): Acceptance into Master of Science in Engineering and Technology Management program or approval of graduate program director

Describes how to apply advanced processes to move a project from start to finish utilizing the project proposal created in Project I. Covers risk analysis, effective communication, and response to problems. Emphasizes financial and project management concepts to compliment a technical background. Describes how to implement optimized project standards of innovation promotion and leadership in product and/or project launch.

# Theatre (THEA)

**THEA 1013** **FF**
**Introduction to Theatre WE**
**3**

Examines theatre analysis, history, dramatic structure, outstanding dramatic literature, and the various roles in theatre production including the playwright, producer, director, the design team, production staff, house staff, run crew, and publicity. Utilizes lecture, film review, play reading, and live theatre attendance.

**THEA 1023** **FF**
**Introduction to Film**
**3**

Designed to develop the analytical skills necessary for understanding the motion picture - not only as an art form, but as a tool for the statement of ideas. Explores the visual and aural elements employed by movie-makers to influence audiences. Studies context--the historical, social, political, cultural, and artistic situation which produced the film and how it reflects ourselves and our society. Combines lecture, screening, and demonstration with critical discussions of assigned readings and films. Requires a weekly lab.

**THEA 1033** **FF**
**Acting I**
**3**

For theatre arts majors and anyone interested in developing acting skills. Covers basic acting terminologies and definitions, techniques of movement, voice, and script analysis with a strong emphasis on performance ethics.

**THEA 1113**
**Voice and Speech I**
**3**
* Prerequisite(s): THEA 1033

Provides student actors with tools for increasing vocal ease and expressivity, with an emphasis on cultivating free and spontaneous breath impulse. Introduces the range of human speech sounds experientially, as a prelude to detailed phonetics and accent work. Provides a framework for developing a personal practice of voice and speech outside the classroom and applying learning through in-class performance. Please note, this is a course in acting, not public speaking.

**THEA 1131**
**Movement Principles**
**2**
* Prerequisite(s): BFA Theatre Arts Matriculation (Acting emphasis) or Instructor Approval

Introduces student actors to principles and practices of physical training, including experiential anatomy, physical conditioning, creative movement, yoga, Alexander technique, contact improvisation, or tumbling and acrobatics. Includes work on physical devising as a core element of creative storytelling.

**THEA 1223**
**Makeup I**
**3**

Introduction to character makeup application for stage and screen with emphasis on corrective, age, and period with some stylized applications. Studies include the development of physical characterization for scripted characters. Course fee of $23 for materials applies.

**THEA 1513**
**Stagecraft I**
**2**
* Prerequisite(s) or Corequisite(s): THEA 1514

Surveys all elements of theatre and film production including sets, lighting, sound, properties, and costumes. Offers experience in the construction, painting, dressing, and striking of sets and props; the hanging, focusing and gelling of lighting instruments; the preparation of sound effects; and the operation of sound and lighting control equipment. Utilizes lecture, demonstration, films, and observation of working production facilities and personnel. Course fee of $30 for equipment applies.

**THEA 1514**
**Stagecraft I Lab**
**1**
* Prerequisite(s) or Corequisite(s): THEA 1513

Laboratory component to THEA 1513. Offers experience in the construction, painting, dressing, and striking of sets and props; the hanging, focusing and gelling of lighting instruments; the preparation of sound effects; and the operation of sound and lighting control equipment.

**THEA 159R**
**Production Practicum for Stage and Screen I**
**1**

Provides the opportunity for students to earn college credit for supervised backstage crew positions on departmental productions. Includes assignments to wardrobe, deck crews, board operations, props and any additional positions a specific production might require. Requires participation for the entire technical rehearsal and production run to receive credit. May be repeated for a maximum of 2 credits toward graduation.

**THEA 1713**
**Script and Text Analysis I**
**3**

Introduces students to the analysis of story-based texts across a range of media. Focuses on the application of narrative and semiotic theory to dramatic literature from various periods in theatre history. Involves lecture, discussion, script and text analysis, film viewing, and live production attendance.

**THEA 184R**
**Singing Technique for Actors I-BA**
**1**
* Prerequisite(s): Theatre major in BA Theatre Arts and department approval

Offers private vocal instruction for BA Theatre Arts majors to develop skills and techniques for performance in musical theatre. Requires substantial individual practice each week and bi-monthly master class participation. May be repeated for a maximum of 3 credits toward graduation. Course lab fee of $331 applies.

**THEA 2033**
**Acting II**
**3**
* Prerequisite(s): THEA 1033; THEA 1113 recommended.

Designed to build upon the techniques learned in THEA 1033. Emphasizes character development and application in creating a role through intense scene study of scripts in both stage and screen.

**THEA 2100** **FF**
**Teaching Theatre For Children**
**3**

Introduces concepts and techniques to teach theatre to children in the community, schools or home consistent with state and national standards. Identifies methods to use drama to teach other subjects. Introduces concepts, theories and techniques in creative drama. Assists students to become independent, creative, and productive learners as they acquire the knowledge, skills, and experience to teach drama and theatre to children ages 5-12.

**THEA 2127**
**Voiceover Acting**
**3**

Introduces students to voiceover techniques and the voiceover industry. Focuses on different types of voiceover work, including commercial/ industrial copy, book narration and animation/ video game work. Includes development of resume and demo reel.

**THEA 2131**
**Movement for the Actor I**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts or BA Theatre Arts

Helps actors for both stage and screen develop the physical awareness and self discipline critical to effective performance of period style, staged combat, and the musical. Emphasizes balance, strength, postural correction, energy drives, motivation, and basic movement vocabulary.

**THEA 2156**
**Group Voice for Theatre**
**2**
* Prerequisite(s): (Theatre major in BFA Theatre Arts or BA Theatre Arts) and department approval

Provides group instruction for actors to develop technical skill and understanding of the singing voice. Requires a minimum of 2 hours of practice each week.

**THEA 2203**
**Costume Construction I**
**3**
* Prerequisite(s) or Corequisite(s): THEA 1513, THEA 1514, and THEA 2204

Provides a beginning overview of the vocabulary and basic sewing methods of theatrical costuming. Familiarizes students with sewing machine and serger operation, basic sewing techniques, fabrics, simple patterning, and skills of costume construction. Course fee of $12 for equipment applies.

**THEA 2204**
**Costume Construction I Lab**
**1**
* Prerequisite(s) or Corequisite(s): THEA 1513, THEA 1514, and THEA 2203

Laboratory component to THEA 2203. Provides hands-on application of techniques taught in THEA 2203, including sewing of theatrical costumes, simple patterning, and other costume construction tasks.

**THEA 2211**
**Theatre for Children and Youth**
**3**

Introduces the philosophy and practices of theatre for children and youth, including its range of uses in the classroom, on the stage, in the community, corporate world and beyond. Focuses on storytelling, puppetry, and dramatic texts for children and youth. Requires play attendance.

**THEA 222R**
**Theatre for Young Audiences Tour**
**3**
* Prerequisite(s): Department Approval by Audition

Provides students with opportunities to perform in touring theatre productions for elementary and secondary audiences in school settings. Includes training in professional and amateur practices in performing, directing, designing, constructing, and managing touring shows for children and youth. May be repeated for a maximum of 9 credits toward graduation.

**THEA 2311 (Cross-listed with: CINE 2311) FF**
**Film History I**
**3**

Explores the development of the feature film, both in America and abroad from 1895 to 1945. Covers the evolution of motion pictures from conception as an entertainment novelty (c. 1895) to the mass-audience, commercial art form of the 1940's. Examines film as a serious historical study of a form of mass communication, which has had ethical, social, and political consequences on society. Includes lecture, screenings, and demonstrations with critical discussions of assigned readings and films.

**THEA 2312 (Cross-listed with: CINE 2312)**
**Film History II**
**3**

Explores the development of the feature film, both in America and abroad from 1940 to the Present. Emphasizes the continuing evolution of motion pictures from the height of the Studio System 1930s through to its status as one "form" of digital entertainment in 2010. Examines film as a serious historical study of a form of mass communication, which has had ethical, social, and political consequences on society. Includes lecture, screenings, and demonstrations with critical discussions of assigned readings and films. (Note: Some films screened may be considered controversial and carry an "R" rating.)

**THEA 234R (Cross-listed with: CINE 234R)**
**Special Topics in Cinema Studies**
**3**
* Prerequisite(s): THEA 1023

Focuses upon a particular genre, director, or film movement for the benefit of theater students seeking a film emphasis and MCT and English students seeking added depth in their fields of study. Topic varies by semester. May be repeated for 3 credits toward graduation, more for interest.

**THEA 2513**
**Introduction to Design for Stage and Screen**
**3**
* Prerequisite(s): THEA 1513 and THEA 1514
* Prerequisite(s) or Corequisite(s): THEA 2514

Studies the design process associated with costumes, scenery, and lighting. Uses research, conceptual renderings, models, and drafting. Introduces perspective drawing, figure drawing, three dimensional model building, and standard drafting practices. Course fee of $10 applies. Lab access fee of $10 applies.

**THEA 2514**
**Introduction to Design for Stage and Screen Lab**
**1**
* Prerequisite(s): THEA 1513
* Prerequisite(s) or Corequisite(s): THEA 2513

Laboratory course to accompany THEA 2513. Teaches skills in the application of elements and principles of design in the creation of scenery, costumes, and lighting in the theatre.

**THEA 2515**
**Rendering for Theatre**
**3**
* Prerequisite(s): ART 1020, ART 1650

Trains theatrical design students in the advanced drawing and painting skills necessary to create detailed renderings of costumes and scenery that effectively communicate visual ideas for stage design concepts. Lab access fee of $10 applies.

**THEA 2517**
**Visual Concepts in Theatre**
**3**
* Prerequisite(s): THEA 2513

Introduces students to the translation of scripts into visual imagery for the stage. Focuses on the processes of conception, development, and implementation of design components to the point of actual presentation. Lab access fee of $10 applies. Software fee of $25 applies.

**THEA 2531**
**Introduction to Lighting and Sound**
**3**

Exposes students to foundational technologies and system designs in lighting and sound for live performance. Provides opportunities for hands-on experience working on realized productions within the theatre department, rounding out their educational experience. Lab access fee of $10 applies. Software fee of $25 applies.

**THEA 2541**
**Costume History**
**3**

Studies costume history from ancient to modern times. Focuses on the political, social, economic and aesthetic concerns of each period. Includes study of the impact of other cultures on Western costume design.

**THEA 2574**
**Drafting for Theatre Design**
**3**

Introduces and trains technical theatre students in the processes of drafting for theatrical design. Focuses on attaining a basic proficiency in using the most recent computer-aided drafting software. Lab access fee of $10 applies.

**THEA 259R**
**Production Practicum for Stage and Screen II**
**1**
* Prerequisite(s): THEA 1513

Provides the opportunity for students to earn college credit for supervised projects in production for the period up to dress rehearsal and during strike. Involves the development of a contract between the student and the assigned instructor. May be repeated for a maximum of 2 credits toward graduation.

**THEA 271R**
**BFA Cohort Seminar**
**1**

Prepares BFA students for integration into the program through theatrical projects that encourage ensemble collaboration and cooperation with cohorts. Teaches critical unifying skills for future professional endeavors. May be repeated for a maximum of 8 credits toward graduation.

**THEA 272R**
**BA Seminar**
**1**

Explores vocational and avocational applications for theatre training. Includes critical analysis of current productions in the department and beyond with faculty and production team members. Allows students and theatre artists to share insights with one another from their various specialties and perspectives. May be repeated for a maximum of 3 credits toward graduation.

**THEA 2741**
**Scriptwriting for Stage**
**3**

Introduces practical storytelling techniques for the stage. Involves writing short form scripts using classic play structure. Focuses on helping student writers to find story material, create engaging characters, structure stories, and communicate thematic ideas.

**THEA 2742**
**Scriptwriting for the Screen WE**
**3**

Introduces practical storytelling techniques for the screen. Involves writing short form scripts using dramatic structure. Focuses on helping student writers to find story material, create engaging characters, structure stories, and communicate thematic ideas.

**THEA 281R**
**Theatre Internship**
**1 to 6**
* Prerequisite(s): Departmental Approval

Provides a transition from school to professional life where learned theory is applied to actual practice through meaningful on-the-job experience. May be repeated for a maximum of 4 credits toward graduation. May be graded credit/no credit.

**THEA 284R**
**Singing Technique for Actors I - BFA**
**1**
* Prerequisite(s): Theatre major in BFA Theatre Arts and department approval

Offers private vocal instruction for theatre majors to develop skills and techniques for performance in musical theatre. Requires substantial individual practice each week and bi-monthly master class participation. May be repeated for a maximum of 3 credits toward graduation. Course lab fee of $331 for private voice lessons.

**THEA 290R**
**Independent Study**
**1 to 5**

For students with individual projects. Credits given for acceptable projects in playwriting, direction, acting, design or other supervised performance, labor, or research in theatre or film. Proposals must be submitted and approved by the department or instructor prior to enrollment. May be repeated for a maximum of 3 credits toward graduation.

**THEA 3033**
**Acting III**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts or BA Theatre Arts; THEA 2033; University Advanced Standing

Trains advanced students in the use of contemporary methods, theories, and practices in creation of roles. Focuses on material written and produced in late 20th and early 21st century theatre.

**THEA 3110**
**Non Fiction Cinema History**
**3**
* Prerequisite(s): THEA 1023 and University Advanced Standing

Surveys the history of non-fiction/documentary film from 1896 to the present. Includes study of early pioneers from Flaherty's NANOOK OF THE NORTH to the current trend of reality television and the popular documentaries of Michael Moore.

**THEA 3113**
**Acting for Film**
**3**
* Prerequisite(s): THEA 2033 or DGM 2110 or Department Approval; University Advanced Standing

Introduces the specialized techniques of performance, audition, and agent/actor relationships as they apply to the film and television industries.

**THEA 3115**
**Improvisation I - BFA**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts; THEA 2033; THEA 2131; University Advanced Standing

Introduces acting students to the use of improvisational techniques. Includes advanced training in the application of objectives, tactics, relationships, and movement in the creation of improvised scenes.

**THEA 3116**
**Auditioning - BA**
**3**
* Prerequisite(s): Theatre Major in BA Theatre Arts; THEA 1033; University Advanced Standing

Prepares BA students with the specific skills to successfully audition for stage roles at the amateur level. Includes instruction on playing objectives, defining relationships, making emotional connections, and physicalizing action. Focuses on mental and psychological preparation for the audition situation.

**THEA 3117**
**Auditioning I**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts or BA Theatre Arts; THEA 2033; University Advanced Standing

Prepares students with the specific skills to successfully audition for stage and screen roles. Includes work on objectives, relationships, emotional connection, and honest physicality.

**THEA 3118**
**Improvisation II-Performance Team-BFA**
**2**
* Prerequisite(s): Theatre Major in BFA Theatre Arts; THEA 3115; University Advanced Standing

Develops acting skills through improvisational performance. Involves training in short and long form improv incorporating skills of story and song structure. Emphasizes application of objectives, tactics, relationships, honest response and communication, and sensory work.

**THEA 3122**
**Voice and Speech II-BFA**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts; THEA 1113; THEA 2131; University Advanced Standing

Continues the work of first-semester Voice and Speech. Strengthens the actor's use of voice, including resonance, range, and vocal variety. Introduces detailed phonetics using the International Phonetic Alphabet and identifies markers of formal versus informal speech. Emphasizes text work, including imaging and operative language. Please note, this is a course in acting, not public speaking.

**THEA 3123**
**Acting in Accent - BFA**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts and THEA 3122 OR department approval by audition; University Advanced Standing

Introduces methods for the actor to research, prepare, and perform any accent with authenticity. Includes exploration of the articulatory setting, pronunciation, and prosody of an accent, using primary research sources.

**THEA 3124**
**Voice and Speech III - BFA**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts; THEA 3122; University Advanced Standing

Introduces advanced topics in voice and speech including creating character voices, voice use in heightened emotional states and violence, and/or beginning and narration.

**THEA 3131**
**Movement for the Actor II-BFA**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts; THEA 1033; THEA 2131; University Advanced Standing

Trains advanced movement students in somatic techniques such as Yoga, Tai Chi, Feldenkrais, Alexander Technique, and Laban.

**THEA 3133**
**Stage Combat**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts or BA Theatre Arts; THEA 2033 OR THEA 2131; University Advanced Standing

Teaches basic principles of stage combat/choreography and safety practices.

**THEA 314G (Cross-listed with: COMM 314G, ENGL 314G)**
**Global Cinema History**
**3**
* Prerequisite(s): (ENGL 2150 or THEA 1023) and University Advanced Standing

Studies the evolution of global film styles, movements, stars, and genres with a focus on international cinema chronologies outside the United States. Some films screened may be considered controversial and carry an "R" rating.

**THEA 3151**
**Acting for Musical Theatre I**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts or BA Theatre Arts; THEA 2033; University Advanced Standing

Introduces the acting student to the techniques of acting, singing, and dancing for the musical, as well as looking at the history and trends of the musical. Incorporates the art of transitioning between dialogue and song.

**THEA 3152**
**Acting for Musical Theatre II - BFA**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts; THEA 3151; University Advanced Standing

Further develops and refines the performer's abilities as a singer, dancer, and actor. Links trends in musical theatre with past and present artistic choices. Explores design aspects of musical theatre and thematic integration of acting, singing, and dancing. Includes lecture, discussion, film, rehearsal, and performance.

**THEA 3154**
**Dance for Musical Theatre I**
**3**
* Prerequisite(s): Theatre Major in BFA Theatre Arts or BA Theatre Arts; THEA 2033; University Advanced Standing

Focuses on the academic and practical study of the history and development of Musical Theatre Dance as an art form from the late 19th century to present. Melds tap, ballet, jazz, ballroom, and ethnic dance into practical character and story based movement while exploring historic context, landmark choreographers and productions.

**THEA 3155**
**Dance for Musical Theatre II - BFA**
**3**
* Prerequisite(s): Theatre Majors in BFA Theatre Arts; THEA 3154; University Advanced Standing

Continues the study of musical theatre choreography. Emphasizes practical application involving a blending of various styles of dance into the creation of practical character and story-based movement.

**THEA 315R**
**Musical Theatre Practicum**
**2**
* Prerequisite(s): Audition, University Advanced Standing

Provides opportunities for musical theater students to perform leading roles in shortened versions of multiple musicals, and collaborate in the full process of producing a musical. May be repeated for a maximum of 6 credits toward graduation. Course fee of $30 for materials, specialized clothing applies.

**THEA 319R**
**Performance Practicum for Stage and Screen**
**1**
* Prerequisite(s): Audition, THEA 159R or Instructor Approval, and University Advanced Standing

Provides opportunity for earning college credit for supervised performance and production assignments in UVU theatre productions from dress rehearsal through closing performance (excluding strike). Allows students to apply learned skills to productions that are currently in performance. Requires project approval from instructor or Department Chair. May be repeated for a maximum of 4 credits toward graduation.

**THEA 3211**
**Applied Theatre**
**3**
* Prerequisite(s): University Advanced Standing

Provides training and experience in Applied Theatre with adult, youth, and child participants in educational and community settings. Includes using Theatre of the Oppressed techniques (as formulated by Augusto Boal), devising original theatre pieces, and creating theatre-in-education programs that address social and community needs and issues.

**THEA 3223**
**Makeup II**
**3**
* Prerequisite(s): THEA 1223; Instructor Approval; and University Advanced Standing

Teaches advanced techniques in makeup design and application, character analysis, and three-dimensional masks. Includes hair applications, prosthetic appliances, airbrush techniques, and variety characterizations. Course fee of $120 for materials applies.

**THEA 3231**
**Creative Drama**
**3**
* Prerequisite(s): THEA 2211, THEA 2100, or Instructor Approval; University Advanced Standing

Examines how creative drama can be applied to other academic subjects, address social issues, and promote social change. Involves study of the works and creative processes of major theater practitioners.

**THEA 3241**
**Storytelling**
**3**
* Prerequisite(s): University Advanced Standing

Introduces techniques associated with effective storytelling practice. Focuses on the use of storytelling as a means of interpreting, generating and preserving stories as an entertaining and empowering tool. Includes performance.

**THEA 3251**
**Puppetry**
**3**
* Prerequisite(s): University Advanced Standing

Introduces techniques for constructing and performing with various puppets. Emphasizes performance for child, adolescent, and adult audiences.

**THEA 3511**
**Stagecraft II**
**3**
* Prerequisite(s): THEA 1513 and University Advanced Standing

Develops intermediate skills in the various stage crafts including carpentry, property construction, lighting and sound for theatre and film. Includes further education in drafting; set and lighting principles; professional, management and safety practices. Students fulfill assigned responsibilities for UVU theatrical productions. Course Lab fee of $40 for equipment applies.

**THEA 3514**
**Period Styles for Theatre Design**
**3**
* Prerequisite(s): THEA 2513 and University Advanced Standing

Introduces historical styles of architecture, painting, and dress that influence theatrical design. Lab access fee of $10 applies.

**THEA 3516**
**Art Direction for Film**
**3**
* Prerequisite(s): THEA 3514 and University Advanced Standing

Focuses on the basics of production design and art direction, the importance of costumes, props, locations selection, special effects, and set decoration in the visual presentation of a cinematic story.

**THEA 3521**
**Sound Design I**
**3**
* Prerequisite(s): THEA 2513 and University Advanced Standing

Introduces students to the physics of sound. Focuses on the production of audio content, and the design and engineering of playback systems. Facilitates collaboration with other members of a theatrical design team. Requires 25 hours of technical sound support for UVU theatrical productions. Lab access fee of $10 applies. Software fee of $25 applies.

**THEA 3531**
**Lighting Design I**
**3**
* Prerequisite(s): THEA 2513 and University Advanced Standing
* Corequisite(s): THEA 3535

Focuses on the designing and practical application of theatrical lighting and sound. Includes laboratory work on UVU theatre productions. Lab access fee of $10 applies. Software fee of $25 applies.

**THEA 3534**
**Lighting Design II**
**3**
* Prerequisite(s): THEA 3531 and University Advanced Standing

Explores and applies elements of design as they relate to lighting for theatre, dance and film from design process conception to final paperwork. Requires work on UVU productions as well as individual student projects. Lab access fee of $10 applies. Software fee of $25 applies.

**THEA 3535**
**Lighting Design I Lab**
**1**
* Prerequisite(s): THEA 2513 and University Advanced Standing
* Corequisite(s): THEA 3531

Laboratory component to THEA 3531. Allows students to implement theatrical lighting and sound design plans. Includes laboratory work on UVU theatre productions.

**THEA 3541**
**Costume Design I**
**3**
* Prerequisite(s): THEA 2513 and University Advanced Standing
* Corequisite(s): THEA 3545

Introduces theories and fundamentals of costume design with practical application through research and rendering. Provides an overview of costume history and period research. Emphasizes conceptual ideas based in script and director's concept. Course lab fee of $19 applies.

**THEA 3542**
**Costume Construction II**
**3**
* Prerequisite(s): THEA 2203 and University Advanced Standing

Provides more experience with sewing machine operations and advanced sewing techniques. Includes textile selection and construction skills. Focuses on specialized pattern drafting and draping. Course fee of $25 for materials, equipment applies.

**THEA 3543**
**Costume Design II**
**3**
* Prerequisite(s): THEA 3541 and University Advanced Standing

Expands on theories of costume design and provides more experience with practical application through research and rendering. Emphasizes advanced conceptual ideas based in script and director's concept. Encourages organization of a professional portfolio.

**THEA 3545**
**Costume Design I Lab**
**1**
* Prerequisite(s): THEA 2513 and University Advanced Standing
* Corequisite(s): THEA 3541

Laboratory course to accompany THEA 3541. Provides opportunities for practical application of design fundamentals in creation of costumes for various genres and historical periods.

**THEA 3561**
**Stage Management I**
**3**
* Prerequisite(s): THEA 1513 and University Advanced Standing

Introduces students to the basic processes of creating and managing a theatre production organization. Includes introductory structural organization, collaboration, strategic planning, accounting, and marketing concepts, procedures, and simulation exercises. Prepares students for upper division courses in theatre management.

**THEA 3565**
**Technical Direction for the Stage**
**3**
* Prerequisite(s): THEA 2574 and University Advanced Standing

Explains the role of the Technical Director in the realization of a theatre production from page to stage. Offers training and hands-on experience in the collaborative production process as seen through the work of the Technical Director. Includes training in industry-standard software and tools. Lab access fee of $10 applies. Software fee of $25 applies.

**THEA 3571**
**Scenic Design I**
**3**
* Prerequisite(s): THEA 2513 and University Advanced Standing
* Corequisite(s): THEA 3575

Focuses on the application of advanced principles of scenic design for sets and properties. Involves completion of project designs featuring elevation drawing and drafting, rendering, and model building. Emphasizes development of conceptual ideas based on script and director's concept. Student designers for UVU productions may be selected from this class. Lab access fee of $10 applies.

**THEA 3572**
**Scenic Design II**
**3**
* Prerequisite(s): THEA 3571 and University Advanced Standing

Focuses on integration of elements and phases of advanced set construction, property construction and paint finishes for theatrical sets. Includes shop experience and work on UVU productions. Lab access fee of $10 applies.

**THEA 3573**
**Scenic Painting**
**3**
* Prerequisite(s): THEA 2513 and University Advanced Standing

Introduces basic approaches to painting theatrical scenery. Covers traditional scene painting techniques and the tools and paints which support those techniques. Course lab fee of $42 applies.

**THEA 3575**
**Scenic Design I Lab**
**1**
* Prerequisite(s): THEA 2513 and University Advanced Standing
* Corequisite(s): THEA 3571

Provides the laboratory component to THEA 3571 in which students may acquire skills in creation and presentation of scale models used in the development of scenic design for theatrical productions. Includes layout, model making techniques, model finishes, and presentation.

**THEA 359R**
**Production Practicum for Stage and Screen**
**1**
* Prerequisite(s): THEA 259R and University Advanced Standing

Provides opportunity to earn college credit for managing projects in production for the period up to dress rehearsal and during strike. Includes projects in lighting, sound, costumes, props, scenery, design, stage management, running crews, house management or publicity. Involves the development of a contract between the student and the assigned instructor. May be repeated for a maximum of 2 credits toward graduation.

**THEA 3611**
**Directing Actors for Stage and Screen**
**3**
* Prerequisite(s): (THEA 1033 and THEA 1713) or DGM 2110; Theatre major in BFA Theatre Arts, BA Theatre Arts, BS Theatre Arts Education, or Theatre minor or DGM major in BS Digital Cinema Production; University Advanced Standing

Introduces basic directing techniques utilized in casting and rehearsing actors for stage and screen performance. Places emphasis on achieving honest and believable performances in the intimate style of camera acting, as well as the highly physical acting style of the stage. Includes studies in script structure, visualization, movement, pace and rhythm, gesture, casting techniques, and rehearsal techniques.

**THEA 3612**
**Directing Actors for the Stage**
**3**
* Prerequisite(s): THEA 3611; University Advanced Standing

Builds upon concepts covered in Directing Actors for Stage and Screen. Includes class workshops and demonstrations followed by class/instructor critique. Requires completion and presentation of a director's book. Culminates in public presentation of a one-act play.

**THEA 3614**
**Directing Actors for the Screen**
**3**
* Prerequisite(s): THEA 3611 or DGM 2110 or Instructor Approval; University Advanced Standing

Builds upon concepts covered in Directing Actors for Stage and Screen. Includes class workshops and demonstrations followed by class/instructor critique. Requires completion and presentation of a director's book. Culminates in public presentation of a short film. For Digital Media Majors and Theatre Majors with instructor approval.

**THEA 3625**
**Development and Fundraising for the Arts**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Introduces the development process, cultivating donors, and raising money through donations, sponsorships, and grants to support nonprofit arts organizations.

**THEA 3711**
**Script and Text Analysis II**
**3**
* Prerequisite(s): THEA 1713 and University Advanced Standing

Builds on the skills taught in Script and Text I. Focuses on theatre structure and thematic dynamics. Discusses plays and their possibilities for performance, then deconstructs the materials and methods with which messages are constructed through performance. Connects these works with the personal practices of theatre artists and to the ways audiences can perceive and interpret performance.

**THEA 3721**
**Theatre History and Literature I WE**
**3**
* Prerequisite(s): THEA 1013, THEA 1713, ENGL 2010, and University Advanced Standing

Examines the history of the theatre from its earliest origins through the Renaissance. Emphasizes theatre practice in its social, political and economic contexts. Introduces the theory and skills necessary for writing analytically about the theatre.

**THEA 3722**
**Theatre History and Literature II**
**3**
* Prerequisite(s): THEA 3721 and University Advanced Standing

Examines the history of the theatre and its associated literature and artists from the Restoration to the present time. Focuses on historical theatre practice in its social, political and economic contexts. Introduces the theory and skills necessary for writing performance reviews and extended research papers in theatre.

**THEA 3725**
**Musical Theatre History**
**3**
* Prerequisite(s): THEA 1713 and University Advanced Standing

Explores the evolution of musical theatre from the 1700s through present day, focusing on how politics, cultural trends, and technology have changed the art form.

**THEA 3731**
**Dramaturgy**
**3**
* Prerequisite(s): THEA 1713

Introduces students to the practice of production research and play outreach. Provides grounding in theory and analysis to develop skills in the discipline. Aimed at students in multiple interest areas such as performance, design and administration.

**THEA 3741**
**Script Writing II**
**3**
* Prerequisite(s): (THEA 2741 or THEA 2742 or Instructor Approval) and University Advanced Standing

Builds and enlarges on the specific writing craft elements of plot, character, and theme introduced in prior writing classes. Examines plot structures in one-act plays and short films including documentaries. Involves students in identifying and strengthening weaknesses or challenges in their own as well as fellow students' original scripts. Includes active class discussions, readings, written and oral presentations, research and final projects of a one-act play or short film from 30 to 60 minutes in length.

**THEA 374R**
**New Script Workshop**
**3**
* Prerequisite(s): THEA 1033 or THEA 2741 or THEA 3611; University Advanced Standing

Acts as a reading, performance, discussion and improvisation lab for scriptwriter's creative works. Involves students in the process of polishing, refining, and brainstorming dramatic works. Supports original student scripts with the ultimate goal of production. Integrates the work of writers, directors and actors into a collaborative effort. Includes active class discussions, readings, improvisations, written and oral presentations and critiques, research and completion of a project. May be repeated for a maximum of 6 credits toward graduation. Course fee of $15 for materials applies.

**THEA 4114**
**Film Acting II - Reel/Media - BFA**
**2**
* Prerequisite(s): BFA Theatre Arts Matriculation; THEA 2131; THEA 3123; University Advanced Standing

Focuses on development of the tools and skills necessary to compete as a professional actor. Involves creation of acting reels, head shots, and resumes. Emphasizes development of networking, professional etiquette and self-promotion skills needed to demonstrate a level of professionalism in the industry. Includes meetings with industry professionals.

**THEA 4115**
**Acting Styles-BFA**
**3**
* Prerequisite(s): BFA Theatre Arts Matriculation; THEA 2033, THEA 3721; University Advanced Standing

Includes advanced preparation for performance of classical texts. Emphasizes voice, speech, movement, and character development. Covers Greek and Roman acting styles, Commedia dell Arte and 17th Century French Neoclassic styles, Shakespearean Tragedy and Comedy, Comedy of Manners, and 19th Century Romanticism and Melodrama. Includes a brief introduction to Modern and Post-modern acting styles.

**THEA 4117**
**Auditioning and the Business - BFA**
**3**
* Prerequisite(s): BFA Theatre Arts Matriculation, THEA 2033, and University Advanced Standing

Teaches advanced skills and methods involved in the audition process for stage and screen roles. Focuses on developing resumes, interview skills, and preparing a wide range of audition pieces.

**THEA 4119**
**Senior Showcase and Career Management - BFA**
**3**
* Prerequisite(s): Senior Standing; THEA 4117, BFA Theatre Arts Major, University Advanced Standing

Allows students to collaborate with a director to create a showcase of each student actor's performance for promotional purposes. Teaches key skills in career and personal financial management related to the acting profession.

**THEA 4122**
**Speaking Shakespeare-BFA**
**3**
* Prerequisite(s): BFA Theatre Arts Major, THEA 3122, and University Advanced Standing

Increases the actor's command of operative language, complex syntax, imagery, figures of sound, and rhythm to fulfill the demands of classical acting. Involves rigorous textual analysis of the verse and prose of Shakespearean texts followed by practice in vocal/physical interpretation and performance.

**THEA 415R**
**Musical Theatre Workshop - BFA**
**2**
* Prerequisite(s): Theatre Major in BFA Theatre Arts; THEA 2156; THEA 3151; THEA 3154; University Advanced Standing

Prepares Juniors and Seniors for the rigor of a professional career in Musical Theater in terms of performance in acting, dance, music, and the relationship between the craft and the story. May be repeated for a maximum of eight credits toward graduation.

**THEA 416R (Cross-listed with: CINE 416R, ENGL 416R)**
**Special Topics in Film Studies**
**3**
* Prerequisite(s): (ENGL 2150 or CINE 2150 or THEA 1023) and University Advanced Standing

Covers cinema directors, genre, theory, and social change on a rotating basis. Explains course focus, defines terminology involved, then studies evolution and/or specific texts or contexts, and considers theoretical discourse. May be repeated for a maximum of 9 credits toward graduation. Some films screened may carry an "R" rating. Course fee of $40 for support applies.

**THEA 4200**
**Theatre and Drama in the Secondary School**
**3**
* Prerequisite(s): EDSC 3000, EDSC 455G, matriculation in to a Secondary Education Program, and University Advanced Standing

For theatre majors interested in teaching theatre arts at the secondary and college levels. Introduces methodologies, strategies, and philosophies of theatre pedagogy based upon current research and practices. Emphasizes lesson plan writing using the Utah State Secondary Theatre Core Curriculum and the National Committee for Standards in the Arts. Integrates theory and practice through lecture, discussion, writing, activities, and classroom teaching experiences in the college and public school settings.

**THEA 451R**
**Special Topics in Theatre Design and Technology**
**1 to 3**
* Prerequisite(s): Theatre Major in BFA Theatrical Arts or department approval; University Advanced Standing

Offers in-depth study of specialized topics in theatre technology and design. Includes possible topics such as scenic and integrated projections, mixed reality and video design, audience participatory technology, 3-D Modeling and prop design, special effects technology, and scenography and European technology. May be repeated for a maximum of 9 credits toward graduation.

**THEA 4522**
**Sound Design II**
**3**
* Prerequisite(s): THEA 3521 and University Advanced Standing
* Prerequisite(s) or Corequisite(s): THEA 2574

Builds on the foundations of the Sound Design I and Live Sound Reinforcement classes to focus on the higher-level design skills needed to succeed as sound designers in professional theater. Includes the drafting and paperwork skills to thoroughly describe a design before moving into production. Introduces students to the physics of sound. Focuses on the production of audio content, and the design and engineering of playback systems. Facilitates collaboration with other members of a theatrical design team. Requires 25 hours of technical sound support for UVU theatrical productions. Lab access fee of $10 applies. Software fee of $25 applies.

**THEA 4535**
**Multimedia Design for Stage**
**3**
* Prerequisite(s): Theatre major in BFA Theatre Arts, THEA 2513 and University Advanced Standing

Introduces the language, history, and technology of digital media as it applies to the theatre. Focuses on developing skills to conceive, create, and implement digital media designs for the stage. Lab access fee of $10 applies. Software fee of $25 applies.

**THEA 4546**
**Digital Costume Design**
**3**
* Prerequisite(s): THEA 3541 and University Advanced Standing

Strengthens abilities to work with advanced design ideas based in script and director's concept. Develops digital rendering skills via training in Photoshop and Illustrator. Lab access fee of $10 applies.

**THEA 454R**
**Special Topics in Costume Construction**
**1 to 3**
* Prerequisite(s): THEA 2203 and University Advanced Standing

Introduces students to the most advanced methods of tailored costume construction. Focuses on practical application of these techniques in the creation of fine couture. May be repeated for a maximum of 9 credits toward graduation.

**THEA 4561**
**Stage Management II**
**3**
* Prerequisite(s): THEA 3561 and University Advanced Standing

Introduces theatre management students to the advanced processes of creating and managing a professional theatre production organization. Emphasizes practical application of skills in professional situations (including work on UVU Theatre Arts main stage productions). Includes collaboration with directors, designers, and production crews to build both a personal methodology and the discipline of practice.

**THEA 457R**
**Practical Design**
**1 to 3**
* Prerequisite(s): Instructor Approval and University Advanced Standing

Involves work on approved projects requiring sophisticated skills in scenic, lighting, costume, or makeup design. Includes designs for UVU productions or for community and regional performing groups. Requires approval by appropriate theatre faculty. May be repeated for a maximum of 3 credits toward graduation.

**THEA 458R**
**Special Topics in Theatre**
**1 to 3**
* Prerequisite(s): THEA 1013 and Instructor Approval, or THEA 1713

Provides in-depth study of performance or academic topics such as theatrical artists, movements, theories, genres, and social changes. Involves delineation of course focus, defines terminologies involved, then studies evolution and/or specific texts or contexts and considers theoretical discourse. May be repeated for a maximum of 12 credits toward graduation.

**THEA 4621**
**Theatre Administration I**
**3**
* Prerequisite(s): University Advanced Standing

The first of two culminating courses in undergraduate theatre administration (theatre management). Introduces concepts in theatre administration for the nonprofit theatre organization. Focuses on the framework of the four functions of administration with emphasis on the strategic planning process. Utilizes lecture, discussion, video, and real-world simulation experiences.

**THEA 4622**
**Theatre Administration II**
**3**
* Prerequisite(s): ACC 3000, THEA 4621, and University Advanced Standing

A continuation of the arts administration concepts begun in Arts Administration I. Discusses financial recordkeeping requirements, financial planning, and promotional aspects of the nonprofit theatre organization. Culminates in a business startup plan for a hypothetical nonprofit theatre organization. Discusses careers in arts administration. Discusses human resources as they apply to the theatre organization. Utilizes lecture, discussion, video, and real-world simulation experiences.

**THEA 4741**
**Scriptwriting III**
**3**
* Prerequisite(s): THEA 2741 or THEA 2742 or Instructor Approval; University Advanced Standing

Extends student dramatic writing skills by creating, rewriting, and polishing a full-length film or play. Focuses on choice of material for specific audiences as well as the specific issues of adaptation of material from an already published source. Emphasizes the processes of selection, securing legal rights, adaptation management imperative to the success of a venture. Includes active class discussions, readings, written and oral presentations, research and final readings of students completed projects.

**THEA 474R**
**New Play Practicum**
**1**
* Prerequisite(s): THEA 1013 or Permission of instructor, and University Advanced Standing

Provides student writers, actors, directors, designers, and dramaturgs with opportunities to participate in the development of new scripts for the stage. Emphasizes the process from script selection to actual production in UVU's Short Attention Span Theatre (SAST) festival. May be repeated for a maximum of 4 credits toward graduation.

**THEA 475R**
**Special Projects in Dramatic Writing**
**2 to 9**
* Prerequisite(s): THEA 4741 and University Advanced Standing

Offers upper-division directed study with professional/academic supervision to motivated students for writing projects such as commissioned or speculative scripted and/or dramatic works, i.e., musicals, one-man shows, guerilla theatre, mimes, short or full-length films, documentaries, television shows, sit-coms, movies-of-the-week and other forms not covered by current classes. Allows for a semesters of writing/re-writing and/or critique/development and possible workshop presentation. May be repeated for a maximum of 9 credits toward graduation.

**THEA 481R**
**Theatre Internship**
**1 to 8**
* Prerequisite(s): Departmental Approval and University Advanced Standing

Provides a transition from school to professional life where learned theory is applied to actual practice through meaningful on-the-job experience. Repeatable for a maximum of 4 credits toward graduation. May be graded credit/no credit.

**THEA 484R**
**Singing Techniques for Actors II-BFA**
**1**
* Prerequisite(s): Theatre Major in BFA Theatre Arts; complete a total of 3 credits out of THEA 184R and THEA 284R, or receive department approval; University Advanced Standing

Offers private vocal instruction for upper-division theatre majors to continue developing skills and techniques for performance in musical theatre. Requires bimonthly master class participation and substantial individual practice. May be repeated for a maximum of 4 credits toward graduation.Course Lab fee of $331 for private voice lessons applies.

**THEA 490R**
**Independent Study**
**1 to 3**
* Prerequisite(s): University Advanced Standing

Provides independent study as directed in reading and individual projects at the discretion and approval of the Dean and/or Department Chair. May be repeated for a maximum of 9 credits toward graduation.

**THEA 497R**
**Professional Topics**
**1**
* Prerequisite(s): Junior Status Theatre Major, Department Approval, and University Advanced Standing

For those intending to enter professional theatre. Includes, but not limited to, the following topics: literature, research, analysis, design, management or performance aspects of theatre and the performing arts. May be repeated for a maximum of 3 credits toward graduation.

**THEA 4981**
**Portfolio**
**1**
* Prerequisite(s): University Advanced Standing

Features development of student portfolio for the areas of performance, design, management, directing, script writing, and performance. Includes interview skills and website development. Emphasizes placement in the theatrical job market or graduate school placement.

**THEA 4993**
**Senior Project in Performance**
**3**
* Prerequisite(s): THEA 3722, Senior Status, and University Advanced Standing

Provides credit for independent projects and research of advanced nature in the area of Theatre Arts under faculty supervision. Requires an area of study to be designated.

**THEA 4994**
**Senior Project in Theatre**
**3**
* Prerequisite(s): THEA 3722, Senior Status, and University Advanced Standing

Provides credit for independent projects and research of advanced nature in the area of Theatre Arts under faculty supervision. Requires an area of study to be designated.

# University Studies (UVST)

**UVST 1100**
**Prior Learning Assessment Theory and Practice**
**3**
* Prerequisite(s): Departmental Approval

Helps students identify areas of learning they may want to have evaluated for college-level equivalency. Also guides students through the preparation and compilation of all components required for the evaluation of a portfolio of prior learning through LearningCounts.org. Delivered entirely online. Graded Credit/No Credit.

**UVST 289R**
**Undergraduate Research**
**1**
* Prerequisite(s): Department Approval

Utilizes Phi Theta Kappa's theme from their "Honors in Action" program as a vehicle to introduce undergraduates to research. Requires students to write a literature review and to present their findings. Requires students to be a member of Phi Theta Kappa. May be repeated for a maximum of 4 credits toward graduation.

**UVST 290R**
**Community Engagement and Applied Service Learning**
**1**
* Prerequisite(s): UVST 289R or Department Approval

Utilizes Phi Theta Kappa's theme from their "Honors in Action" program as a vehicle to introduce undergraduates to service learning. Requires students to plan and implement a service project. May be repeated for a maximum of 4 credits toward graduation.

**UVST 3110**
**Theory and Practice of Tutoring Writing**
**3**
* Prerequisite(s): ENGL 2010 and University Advanced Standing

Teaches investigative theories, methods, practices and processes of tutoring writing. Has students practice tutoring as a process, actively participating in tutorial sessions and developing tutees ability to do the same. Teaches students to read scholarship from the field of writing center studies that will give them an awareness of the concepts of professional and intellectual tutoring. Requires students to compose several responses to writing center theory, conduct numerous observations of tutorials, participate in tutorials, and ultimately compose an individual philosophy of tutoring.

**UVST 481R**
**Internship**
**1 to 8**
* Prerequisite(s): University Advanced Standing and Departmental Approval

Increases students' knowledge and skills in personal or career-related areas while synthesizing previous and new learning experiences. Final project involves reflection and demonstration of learning outcome achievement. For BA/BS University Studies majors, requires a project planned with and evaluated by a faculty mentor from an academic discipline closely related to the emphasis for the degree. Repeatable for a maximum of 16 credits toward graduation. May be graded credit/no credit.

**UVST 4930**
**Capstone WE**
**3**
* Prerequisite(s): Matriculation into the BA/BS University Studies and University Advance Standing

For UVST BA/BS students in their last semester. Involves reflection on learning, demonstration of the achievement of stated learning outcomes, and advanced development of writing and communication skills. Includes a research/writing project or the creation of a professional portfolio to display knowledge and abilities. Culminates with an oral presentation.

# Zoology (ZOOL)

**ZOOL 1090** **BB**
**Introduction to Human Anatomy and Physiology**
**3**
* Prerequisite(s): BIOL 1010 or BIOL 1610

Presents a basic introduction to the sciences of anatomy and physiology. Covers the basic structure and function of the human body at the cellular, tissue, organ, and system levels. Provides a foundation of particular value for pre-nursing students who wish to have a preview of their required life science courses.

**ZOOL 2320** **BB**
**Human Anatomy**
**3**
* Prerequisite(s): BIOL 1610 and (ENGL 1010 or ENGH 1005) with a minimum of C- or written permission of the Anatomy program coordinator
* Corequisite(s): ZOOL 2325

Studies, in-depth, the anatomy of the human body. Covers the structure and some functions at the cellular, tissue, organ, and system levels. Emphasizes the names, locations, and functions of body components. Involves problem solving and analytical thinking. Includes weekly laboratory study of human cadavers, models, and specimens. Canvas Course Mats $78/McGraw applies.

**ZOOL 2325**
**Human Anatomy Laboratory**
**1**
* Corequisite(s): ZOOL 2320

Studies, in-depth, the anatomy of the human body. Covers the structure and some functions at the cellular, tissue, organ, and system levels. Emphasizes the names, locations, and functions of body components. Involves problem solving and analytical thinking. Includes weekly laboratory study of human cadavers, models, and specimens. Course Lab fee of $30 applies.

**ZOOL 232H** **BB**
**Human Anatomy**
**3**
* Prerequisite(s): BIOL 1610, (ENGL 1010 or ENGH 1005 or written permission of the Anatomy program coordinator), a minimum of a C- required in prerequisite courses.
* Corequisite(s): ZOOL 2325; at least one semester of college level experience is highly recommended.

Is for students who intend to pursue careers in the bio-medical sciences; especially pre-nursing, pre-med, pre-dent, and pre-vet students. Emphasizes the role and value of anatomical knowledge in health and disease. Covers the same general material as ZOOL 2320, but emphasizes clinical applications of the information. Requires students to choose and complete a course project that may involve short written reports, a term paper, or a poster presentation. Includes weekly laboratory study of human cadavers, models, and specimens. Canvas Course Mats $78/McGraw applies.

**ZOOL 232L**
**Human Anatomy Honors Laboratory**
**1**
* Prerequisite(s): BIOL 1010 or BIOL 1610. ENGL 1010 or ENGH 1005 or written permission of the Anatomy program coordinator.
* Corequisite(s): ZOOL 232H

For students who intend to pursue careers in the bio-medical sciences; especially pre-nursing, pre-med, pre-dent, and pre-vet students. Emphasizes the role and value of anatomical knowledge in health and disease. Covers the same general material as ZOOL 2320, but emphasizes clinical applications of the information. Students will choose and complete a course project that may involve short written reports, a term paper, or a poster presentation. Includes weekly laboratory study of human cadavers, models, and specimens. Course Lab fee of $30 applies.

**ZOOL 2420**
**Human Physiology**
**3**
* Prerequisite(s): BIOL 1610 with a minimum grade of C- and CHEM 1110 with a minimum grade of C-
* Corequisite(s): ZOOL 2425

Studies the functions of the human body at the chemical, cellular, organ, and system levels. Explains control mechanisms involved in homeostasis and stimulus/response pathways. Involves problem solving and analytical thinking. Includes weekly laboratory.

**ZOOL 2425**
**Human Physiology Laboratory**
**1**
* Prerequisite(s): BIOL 1610 and CHEM 1110
* Corequisite(s): ZOOL 2420

Accompanies ZOOL 2420. Covers topics that include the scientific method, scientific data presentation, diffusion and osmosis, enzymatic function, buffers, neurotransmission, skeletal and cardiac muscle physiology, hematology, respiratory physiology and renal physiology. Course Lab fee of $24 applies.

**ZOOL 242H**
**Human Physiology**
**3**
* Prerequisite(s): BIOL 1610 with a minimum grade of C- and CHEM 1110 with a minimum grade of C-, written permission of the physiology program coordinator
* Corequisite(s): ZOOL 2425

Studies the functions of the human body at the chemical, cellular, organ, and system levels. Explains control mechanisms involved in homeostasis and stimulus/response pathways. Involves problem solving and analytical thinking. Includes weekly laboratory. Requires a term paper, project, or presentation.

**ZOOL 242L**
**Human Physiology Honors Laboratory**
**1**
* Prerequisite(s): BIOL 1010 (or BIOL 1610), CHEM 1110, written permission of the physiology program coordinator.
* Corequisite(s): ZOOL 242H

Studies the functions of the human body at the chemical, cellular, organ, and system levels. Explains control mechanisms involved in homeostasis and stimulus/response pathways. Involves problem solving and analytical thinking. Includes weekly laboratory. Course Lab fee of $24 applies.

**ZOOL 3100**
**Vertebrate Zoology**
**3**
* Prerequisite(s): (BIOL 1010 or BIOL 1620) with a C- or higher and University Advanced Standing
* Corequisite(s): ZOOL 3105

Designed for intended Biology or Zoology majors who desire a broad introduction to the vertebrates and a greater understanding of their unique structure, distribution and the importance of these organisms in the present and past history of the Earth. Covers the evolutionary development of the vertebrates pertaining to major skeletal and physiological adaptations. The approach is also ecological as to vertebrate habitat requirements, their distribution, and community roles. Includes weekly laboratory.

**ZOOL 3105**
**Vertebrate Zoology Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): ZOOL 3100

Provides students with hands-on laboratory experience in classification and identification of vertebrates. Course Lab fee of $50 applies.

**ZOOL 3200**
**Invertebrate Zoology**
**3**
* Prerequisite(s): BIOL 1620 with a C- or higher and University Advanced Standing
* Corequisite(s): ZOOL 3205 Invertebrate Zoology Laboratory

Intended for Biology Department majors. Covers the anatomy, physiology, systematics, evolution and ecology of invertebrate animals.

**ZOOL 3205**
**Invertebrate Zoology Laboratory**
**1**
* Prerequisite(s): BIOL 1620 with a C- or higher and University Advanced Standing
* Corequisite(s): ZOOL 3200 Invertebrate Zoology

Covers the anatomy, physiology, systematics, evolution and ecology of invertebrate animals. Course Lab fee of $25 applies.

**ZOOL 3300**
**Herpetology**
**3**
* Prerequisite(s): BIOL 1620 with minimum grade of C-, and University Advanced Standing
* Corequisite(s): ZOOL 3305 Herpetology Laboratory

Covers the evolution, ecology, and diversity of reptiles and amphibians. Includes active class discussions, oral presentations. Emphasizes native Utah herpetofauna. Must be taken concurrently with weekly laboratory and required field trips.

**ZOOL 3305**
**Herpetology Laboratory**
**1**
* Prerequisite(s): BIOL 1620 with minimum grade of C-, and University Advanced Standing
* Corequisite(s): ZOOL 3300 Herpetology

Covers the evolution, ecology, and diversity of reptiles and amphibians. Includes active class discussions, oral presentations, and field trips. Emphasizes native Utah herpetofauna. Must be taken concurrently with lecture. Course Lab fee of $65 for transportation, support, and lab applies.

**ZOOL 3430**
**Entomology**
**3**
* Prerequisite(s): BIOL 1620 and BIOL 1625 with a minimum grade of C- in each, and University Advanced Standing
* Corequisite(s): ZOOL 3435

Introduces the study of insects, including insect diversity and classification, anatomy and physiology, relationships to other animals and plants, behavior, and ecology. Includes the application of the study of insects to pest management, environmental assessment, and forensic investigations.

**ZOOL 3435**
**Entomology Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): ZOOL 3430

Introduces the study of insects, including insect diversity and classification, anatomy and physiology, relationships to other animals and plants, behavior, and ecology. Includes the application of the study of insects to pest management, environmental assessment, and forensic investigations. Course lab fee of $45 applies.

**ZOOL 3500**
**Mammalogy**
**3**
* Prerequisite(s): BIOL 1620 with a minimum grade of C-, and University Advanced Standing; ZOOL 3100 and ZOOL 3105 strongly recommended
* Corequisite(s): ZOOL 3505

Explores the taxonomy, morphology, behavior, ecology, evolution, development, and conservation of mammals. Includes three weekly lectures and a weekly laboratory.

**ZOOL 3505**
**Mammalogy Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): ZOOL 3500

Explores the taxonomy, morphology, behavior, ecology, evolution, development, and conservation of mammals. Includes three weekly lectures and a weekly laboratory. Course Lab fee of $67 for transportation, lab applies.

**ZOOL 3600 (Cross-listed with: FSCI 3600)**
**Forensic Anthropology I**
**3**
* Prerequisite(s): ZOOL 1090, or ZOOL 2320 and ZOOL 2325, University Advanced Standing

Provides instruction on the study of human bones and their remains as physical evidence in criminal investigations. Teaches the importance of dentition in determining an age estimate of human remains. Identifies the differences among the sexes, whether the remains are human or nonhuman, and what is of forensic significance. Explains crime scene methodology and clinical applications in Forensic Anthropology. Teaches problem solving and analytical thinking in order to develop a biological profile based on population-specific data and standards. Investigates different pathological conditions and variables which must be taken into consideration when determining the cause of death.

**ZOOL 3700 (Cross-listed with: EXSC 3700)**
**Exercise Physiology**
**3**
* Prerequisite(s): EXSC Majors: ZOOL 2320 (or 232H), ZOOL 2325 (or 232L), and EXSC 270G all with a C- or higher and (MATH 1050 or MATH 1055). PETE Majors: PETE 2700 and ZOOL 1090 with a C- or higher and (MATH 1050 or MATH 1055). All: University Advanced Standing
* Prerequisite(s) or Corequisite(s): ZOOL 2420 (or 242H), ZOOL 2425 (or 242L)

Studies acute and chronic physiological responses to exercise, as well as nutritional and environmental effects on these responses. Requires separate weekly laboratory. Canvas Course Mats $78/McGraw applies.

**ZOOL 3705 (Cross-listed with: EXSC 3705)**
**Exercise Physiology Laboratory**
**1**
* Prerequisite(s): University Advanced Standing
* Corequisite(s): EXSC 3700

Studies acute and chronic physiological responses to exercise, as well as nutritional and environmental effects on these responses. The laboratory is designed to offer the hands-on experience where students will experience the physiological responses to different stressors in the lab setting. The labs are arranged to be conducted as similar material is being discussed in class. Course Lab fee of $28 for materials applies.

**ZOOL 4000**
**Animal Behavior**
**3**
* Prerequisite(s): BIOL 1610 and University Advanced Standing

Examines the biological basis of animal behavior with emphasis on the underlying mechanisms and evolutionary causes of behavior. Covers first the proximate causes of behavior and then the ultimate or evolutionary causes of behavior. Includes topics such as the genetic basis of behavior, perceptual and effectual systems, ethology, neurophysiology, learning, animal communication, sexual behavior, and social systems.

**ZOOL 4100 (Cross-listed with: MICR 4100)**
**Parasitology**
**4**
* Prerequisite(s): (BIOL 1620 or MICR 2060) with a C- or higher and University Advanced Standing

Introduces the study of parasites. Emphasizes the biology of principal groups of parasites affecting humans, livestock, and other animals, including their medical economic, and ecological significance. Emphasizes parasites causing zoonotic diseases. Includes weekly laboratory experience involving identification of parasites. Course Lab fee of $25 applies.

**ZOOL 4300**
**Histology**
**4**
* Prerequisite(s): [(ZOOL 2320 or ZOOL 232H) with a C- or higher or written instructor approval] and University Advanced Standing

For pre-professional students pursuing biomedical careers and Biology majors with a particular interest in vertebrate structure and function. Studies the microscopic structure of the body at the cellular, tissue, and organ levels. Emphasizes physical and functional relationships of various tissues in the organs of the body. Includes weekly laboratory. Course Lab fee of $35 applies.

**ZOOL 4400**
**Pathophysiology**
**4**
* Prerequisite(s): ZOOL 2320, ZOOL 2420, and MICR 2060 each with a minimum grade C-, and University Advanced Standing

For Biology majors with an emphasis in human physiology, pre-professional majors, and nursing students. Studies pathophysiological etiologies and mechanisms that cause disease and examines physiological adaptations and dysfunction of organs and organ systems in a disease state.

**ZOOL 4500**
**Comparative Vertebrate Zoology**
**3**
* Prerequisite(s): BIOL 1620 and (ZOOL 1090, ZOOL 2320, or ZOOL 3100) with a grade of C- or higher and University Advanced Standing
* Corequisite(s): ZOOL 4505

Studies the structure and function of vertebrates at the cellular, tissue, organ and systems levels. Emphasizes developmental and evolutionary comparative aspects of mammalian, avian, reptilian, amphibian, and piscian organs and systems.

**ZOOL 4505**
**Comparative Vertebrate Zoology Laboratory**
**1**
* Prerequisite(s): ZOOL 1620 and (ZOOL 1090, ZOOL 2320, or ZOOL 3100) with a grade of C- or higher and University Advanced Standing
* Corequisite(s): ZOOL 4500

Accompanies the comparative vertebrate zoology lecture. Studies the structure and function of vertebrates at the cellular, tissue, organ and systems levels. Incorporates dissections of mammalian, avian, reptilian, amphibian, and piscian organs and systems. Course Lab fee of $40 applies.

**ZOOL 4600**
**Ornithology**
**4**
* Prerequisite(s): BIOL 1620 and University Advanced Standing; ZOOL 3100 and ZOOL 3105 highly recommended

Provides an in-depth study of avian evolution, systematics, developmental anatomy (wings, beaks, feathers), physiology, and social and reproductive behavior. Emphasizes an evolutionary and adaptive theme to the study of birds. Includes lectures, laboratories and field trips. Course Lab fee of $41 for transportation, lab applies.

**ZOOL 4700**
**Advanced Anatomy**
**4**
* Prerequisite(s): ZOOL 2320 with a minimum grade of C- and University Advanced Standing

For students interested in biomedical science careers or with a special interest in anatomy. Covers principles and techniques of anatomical investigation and specimen preparation. Provides supervised experience in human cadaver dissection, anatomic interpretation of radiographs, craniometrics, and palpation of the body. A regional dissection approach will be used in the lab. Requires problem solving and analytical thinking. Includes the theory and basic principles of various forms of diagnostic imaging, light and electron microscopy, skeletal preparation, and injection/maceration techniques. Includes weekly laboratory. Course Lab fee of $13 applies.

**ZOOL 4750**
**Human Physiology A Cell Biology Approach**
**4**
* Prerequisite(s): BIOL 3400 and University Advanced Standing

Addresses physiological principles and functions of the human body systems at the molecular level. Emphasizes cell signal transduction involved in the body maintaining homeostasis. Gives special attention to nervous, muscular, cardiovascular, urinary and respiratory systems. Requires problem solving and analytical thinking skills to be successful in the class. Includes weekly laboratory. Course Lab fee of $25 applies.

**ZOOL 4780**
**Neuroscience**
**4**
* Prerequisite(s): ZOOL 2420 with a C- or higher and University Advanced Standing

Covers aspects of molecular and cell biology, physiology, pharmacology, anatomy and the interplay of these and other disciplines in our understanding of the structure and function of the nervous system. Discusses neuroanatomy, developmental neurobiology, electrophysiology, membrane specializations related to signal propagation and signal transmission, neurotransmitter function and neuropharmacology, structure and function of simple neuronal circuits and complex neural networks and the plasticity of the nervous system. Incorporates discussion of journal articles related to the latest advances in neuroscience.

**ZOOL 490R**
**Special Topics in Zoology**
**1 to 4**
* Prerequisite(s): BIOL 1620 and University Advanced Standing

Explores and examines special topics relating to the field of zoology. Emphasizes areas of rapid growth in zoology or current importance to society. May be repeated for a total of 9 credits toward graduation.

**A**

**ABBOTT, Scott** (1999); *Professor.* Faculty, Integrated Studies; B.A., M.A., German Literature, Philosophy minor, Brigham Young University; Ph.D., German Literature, Princeton University.

**ABDRISAEV, Baktybek** (2007); *Lecturer.* Faculty, History & Political Science; B.S., Computer Science, Bishkek Polytechnic Institute; Ph.D., Electronics, Academy of Science Belarus.

**ABRAMSON, Mark** (2017); *Associate Professor.* Faculty, Mathematics; B.S., Computational Mathematics, Brigham Young University; M.A., Computational/Applied Mathematics Rice University; M.S. Aeronautics/ Astronautics, University of Washington; Ph.D., Computational/Applied Mathematics, Rice University.

**ABUNUWARA, Kim** (2013); *Associate Professor.* Faculty, Integrated Studies; B.A., Ph.D., Theatre & Film, Brigham Young University; M.F.A., Acting, National Theatre Conservatory.

**ADAMS, Kenneth** (2019); *Assistant Professor.* Faculty, Construction Technologies; B.S., Technology Management, Utah Valley University, M.B.A., Business Administration, University of Utah.

**ADAMS, Lynn** (2018); *Associate Professor.* Department Chair and Faculty, Strategic Management & Operations; B.S.. Math/Science. Brigham Young University - Provo; M.B.A., Business Administration, Westminster College; Ph.D., Organizational Leadership, University of Phoenix.

**AESCHBACHER, Max** (2005); *Associate Professor.* Faculty, Developmental Mathematics; B.S., Mathematics, University of Utah; M.S., Mathematics, University of Oregon.

**ALBRECHT-CRANE, Christa** (2001); *Professor.* Faculty, English & Literature; B.A., American Literary and Cultural History, Ludwig-Maximillian's University; M.A., American Studies, Washington State University; Ph.D., Rhetoric and Technical Communication, Michigan Technological University.

**ALDOUS, Peter** (2020); *Assistant Professor.* Faculty, Computer Science; B.S., Computer Science, Brigham Young University; Ph.D., Computer Science, University of Utah.

**ALIN, Pauli** (2016); *Assistant Professor.* Faculty, Technology Management; B.A., M.Soc.Sci., Communication, University of Helsinki; D.Sc., Industrial Engineering, Aalto University, Finland.

**ALLEN, Jordan** (2018); *Assistant Professor.* Faculty, Communication; B.A., Psychology, M.A., Communication Studies, University of Montana, Ph.D., Communication Studies, University of Nebraska-Lincoln.

**ALLISON, Charles** (2001); *Professor.* Faculty, Computer Science; B.S., Mathematics/Portuguese, M.S., Mathematics/Statistics, Brigham Young University; M.S., Ph.D. (ABD), Applied Math/Computer Science, University of Arizona.

**ALLRED, Steven** (2008); *Associate Professor.* Faculty, Emergency Services; A.A.S., Fire Science, B.S., Public Emergency Services Management, Utah Valley University; A.A.S., Emergency Care and Rescue, Weber State University; M.Ed., Instructional Design, Utah State University.

**ALLRED, Jonathan** (2015); *Assistant Professor.* Faculty, Architecture and Engineering Design; A.S., Drafting Technologies, B.S., Technology Management, Utah Valley University; M.Ed., Technology & Learning Sciences, Utah State University.

**AL-NSOUR, Rawan** (2018); *Assistant Professor.* Faculty, Engineering Technology; B.S., Mechanical Engineering, Jordan University of Science & Technology, M.Sc., Industrial Engineering, University of Jordan, Ph.D., Mechanical/Nuclear Engineering, Virginia Commonwealth University.

**ALSHARIG, Ahmed** (2021); *Assistant Professor.* Faculty, Technology Management; B.S., Engineering, University of Tripoli, Libya; M.B.A., Management and Organization, Academy of Hihgher Studies, Libya; M.S., Ph.D., Engineering Management, Missouri University of Science and Technology.

**ALVARADO-KARSTE, Diego** (2020); *Assistant Professor.* Faculty, Marketing; B.S., Economics, University of Azuay, Ecuador; Post-Grad Diploma, Economics, Tecnológico de Monterrey, Mexico; M.B.A., Business, Tecnológico de Monterrey, Mexico; Ph.D. (ABD), Marketing, University of North Texas.

**AMIN, Masood** (1997); *Associate Professor.* Faculty, Engineering; B.S., M.S., Ph.D., Mechanical Engineering, Brigham Young University.

**ANDELIN, Lane B.** (2018); *Lecturer.* Faculty, Behavioral Science; B.S., Psychology, M.Ed., Counseling and Guidance, Ph.D., Psychology, Forest Institute of Professional Psychology, Brigham Young University.

**ANDERSEN, Bonnie** (2008); *Professor.* Faculty, Physics; B.S., Physics, Brigham Young University; Ph.D., Experimental Physics, University of Utah.

**ANDERSEN, Duane** (2014); *Associate Professor.* Faculty, Digital Media; B.F.A., Brigham Young University; M.F.A., State University of New York, Buffalo.

**ANDERSEN, Richelle** (2018); *Lecturer.* Faculty, Marketing; B.A., English, Brigham Young University; M.A., College Student Personnel; M.A., Guidance & Counseling, Bowling Green State University.

**ANDERSON, Christopher** (2014); *Assistant Professor.* Faculty, Behavioral Science; B.A., Spanish, B.S., Behavioral Science, Utah Valley University, Ph.D., Clinical Psychology, Brigham Young University.

**ANDERSON, Jonathan** (2010); *Associate Professor.* Faculty, Developmental Mathematics; B.S., M.S., Electrical and Computer Engineering, Brigham Young University.

**ANDERSON, John** (2007); *Professor.* Faculty, Information Systems & Technology; B.A., English, M.B.A., Strategy & Finance, University of Utah; Ph.D., Information Systems, Utah State University.

**ANDERSON, Thor** (2018); *Associate Professor.* Faculty, Digital Media; B.A., German, Brigham Young University - Provo, M.S., Ph.D., Instructional Technology, Utah State University.

**ANDERSON, Zann** (2019); *Assistant Professor.* Faculty, Computer Science; B.S., Computer Science, Utah State University; M.S., Ph.D., Computer Science, Brigham Young University.

**ANDRADE, Maureen** (2018); *Professor.* Faculty, Organizational Leadership; B.A., English, Brigham Young University - Provo; M.A., English, University of Utah; Ed.D., Higher Education Leadership, University of Southern California, Los Angeles.

**ANDRIST, Kathryn** (2001); *Professor.* Faculty, Mathematics; B.S., M.S., Ph.D., Mathematics, Brigham Young University.

**ARENDT, Anne** (2018); *Associate Professor.* Department Chair and Faculty, Technology Management; B.A., University of Minnesota; M..S, Walden University; M.B.A. Information Systems, University of Minnesota Carlson School; EdD, Utah State University.

**AROCHO, Rachel** (2019); *Assistant Professor.* Faculty, Behavioral Science; B.S., Family, Consumer and Human Deveopment, Utah State University, M.S., Ph.D., Human Development and Family Science, The Ohio State University.

**ASHCRAFT, Carrie** (2018); *Lecturer.* Faculty, Secondary Education; B.A., English, Boise State University; M.Ed., Education, Westminster College.

**ASHMAN, Marinda** (2007); *Associate Professor.* Department Chair and Faculty, Student Leadership & Success Studies; B.S., Elementary Education, Brigham Young University; M.Ed., Health, Physical Education & Recreation, Utah State University.

**AUGUST, Matt** (2020); *Assistant Professor.* Faculty, Theatrical Arts; B.F.A., Performance Studies, University of Colorado; M.F.A., Directing, California Institute of the Arts.

**AUSTIN, Brent** (2018); *Lecturer.* Faculty, Communication; A.A., Liberal Studies, College of the Desert, B.A., Communication Studies, M.A., Communication Studies, California State University, San Bernadino.

**B**

**BACKUS, Ellen** (2002); *Associate Professor.* Faculty, Developmental Mathematics; A.A., General Education, B.A., Math Education, M.A., Mathematics, Brigham Young University.

**BAGLEY, Katie** (2013); *Associate Professor.* Faculty, Nursing; A.S.N., B.S., Nursing, Utah Valley University; M.S.N., Teaching Nursing, University of Utah.

**BAILEY, Brooke** (2014); *Lecturer.* Faculty, English Language Learning; B.A., Linguistics, Brigham Young University; M.Ed., ESL Curriculum & Instruction, Concordia University.

**BAILEY, James** (2009); *Professor.* Faculty, Accounting; B.S., Finance, Brigham Young University; B.S., Accounting, M.B.A., University of Utah; Ph.D., Business (Accountancy), University of Nebraska-Lincoln.

**BAIRD, Kellan** (1998); *Associate Professor.* Faculty, Construction Technologies; A.S., General Studies, Ricks College; B.S., Industrial Education, Brigham Young University.

**BAKER, David** (2020); *Assistant Professor.* Faculty, Music; B.A., Music Performance, Columbus State University; M.M., Jazz Studies, Bass Performance, University of Northern Colorado; Ph.D. (ABD), Jazz Studies, Bass performance, University of Northern Colorado.

**BALL, Kamilyn** (2018); *Professional in Residence.* Faculty, Accounting; B.S., Accounting, Utah State University, M.Acc., Accounting, University of Washington.

**BALL, Nicholas** (2014); *Associate Professor.* Faculty, Information Systems & Technology; B.A., Finance, M.B.A., Idaho State University; Ph.D., Information & Decision Sciences, University of Minnesota.

**BALLARD, Jessica** (2018); *Professional in Residence.* Faculty, Organizational Leadership; B.A., Communication, M.P.C., Professional Communication, Westminster College.

**BALLARD, Matthew** (2020); *Assistant Professor.* Faculty, Engineering; B.S. Mechanical Engineering, Brigham Young University; M.S., Ph.D., Mechanical Engineering, Georgia Institute of Technology.

**BALLARD, Michael B.** (2019); *Assistant Professor.* Faculty, Languages and Cultures; B.A., Communication, University of Colorado, M.A., Communcation & Leadership, Gonzaga University, Ph.D., Educational Leadership, Drake University.

**BANCHERO-KELLEHER, Angela** (2006); *Professor.* Faculty, Dance; B.A., History; M.F.A., Dance, University of Utah.

**BARBER, Melinda** (2019); *Assistant Professor.* Faculty, Public and Community Health; B.S., School Health Education, Utah Valley University, M.Sc., Health Promotoin & Education, University of Utah.

**BARKER, David** (2015); *Assistant Professor.* Faculty, Architecture and Engineering Design; A.S., Pre-Architecture, Ricks College; B.S., Architecture, M-Arch, University of Utah.

**BARRETT, Kyle** (2020); *Lecturer - Placeholder.* Faculty, Philosophy and Humanities; B.A., Philosophy, DePaw University; M.A., Philosophy, University of Missouri-St. Louis; Ph.D. (ABD), Philosophy, University of Utah.

**BARTHEL, Brian** (1998); *Associate Professor.* Faculty, Public & Community Health; B.S., M.S., Health Science/Community Health, Brigham Young University; Ph.D., Health Education, Southern Illinois University.

**BARTHOLOMEW, Aaron** (2007); *Associate Professor.* Faculty, Accounting; B.A., Communication, J.D., Brigham Young University.

**BAYER, Virginia** (2000); *Associate Professor.* Faculty and Faculty, Biology; B.S., Biological Science, B.A., Classical Languages, University of California, Irvine; Ph.D., Medical Sciences-Neuroscience, Cornell University Graduate School of Medical Science; D.V.M., Cornell University College of Veterinary Medicine.

**BEAN, Paul** (1997); *Associate Professor.* Faculty, Transportation Technologies; B.S., Industrial Education, Brigham Young University; M.Ed., Instructional Technology, Utah State University.

**BEENE, Lara** (2014); *Assistant Professor.* Faculty, Theatrical Arts for Stage & Screen; B.A., Theater Arts, Brigham Young University; M.F.A., Costume Design, Brigham Young University.

**BEMEL, James** (2010); *Associate Professor.* Faculty, Public & Community Health; B.S., Health Promotion, Weber State University; M.S., Public Health/Health Services Administration, Ph.D., Health Promotion & Education, University of Utah.

**BENACQUISTA, Jane** (2019); *Lecturer.* Faculty, English and Literature; B.A., Liberal Arts, St. John's College, M.A., Ph.D., English/Literature, University of Arizona.

**BENDER, Melinda** (1998); *Professor.* Faculty, Literacies & Composition; B.S., Speech Communication, M.A.I.S., Communication and Human Development, Oregon State University.

**BENNETT, Lyn** (1996); *Professor.* Faculty, History & Political Science; B.A., History, B.A., Anthropology, M.S.E., Curriculum and Instruction, Ph.D., History, University of Kansas.

**BENNETT, Sean** (2010); *Associate Professor.* Faculty, Nursing; M.S., Nursing, University of Phoenix.

**BENSON, David** (2019); *Lecturer.* Faculty, Marketing; B.S., Accounting, Brigham Young University; M.B.A., Business Administration, University of Michigan; Ph.D., Strategy and Entrepreneurship, University of Michigan.

**BENTLEY, Jan** (1999); *Associate Professor.* Faculty, Information Systems & Technology; A.S., Clerical Office Training, Ricks, College; B.S., Marketing and Distributive Education, Brigham Young University; M.S., Business Information Systems and Education, Utah State University.

**BERGE, Nichole** (2020); *Lecturer.* Faculty, Emergency Services; B.S., Emergency Services Administration, M.P.S., Public Service, Utah Valley University.

**BETTRIDGE, Amy** (2013); *Lecturer.* Faculty, Marketing; B.A., International Relations, Brigham Young University; M.S., Business, Utah State University.

**BEUCHER, Margaret** (2018); *Lecturer.* Faculty, Biology; B.S., Biology, Mercyhurst College, Ph.D., Genetics, University of North Carolina School of Medicine.

**BHATT, Harish** (2020); *Assistant Professor.* Faculty, Mathematics; B.A., Mathematics, Tribuhavan University, Nepal; M.A., Mathematics, Tribhuvan University, Nepal; Ph.D., Computational Science, Middle Tennessee State University.

**BHATTACHARJEE, Debanjan** (2011); *Associate Professor.* Faculty, Mathematics; B.S., M.S., Statistics, University of Calcutta, Ph.D., Statistics, University of Connecticut.

**BI, Rachel** (2014); *Associate Professor.* Faculty, Finance & Economics; B.S., Management of Information Systems, Dalian Maritime University; M.S., Personal Financial Planning; M.B.A., Finance; Ph.D., Texas Tech University.

**BIBBY, Andrew** (2015); *Assistant Professor.* Faculty, History & Political Science; B.A., Honors English, Concordia University; Ph.D., Political Science, Michigan State University.

**BIRCH, Brian** (1999); *Professor.* Faculty, Philosophy & Humanities; B.S., Philosophy, M.S., Philosophy, University of Utah; Ph.D., Philosophy of Religion & Theology, Claremont Graduate University.

**BIRD, Tyler** (2015); *Assistant Professor.* Department Chair and Faculty, Engineering Technology; A.A.S., Electrical and Automation, Utah Valley University; B.S., Electrical Engineering, Brigham Young University; M.Engr., Electrical Engineering, University of Idaho

**BLEVINS, Maria** (2013); *Associate Professor.* Faculty, Communication; B.S., Recreation Management, University of Maine at Machias; M.A., Organizational Communications, University of Montana; Ph.D., Speech Communication, University of Utah.

**BODEN, Jeremy** (2010); *Associate Professor.* Faculty, Behavioral Science; B.S., Psychology, Brigham Young University; M.S., Marriage and Family Therapy, Loma Linda University; Ph.D., Human Development & Family Studies, Texas Tech University.

**BOGGESS, Cris** (1999); *Associate Professor.* Faculty, Transportation Technologies; A.A.S., Collision Repair Technology, Utah Valley University.

**BOHL, Dean** (2001); *Associate Professor.* Faculty, Transportation Technologies; A.A.S., Diesel Equipment Technology, Utah Valley State College.

**BOHNE, Michael** (2007); *Professor.* Department Chair and Faculty, Exercise Science & Outdoor Recreation; B.S., Physical Education, M.S., Exercise Science, Utah State University; Ph.D., Sport & Exercise Science, University of Northern Colorado.

**BOND, Calvin** (2001); *Associate Professor.* Faculty, Chemistry; B.S., Chemistry, Ph.D., Environmental and Analytical Chemistry, University of Maryland.

**BONE, Kirstin** (2019); *Lecturer.* Faculty, English and Literature; B.S., Shapespeare Studiese, Southern Utah University, M.A., Renaissance Studies, University of Alabama, Ph.D., Composition/Rhetoric, University of Alabama.

**BORDELON, Amanda** (2018); *Associate Professor.* Faculty, Engineering; B.S., M.S., Ph.D., Civil & Environmental Engineering, University of Illinois at Urbana-Champaign.

**BORNS, Renee** (2011); *Associate Professor.* Faculty, Student Leadership & Success Studies; B.A., Public Administration, University of Central Florida; M.S., Higher Education Administration, Florida State University; Ph.D., Higher Education Administration, Bowling Green State University.

**BOTT, Laurie** (2011); *Professional in Residence.* Faculty, Marketing; B.S., Communications, Utah Valley University; M.B.A., Business Administration, Utah Valley University.

**BOULTER, Claudia** (2020); *Lecturer - Placeholder.* Faculty, Philosophy and Humanities; B.A., Law, Catholic University of El Salvador; M.Ed., Education, Catholic University of Brasilia; LL.M., Law, J.D., Law, Michigan State Univesity, Dubai.

**BOYD, Tara** (2019); *Lecturer.* Faculty, Dance; B.A., Dance, Brigham Young University.

**BOYER, Bret** (2007); *Associate Professor.* Faculty, Exercise Science & Outdoor Recreation; B.S., Sports Medicine, M.A., Health, Brigham Young University; D.P.T., Physical Therapy, Creighton University.

**BRADFORD, Joel** (1993); *Associate Professor.* Faculty, Earth Science; B.S., Vocational Education, Southern Illinois University; M.S., Cultural Anthropology, University of Utah.

**BRADSHAW, James** (2013); *Lecturer.* Faculty, Biology; B.S., Biochemistry & Cell Biology, University of California-San Diego; Ph.D., Physiology & Developmental Biology, Brigham Young University.

**BRADY, Jane** (2020); *Lecturer.* Faculty, English & Literature; B.A., M.A. English, Brigham Young University - Provo

**BRANDT, Lorilynn** (2009); *Associate Professor.* Faculty, Elementary Education; B.S., Elementary Education, M.Ed., Reading and Literacy, Brigham Young University; Ph.D., Curriculum and Instruction, Utah State University.

**BRETON, Brett** (2015); *Assistant Professor.* Faculty, Behavioral Science; A.S., Aviation & Air Traffic Control, Mount San Antonio College; B.S., Psychology, M.S., Counseling & School Psychology, Ph.D., Psychology, Brigham Young University.

**BRETZ, Thomas** (2016); *Assistant Professor.* Faculty, Philosophy & Humanities; B.A., Philosophy/Ethics, Dresden University of Technology; M.A.,,Philosophy, The New School for Social Research; Ph.D., Philosophy, Loyola University.

**BRINKERHOFF, Mary** (2008); *Associate Professor.* Faculty, Developmental Mathematics; B.S., Mathematics, Weber State University; M.S., Mathematics, University of Utah.

**BRISCOE, Gregory** (2002); *Associate Professor.* Faculty, Languages & Cultures; B.A., Spanish, Utah State University; M.A., Spanish, University of California, Berkeley; Ph.D., Spanish, University of Pennsylvania.

**BROOKS, Lauren** (2018); *Assistant Professor.* Faculty, Biology; B.S., Environmental Science, Marshal University, M.S., Environmental Science, Yale School of Forestry & Environmental Studies, Ph.D, Microbiology, Oregon State University.

**BROOME, Rodger** (2010); *Associate Professor.* Faculty, Emergency Services; A.S., Psychology, B.S., Psychology, Utah Valley University; M.A., Ph.D., Psychology, Saybrook University.

**BROWN, Clayton** (2006); *Associate Professor.* Faculty, Developmental Mathematics; B.A., Mathematics Education, Brigham Young University; M.A., Teachers of Mathematics, Central Washington University.

**BROWN, Erin** (2019); *Lecturer.* Faculty, Dance; M.F.A., Dance, University of Utah.

**BROWN, Kim** (2008); *Associate Professor.* Department Chair and Faculty, Digital Media; B.S., Business Education/Administrative Systems, M.Ed., Instructional Technology, Utah State University.

**BROWN, Marc** (2014); *Professional in Residence.* Faculty, Organizational Leadership; A.S., Business Management, Utah Valley University; B.A., Management, M.B.A., Finance & Accounting, University of Utah;

**BROWN, Mary** (2006); *Professor.* Department Chair and Faculty, Public & Community Health; B.S., M.S., Community Health, Brigham Young University; Ph.D., Health Promotion & Education, University of Utah.

**BRUNGER, Candice** (2017); *Assistant Professor.* Faculty, Nursing; A.D.N., Nursing, Utah Valley University; B.S.N., Nursing, Brigham Young University-Idaho; M.S.N., Nursing, Weber State University.

**BULE, Steve** (1999); *Professor.* Faculty, Art & Design; B.A., Italian & Art History, Brigham Young University; Ph.D., Art History, Ohio State University.

**BUNDS, Michael** (2001); *Professor.* Faculty, Earth Science; B.A., Geological Sciences, University of California, Santa Barbara; M.S., Geology, University of California, Davis; Ph.D., Geology (Geochemistry, Structural Geology), University of Utah.

**BURTON, Cami** (2018); *Lecturer.* Faculty, Secondary Education; A.S., General Academics, Utah Valley University, B.S., M.S., Special Education, Brigham Young University - Provo.

**BYBEE, Paul** (1994); *Professor.* Faculty, Biology; A.S., General Science, B.S., Zoology/Botany/Geology, Weber State University; M.S., Ecology, Ph.D., Zoology (Comparative Evolutionary Biology, Vertebrate Paleontology), Brigham Young University.

**BYRD, Elaine** (1992); *Professor.* Faculty, Elementary Education; B.S., Social Work, Ed.D., Teacher Education/Literacy, Brigham Young University; M.A., Education/Reading Specialist, Hood College, Maryland

**BYRNES, Andrew** (2008); *Professor.* Faculty, Emergency Services; A.A.S., Fire Science, B.S., Public Emergency Services Management, Utah Valley University; M.Ed., Instructional Technology, Utah State University.

**C**

**CADET, Eddy** (1993); *Associate Professor.* Faculty, Earth Science; B.S., Biology, University of Illinois; M.S., Environmental Sciences, Ph.D., Integrative Biological Sciences, Tuskegee University; Licensed Environmental Health Scientist (Utah); Registered Environmental Health Specialist (REHS).

**CAKA, Fern** (2001); *Associate Professor.* Department Chair and Faculty, Chemistry; B.A., Chemistry, M.S., Ph.D., Analytical Chemistry, Brigham Young University.

**CALDIERO, Alex** (2002); *Senior Artist in Residence.* Faculty, Philosophy & Humanities; Artist in Residence/ No degree

**CALISKAN, Cenk** (2009); *Associate Professor.* Faculty, Strategic Management & Operations; B.S., Industrial Engineering, Bilkent University; M.S., Ph.D., Industrial and Systems Engineering, University of Southern California.

**CALL, Jennifer** (2018); *Lecturer.* Faculty, Secondary Education; A.A.S., Family Science, Brigham Young University - Idaho; B.S., Interdisciplinary Studies, Texas A & M University; M.S., Low Incidence Disabilities & Autism, Sam Houston State University.

**CALLISON, James** (1994); *Associate Professor.* Faculty, Earth Science; B.S., Biology, Southern Utah University, M.S., Range Science, Brigham Young University; Ph.D., Watershed Management, University of Arizona.

**CAMMACK, Susanne** (2019); *Lecturer.* Faculty, English & Literature; B.S., English, Brigham Young University - Idaho; M.A., Irish Studies, National University of Ireland; M.A., English, Boise State University; Ph.D., English, Southern Illinois University - Carbondale.

**CAMPBELL, Monica** (2010); *Associate Professor.* Faculty, Dance; B.F.A., M.F.A., Modern Dance, University of Utah.

**CARD, Arlen** (2009); *Associate Professor.* Faculty, Digital Media; B.M.A., M.M., Music Composition and Theory, Brigham Young University; J.D., J. Reuben Clark Law School.

**CARLSON, Jane I.** (2018); *Assistant Professor.* Faculty, Secondary Education; B.S., Elementary/Special Education, Keene State College; M.A., Psychology, SUNY at Stony Brook; Ph.D., Clinical Psychology, SUNY at Stony Brook.

**CARNEY, Rob** (1997); *Professor.* Faculty, English & Literature; B.A., English, Pacific Lutheran University; M.F.A., Creative Writing-Poetry, Eastern Washington University; Ph.D., English, University of Louisiana - Lafayette.

**CARTER, Angie** (2010); *Senior Lecturer.* Faculty, English & Literature; B.A., M.A., English, Brigham Young University.

**CHADWICK, Tyler** (2018); *Lecturer.* Faculty, English & Literature; B.S., English, Weber State University; M.S., English, National University; Ph.D., English Teaching, Idaho State University.

**CHAKRAVARTY, Debjani** (2015); *Associate Professor.* Faculty, Behavioral Science; B.Com, Accountancy & Business Economics, University of Calcutta; M.A., M.Phil., Sociology, University of Purdue; Ph.D., Gender Studies, Arizona State University.

**CHAMBERLAIN, Cory** (2008); *Associate Professor.* Faculty, Aviation Science; A.A.S., Aviation Maintenance Technology, Utah Technical College; B.S., Psychology, University of Utah; Master of Aeronautical Science, Embry-Riddle Aeronautical University.

**CHAMBERLAND, Stephen** (2015); *Associate Professor.* Faculty, Chemistry; B.S., Biochemistry, Boston College; Ph.D., Organic Chemistry, University of California, Irvine.

**CHAN, Leo** (2008); *Associate Professor.* Faculty, Finance & Economics; B.A., Ph.D., Economics, University of Kansas.

**CHANG, Kuo-Liang** (2011); *Associate Professor.* Faculty, Developmental Mathematics; B.B.A., Information Management, M.A., Philosophy, Fu-Jen Catholic University, Taiwan; M.S., Applied Math, Ph.D., Math Education, Michigan State University.

**CHAPMAN, Jared** (2011); *Associate Professor.* Faculty, Organizational Leadership; B.A., Recreational Management & Youth Leadership, M.B.A., Ph.D., Applied Social Psychology, Brigham Young University; M.S., Instructional Technology, Utah State University.

**CHAU, Cheung** (2012); *Associate Professor.* Faculty, Music; B.M., Cello Performance, Harid Conservatory, M.M., Cello Performance, Yale School of Music; D.M.A., Cello Performance and Wind Ensemble Conducting, New England Conservatory.

**CHEN, Hsiu-Chin** (2004); *Professor.* Faculty, Nursing; B.S.N., Chung Shan Medical University; M.S., Nursing, Kaohsiung Medical University; Ph.D., Nursing, University of Utah; EdD Educational Administration, University of South Dakoda.

**CHENEY, Paul** (2008); *Associate Professor.* Faculty, Digital Media; A.A., General Education, Ricks College; B.S., Elementary Education, Brigham Young University; M.S., Instructional Technology, Utah State University; Ph.D., Instructional Technology, University of Virginia.

**CHERRINGTON, Mark** (2018); *Professional in Residence.* Faculty, Finance and Economics; B.S., Business Management, M.B.A., Finance, Brigham Young University.

**CHO, Richard** (2015); *Assistant Professor.* Faculty, History & Political Science; B.A., Ph.D., Political Science, Stony Brook; M.A., Political Psychology, Columbia University.

**CHOU, Grace** (2002); *Professor.* Faculty, Behavioral Science; B.A., Sociology, National Taiwan University; M.A., Ph.D., Sociology, University of California, Riverside.

**CHRISTENSEN, Seth** (2018); *Assistant Professor.* Faculty, Digital Media; B.F.A., Industrial Design, Brigham Young University, M.F.A., Design Thinking, Radford University.

**CHRISTENSEN, Tammy** (2013); *Lecturer.* Faculty, Languages & Cultures; B.A., M.A., French Studies, Brigham Young University.

**CICCONE, Anthony** (2018); *Assistant Professor.* Faculty, Exercise Science & Outdoor Recreation; B.S., Exercise Science, University of Minnesota Duluth, M.S., Kinesiology, California State University Fullerton, Ph.D., Exercise Physiology, University of Kansas.

**CIESLEWICZ, Joshua** (2010); *Associate Professor.* Faculty, Accounting; B.S., M.Acc., Accounting, Brigham Young University; Ph.D., International Management, specialization in Accounting, University of Hawaii.

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**D**

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**F**

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**FAWCETT, Elizabeth** (2018); *Assistant Professor.* Faculty, Behavioral Science; B.S., Psychology, M.S., Marriage & Family Therapy, Ph.D., Marriage, Family & Human Development, Brigham Young University - Provo.

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**FEDECZKO, Wioleta** (2011); *Associate Professor.* Faculty, English & Literature; B.A., English, University of Idaho; M.S., English, Towson University; Ph.D., English, Miami University.

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**FISHER, James** (2014); *Lecturer.* Faculty, Communication; B.S., University Studies, University of New Mexico; M.A., Journalism, University of Missouri-Columbia; Ph.D. (ABD), Journalism, University of Utah;

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**FRAME, David** (2018); *Assistant Professor.* Faculty, Engineering Technology; B.S.EET, Purdue University, Electronic Engineering, A.S., Electronics/Robotics, Vincennes University, M.S., Technology, Computer Systems, Arizona State University.

**FRANCOM, Kenneth** (2017); *Assistant Professor.* Faculty, Culinary Arts; A.A.S., Culinary Arts, Utah Valley University; B.A., Business Management, Brigham Young University - Provo.

**FRANZ, Reinhard** (2014); *Associate Professor.* Faculty, Mathematics; B.S., M.S., Ph.D., Mathematics, Universitat Bielefeld.

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**FRY, Gareth** (2015); *Assistant Professor.* Faculty, Art & Design; B.A., Graphic Design, Surrey Institute of Art & Design.

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**FULLMER, Stephen** (1996); *Associate Professor.* Faculty, English & Literature; A.S., English, Utah Valley State College; B.A., M.A., English, Brigham Young University; Ph.D., Leadership & Organizational Change, Brigham Young University.

**G**

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**GODDARD, Todd** (2013); *Associate Professor.* Faculty, English & Literature; B.A., English & American Literature; M.A.,English, University of Wisconsin; J.D., University of Connecticut; Ph.D., English, University of Wisconsin.

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**GORELICK, Nathan** (2010); *Associate Professor.* Faculty, English & Literature; B.A., Sociology, New York University; M.A., Ph.D., Comparative Literature, State University of New York, Buffalo.

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**H**

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**HANSON, Kimberly** (2016); *Lecturer.* Faculty, Communication; A.A., Interpersonal Communication, Ricks College; B.A., Communication & Rhetorical Studies, Idaho State University; M.A., Interpersonal Communication Studies.

**HARDIN, Chad** (2016); *Assistant Professor.* Faculty, Art & Design; B.S., Art Illustration, Southern Utah University; M.F.A., Illustration, Academy of Art University.

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**HUYNH, Mark** (2018); *Lecturer.* Faculty, Biology; B.S., Biology, Utah Valley University, A.S., General Studies, Salt Lake Community College, M.S., Genetics & Biotechnology, Brigham Young University - Provo, M.S., Clinical Sciences, University of Colorado School of Medicine.

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**I**

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**J**

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**K**

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**KANG, Mi** (2011); *Associate Professor.* Faculty, Elementary Education; B.A., M.Ed., Korean Language and Literature Education, Chonbuk National University; M.S., Educational Leadership, University of Oregon; Ph.D., Curriculum and Instruction, University of Wisconsin-Madison.

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**L**

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**LARICHEVA, Elena** (2015); *Assistant Professor.* Faculty, Chemistry; B.S., M.S., Analytical Chemistry, St. Petersburg State University, Russia; Ph.D., Computational Chemistry, Bowling Green State University.

**LARSEN, Merilee** (2013); *Assistant Professor.* Faculty, Public & Community Health; B.S., Community Health, Utah Valley University; M.P.H., Health Education, Ph.D., Public Health, Loma Linda University.

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**LENTZ, Mark** (2013); *Associate Professor.* Faculty, History & Political Science; B.A., History, Nebraska Wesleyan University; M.A., Ph.D., Colonial Latin, Tulane University.

**LEONARD, Todd** (2007); *Associate Professor.* Faculty, Culinary Arts Institute; A.A., Culinary Arts, Salt Lake Community College

**LERBERG, Matthew** (2018); *Lecturer.* Faculty, English & Literature; B.A., English, University of North Dakota, M.A., English, Northern Arizona University, Ph.D., English, University of Texas.

**LEWIS, Scott** (1999); *Professor.* Faculty, Mathematics; B.S., M.S., Mathematics, Brigham Young University; Ph.D., Mathematics, Montana State University.

**LEY, Stephen** (2017); *Associate Professor.* Faculty and Faculty, Aviation Science; B.S., Aviation Technology, Purdue University; M.A.S., Aeronautical Science, Embry-Riddle Aeronautical University.

**LI, Ya** (1990); *Professor.* Faculty, Mathematics; B.S., Mathematics, University of Science and Technology of China; Ph.D., Mathematics, University of Utah.

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**LIANG, Samuel** (2011); *Associate Professor.* Faculty, Philosophy & Humanities; B.A., Architecture, Anhul Architectural Industry Institute; M.A., History of Architecture, Tongji University, Shanghai; Ph.D., Art History, Binghampton University.

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**M**

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**MCDONELL, Martin** (2017); *Associate Professor.* Faculty, Behavioral Science; B.A., Psychology, San Diego State University; M.S.W., California State University-Long Beach; Ph.D., Social Work, University of Utah.

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**MCPHERSON, Michelle** (2018); *Lecturer.* Faculty, Marketing; B.S., Management/Marketing, Brigham Young University, A.S., Accounting, Snow College, J.D., Law, Brigham Young University - Provo.

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**MEASOM, Keri** (2012); *Lecturer.* Faculty, Elementary Education; B.S., Elementary Education, Southern Utah University; M.Ed., Education, Brigham Young University.

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**MERRILL, Kyle** (2016); *Professional In Residence.* Faculty, Technology Management; B.S., Statistics/Quality & Production, M.S., Statistics, Brigham Young University.

**MERRIN, Christine** (1992); *Professor.* Faculty, Mathematics; B.S., Mathematics, University of Maryland; M.S., Ph.D., Mathematics, New Mexico State University.

**MERRIN, Stephen** (1996); *Professor.* Faculty, Mathematics; B.S., Mathematics, University of Colorado; M.A., Mathematics, University of Maryland; Ph.D., Mathematics, New Mexico State University.

**MGONJA, Thomas** (2012); *Associate Professor.* Faculty, Developmental Mathematics; B.S., Mathematics, Idaho State University; M.S., Financial Mathematics, Florida State University.

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**MILLER, Douglas** (1996); *Professor.* Faculty, Organizational Leadership; B.S., Hospitality Management, Brigham Young University, Hawaii; M.B.A., Chaminade University; Ph.D., University of Utah.

**MILLER, Duane** (1992); *Professor.* Faculty, Marketing; B.S., M.S., Business Education, Brigham Young University.

**MILLER, Ronald** (2017); *Professor.* Faculty, Strategic Management & Operations; B.S., Experimental Psychology, Brigham Young University; M.S., Ph.D., Experimental Psychology, Purdue University.

**MILLIGAN, Patrick** (2015); *Professional In Residence.* Faculty, Strategic Management & Operations; B.S., Business Management, University of Utah; M.A., Business Management, M.S., Organizational Leadership, Gonzaga University.

**MINAIE, Afsaneh** (2001); *Professor.* Department Chair and Faculty, Engineering; B.S., M.S., Ph.D., Electrical Engineering, University of Oklahoma.

**MINCH, Michael** (2001); *Professor.* Faculty, Philosophy & Humanities; B.A., History, Grand Canyon College; M.A., Political Philosophy, Ph.D., Political Science, University of Utah; M. Divinity, The Eastern Baptist Theological Seminary.

**MINER, M.** (1975); *Professor.* Faculty, Exercise Science & Outdoor Recreation; B.S., Recreation/Physical Education Management, M.A., Recreation/Physical Education Administration, Brigham Young University; Ph.D., Education, University of Wyoming.

**MISBACH, Alan** (2014); *Associate Professor.* Faculty, Behavioral Science; B.S., Psychology, Brigham Young University; MWS, Social Work, University of Nevada Las Vegas.

**MITTELMAN, Margaret** (2003); *Professor.* Faculty, Emergency Services; A.A.S., Community Health, Utah Valley University; B.S., Psychology, Utah Valley State College; M.Ed., Utah State University.

**MIZELL, Karen** (1999); *Professor.* Faculty, Philosophy & Humanities; B.A., Philosophy, Incarnate Word College; M.A., Ph.D., Philosophy, University of Oklahoma.

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**MONSON, Natalie** (2017); *Assistant Professor.* Faculty, Nursing; A.A.S., Nursing, Utah Valley University; M.S.N., Nursing, Walden University.

**MOODY, Richard** (2010); *Associate Professor.* Faculty, Theatrical Arts for Stage & Screen; B.S., Radio, Television and Film, M.A., Telecommunications, San Diego State University; Ph.D., Film Studies, Brigham Young University.

**MOON, Matthew** (2018); *Lecturer.* Faculty, Organizational Leadership; A.S., General Studies, Salt Lake Community College, BB.M., Business Management, M.B.A., Business Administration, University of Phoenix.

**MOORE, Thomas** (2016); *Lecturer.* Faculty, Transportation Technologies; A.A.S. Drafting Technology, Utah Valley University; B.S., M.S., Technology & Engineering, Brigham Young University.

**MORIN, David** (2013); *Associate Professor.* Department Chair and Faculty, Communication; B.A., Political Science, University of Illinois; M.A., Communication, Virginia Polytechnic Institute; Ph.D., Media & Communication, Bowling Green State University.

**MORREY, C.** (2011); *Associate Professor.* Department Chair and Faculty, Information Systems & Technology; B.S., Computer Science, Utah Valley University; M.S., Ph.D., Computer Science, New Jersey Institute of Technology.

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**MOSS, David** (2006); *Associate Professor.* Faculty, English & Literature; B.A., English, Washington University; M.A., English, Southern Illinois University; Ph.D., English, University of North Carolina.

**MOULTON, Benjamin** (2002); *Professor.* Faculty, Developmental Mathematics; B.S., Mathematics, B.A., Modern Languages, Montana State University; M.S., Civil Engineering, Brigham Young University; Ph.D., Philosophy, Walden University.

**MUELLER, Katherine** (2009); *Associate Professor.* Faculty, Nursing; B.S., Nursing, Westminster College; M.S., Nursing, Ph.D. (ABD), University of Utah.

**MUGLESTON, Joseph** (2017); *Lecturer.* Faculty, Biology; A.S., Dixie state College; B.S., Biology, University of Utah; Ph.D., Biology, Brigham Young University.

**MUNIS, B.** (2021); *Assistant Professor.* Faculty, History and Political Science; B.A., M.A., Political Science, University of Montana; Ph.D., Government, University of Virginia.

**MUNZ, Stevie** (2016); *Assistant Professor.* Faculty, Communication; B.A., German Business/Translation, B.A., Organizational Communications, Northern Illinois University; M.A., Communication, Illinois State University; Ph.D., Communication Studies, Ohio University.

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**MUSSETT, Shannon** (2003); *Professor.* Faculty, Philosophy & Humanities; B.A., Philosophy, Goucher College; M.A., Ph.D., Philosophy, Villanova University.

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**N**

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**NAISBITT, Gary** (2005); *Associate Professor.* Faculty, Criminal Justice/Law Enforcement; B.A., German, Weber State College; Ph.D., Biochemistry, Brigham Young University.

**NARDIN, Mark** (2020); *Assistant Professor.* Faculty, Engineering; B.S., Electrical Engineering, Michigan Technology University; M.S., Electrical Engineering, Princeton University; Ph.D., Electrical Engineering, University of Michigan.

**NELSON, Daren T.** (2019); *Assistant Professor.* Faculty, Earth Science; B.S., Geology, Utah State University; M.S., Hydrology, University of Idaho; Ph.D., Geology, University of Utah.

**NELSON, Julie** (2015); *Assistant Professor.* Faculty, Behavioral Science; B.S., Elementary Education & Early Childhood, Brigham Young University; M.A., Family & Human Development, Utah State University.

**NELSON, Troy** (2003); *Associate Professor.* Faculty, Nursing; A.S., Nursing Utah Valley University; B.S., Nursing, Weber State University; M.S., Nursing-Family Nurse Practitioner, University of Utah.

**NEWMAN, John** (2010); *Associate Professor.* Department Chair and Faculty, Theatrical Arts for Stage & Screen; B.F.A., Theatre, M.Ed., Multicultural Studies, University of Utah; M.A., Drama and Theatre for Youth, University of Texas at Austin; Ph.D., Educational Theatre, New York University.

**NIBLEY, Alex** (2015); *Professional In Residence.* Faculty, Digital Media; B.A., Mass Communication, University of Utah; M.F.A., Directing & Arts Administration, American Conservatory Theatre.

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**NIELSON, Elijah** (2016); *Assistant Professor.* Faculty, Behavioral Science; B.A., Asian Studies, M.S.W., Brigham Young University; J.D., Ave Maria School of Law; L.L.M., Stratus Institute for Dispute Resolution; Ph.D., (ABD), Social Work, University of Utah.

**NIELSEN, Jeffrey** (2017); *Lecturer.* Faculty, Philosophy & Humanities; B.A., German, Weber State University; M.A., Philosophy, Boston College.

**NIELSEN, Kim** (2012); *Assistant Professor.* Faculty, Physics; B.S., Physics, University of Copenhagen; M.S., University of Alaska; Ph.D., Physics, Utah State University.

**NIELSEN, Ryan** (2018); *Associate Professor.* Faculty, Music; B.M., Music Education, Brigham Young University - Idaho; M.M., Trumpet Performance, Arizona State University; Ph.D., Jazz Performance, New England Conservatory of Music.

**NIGRO, Jenna** (2015); *Assistant Professor.* Faculty, History & Political Science; B.A., History & French, Allegheny College; M.A., French Studies, New York University; Ph.D., History, University of Illinois.

**NISGURITZER, Jorge** (2007); *Associate Professor.* Faculty, Languages & Cultures; B.A., Spanish, Weber State University; M.A., Ph.D., Languages & Literature, University of Utah.

**NOLL, Gary** (1997); *Professor.* Department Chair and Faculty, Emergency Services; A.A.S., Fire Science, Community College of the Air Force; B.S., Technology Management (Fire Science Specialty), Utah Valley University; M.Ed., Utah State University.

**NORTH, Matthew** (2015); *Assistant Professor.* Faculty, Information Systems & Technology; B.A., History, Brigham Young University; M.S., Business Information Systems, Utah State University; Ph.D., Education, West Virginia University.

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**NICHOLS, Nyree-Dawn** (2012); *Associate Professor.* Faculty, Nursing; A.S., Utah Valley University, B.S.N., M.S., Nursing, University of Utah.

**O**

**O'FLYNN, Jeffrey** (2015); *Assistant Professor.* Faculty, Music; B.M., Clarinet Performance, Wichita State University; M.M., Clarinet Performance, Florida State University; D.M.A., Clarinet Performance, College-Conservatory of Music.

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**OGDEN, T.** (2009); *Associate Professor.* Faculty, Biology; B.S., Zoology, Ph.D., Integrative Biology, Brigham Young University; M.S., with mention in Zoology, Universidad de Concepción.

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**PANG, Hong** (2012); *Assistant Professor.* Faculty, History & Political Science; B.A., International Politics, B.A., Economics, Peking University, P.R. China; M.A., Economics, Ph.D., Politics and International Relations, University of Southern California.

**PANOS, Angelea** (2017); *Assistant Professor.* Faculty, Behavioral Science; B.A., Psychology, M.S.W., Mental & Occupational Health, University of Utah; M.A., Ph.D., Clinical Psychology, Fielding Graduate University.

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**PARRY, Alan** (2016); *Assistant Professor.* Faculty, Mathematics; B.S., M.S., Mathematics, Utah State University; M.A., Ph.D., Mathematics, Duke University.

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**PATTEN, Devin** (2018); *Lecturer.* Faculty, English & Literature; B.S., Technology Management, Utah Valley University; M.A., Writing & Literature, Utah State University.

**PATTERSON, Jonathan** (2019); *Lecturer.* Faculty, English & Literature; B.A., English, Southern Illinois University, M.A., English, Southern Illinois University, Ph.D. (ABD), Enlgish, University of Kansas.

**PAUL, Ordyna** (2020); *Professional In Residence.* Faculty, Accounting; B.Acc., Accountancy, Brigham Young University, Provo; M.Acc., Accountancy, University of Mississippi; Ph.D., Business Administration, Business Administration, Purdue University.

**PAULY, Jessica** (2018); *Assistant Professor.* Faculty, Communication; B.A., Communication Studies, Nebraska Wesleyan University, M.A., Communication Studies, University of Kansas, Ph.D., Communication Studies, Purdue University.

**PEPPER, Mark** (2011); *Associate Professor.* Faculty, English & Literature; B.A., English, M.A., English Literature, Sacramento State University; Ph.D., Rhetoric & Composition, Purdue University.

**PERRY, Danial** (2005); *Professor.* Faculty, Architecture and Engineering Design; A.A.S., Drafting and Design Technology, Utah Valley Technical College; B.S., Management, Linfield College; M.B.A., University of Phoenix.

**PETERSEN, Boyd** (2008); *Lecturer.* Faculty, English & Literature; B.A., French and International Relations, Brigham Young University; M.A., Comparative Literature, University of Maryland; Ph.D., Comparative Literature, University of Utah.

**PETERSEN, Jerry** (2013); *Associate Professor.* Faculty, English & Literature; B.A., Social Sciences, Washington State University; M.A., English Rhetoric & Composition, Washington University; Ph.D., English, Rhetoric and Composition, Washington State University.

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**PETERSON, Owen** (2015); *Assistant Professor.* Faculty, Digital Media; A.A., Theatre & Music, Western Wyoming Community College; B.A., Theatre Studies, Brigham Young University; MEAE, Entertainment Arts & Engineering; University of Utah.

**PETERSON, Todd** (2003); *Associate Professor.* Faculty, Computer Science; B.S., Computer Science, Brigham Young University; M.S., Ph.D., Computer Science, University of Alabama.

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**PORTER, Evelyn** (2008); *Associate Professor.* Department Chair and Faculty, Developmental Mathematics; B.S., U.S. Naval Academy; M.E.M., Master of Engineering Management, Old Dominion University.

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**POTTER, Kelli** (2000); *Associate Professor.* Faculty, Philosophy & Humanities; B.A., Philosophy, Brigham Young University; M.A., Philosophy, Florida State University; M.A., Philosophy, University of Notre Dame.

**POTTS, Kaitlyn** (2019); *Lecturer.* Faculty, Dance; A.A., University Studies, Utah Valley University; B.A., Business Administration, Harvard University.

**POULSON, Barton** (2002); *Associate Professor.* Faculty, Behavioral Science; B.S., Psychology, Brigham Young University; M.A., Psychology, Hunter College; M. Phil., Psychology, Ph.D., Social-Personality Psychology, The City University of New York.

**POWELL, John** (2013); *Lecturer.* Faculty, Physics; B.S., Physics, M.S., Physics, Ph.D., Physics & Astronomy, Brigham Young University.

**PREMO, Joshua** (2019); *Assistant Professor.* Faculty, Secondary science education/ Biology; B.Sc., Biology, History and Anthropology, SUNY Plattsburgh, M.A., Teaching, Binghamton University, Ph.D. (ABD), Zoology, Washington State University,

**PRESTON, Jacqueline** (2011); *Associate Professor.* Faculty, Literacies & Composition; B.S., Education, Ohio University; M.A., Humanities, M.A., English, Wright State University; Ph.D., English, University of Wisconsin, Madison.

**PRESTON, Karen** (2012); *Associate Professor.* Faculty, Allied Health; B.S., Dental Hygiene, Weber State College; M.Ed., Education, University of Phoenix.

**PRICE, James** (1999); *Professor.* Department Chair and Faculty, Biology; B.A., Biology, University of California; Ph.D., Molecular Biology, University of Colorado.

**PRICE, Jared** (2019); *Assistant Professor.* Faculty, Nursing; B.S., Nursing, University of Utah, B.S., Emergency Administration, Utah Valley Hospital, D.N.P., Nursing, University of Utah.

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**R**

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**REES, John** (2010); *Associate Professor.* Faculty, Art & Design; B.F.A., Photography, Brigham Young University.

**REEVES, Audrey** (2019); *Assistant Professor.* Faculty, Art and Design; B.S., Art Education, Miami University, M.A., Art Education, Arizona State University, Ph.D. (ABD), Arts Administration, Education & Policy, The Ohio State University.

**REMY, Jennifer** (2020); *Lecturer - Placeholder.* Faculty, Architecture and Engineering Design; A.A.S., Pre-Pharmacy, Snow College; B.S., Conservation & Botony, Brigham Young University.

**RHOADS, Kevin** (2012); *Assistant Professor.* Faculty, Strategic Management & Operations; B.A., French, Brigham Young University; Ph.D., Strategy/Entrepreneurship, University of Oklahoma.

**RHODES, Samuel C.** (2019); *Lecturer.* Faculty, History and Political Science; B.A., Political Science, Shippensburg University of Pennsylvania, M.A., Political Science, Washington State University, Ph.D. (ABD), Political Science, Washington State University.

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**ROSSI DE OLIVEIRA, Andre** (2011); *Associate Professor.* Faculty, Finance & Economics; B.A., M.A., Economics, University of Brasilia; M.Sc., Mathematics, Ph.D., Economics, University of Illinois at Urbana-Champaign.

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**S**

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**SCHLOSNAGLE, Leo** (2015); *Assistant Professor.* Faculty, Behavioral Science; A.S., Computer Science, Garrett College; B.A., Psychology, St. Mary's College of Maryland; Ph.D., Psychology, West Virginia University.

**SCHMIDT, Bunny** (2019); *Lecturer.* Faculty, Accounting; Ph.D., Business Administration/Accounting; M.Acc., Accounting, Utah State University; B.S. Accounting, Utah Valley University; A.S. Accounting, Santa Rosa Jr. College.

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**SCOTT, Christopher** (2018); *Lecturer.* Faculty, English & Literature; B.A., Enlgish Composition & Litarature, California State University Fullerton, A.A., General Studies, Saddleback College, M.Litt, Gothic Literature and Film, University of Stirling, UK, M.A., Enlgish Literature,

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**STEPHEN, Daniel** (2003); *Associate Professor.* Faculty, Earth Science; B.S., M.S., Geology, University of Arkansas; Ph.D., Geology (Invertebrate Paleontology), Texas A & M University.

**STEVENS, Michael** (2010); *Professor.* Faculty, Biology; B.S., Conservation Biology, Brigham Young University; M.S., Ph.D., Botany, University of Wisconsin-Madison.

**STEWART, Perry** (2000); *Professor.* Faculty and Faculty, Art & Design; A.A.S., Technical Biology, Brigham Young University - Idaho; B.F.A., M.F.A., Illustration, Utah State University.

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**STORER, Joshua** (2020); *Assistant Professor.* Faculty, Art and Design; M.F.A., 2-D Design, Cranbrook Academy of Art.

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**T**

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**TEMPLE, Walter** (2016); *Assistant Professor.* Faculty, Languages & Cultures; B.A., French, Elon College; M.A., French Literature, American University; Ph.D., Romance Studies, University of Miami.

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**TRUSCOTT, Brandon** (2015); *Associate Professor.* Faculty, Art & Design; B.A., Studio Art/Graphic Design, Humboldt State University; M.Ed., Cross-Cultural Teaching, National University; M.F.A., Design & Technology, San Francisco Art Institute.

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**U**

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**VILLALOBOS, Gina** (2019); *Lecturer.* Faculty, Languages & Cultures; B.A., Spanish Teaching, M.A., Spanish Literature, Brigham Young University.

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**W**

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**WALKER, Kent** (2007); *Associate Professor.* Faculty, Transportation Technologies; A.A.S., Heavy Equipment Mechanics, Utah Technical College; B.S., Business Management, Brigham Young University; M.Ed., Instructional Technology, Utah State University.

**WALKER, William** (2015); *Assistant Professor.* Faculty, Engineering Technology; B.S., Electronic Engineering, M.B.A., Weber State

University; Ph.D. (ABD), Educational Leadership, University of Nevada, Las Vegas.

**WALSH, Robert** (2002); *Professor.* Faculty, Public & Community Health; B.S., Health Education, Brigham Young University; M.H.E., Health Education, Idaho State University; Ed.D., Health Education, University of Idaho.

**WANG, Weihong** (2012); *Associate Professor.* Faculty, Earth Science; B.Sc., Geophysics, M.Sc., Environmental Geology, Jianghan Petroleum University; M.Sc., Geology, Iowa State University; Ph.D., Marine Science, University of South Carolina.

**WARBURTON, Trevor** (2017); *Assistant Professor.* Faculty, Secondary Education; B.A., Mathematics and Spanish, Utah State University; M.A., Teaching English as a Second Language, Pennsylvania State University; Ph.D., Education, Culture, and Society, University of Utah.

**WARCUP, Robert** (2009); *Associate Professor.* Department Chair and Faculty, Construction Technologies; B.S., Construction Management, Brigham Young University; M.B.A., University of Nevada; Ph.D, Technology & Engineering Education, Utah State University.

**WARD, Debra** (2017); *Assistant Professor.* Faculty, Developmental Mathematics; B.S., Mathematics, M.Ed., Ph.D., Mathematics Education, Texas State University.

**WARMBIER, H.** (2014); *Lecturer.* Faculty, Strategic Management & Operations; B.S., Computer Science, Wilhelm-Buchner Hochschule, Germany; M.B.A., Business, Utah Valley University.

**WARNE, Russell** (2011); *Associate Professor.* Faculty, Behavioral Science; B.S., Psychology, Brigham Young University; Ph.D., Educational Psychology, Texas A&M University.

**WASDEN, Cary** (2015); *Professional in Residence*. Faculty, Finance & Economics; B.S., Zoology, M.P.A., Business Development, Brigham Young University; Ph.D. ( ABD), International Finance & Economics, Ohio State University.

**WASSERBAECH, Steven** (2002); *Professor.* Faculty, Physics; B.S., Mathematics, B.S., Physics, University of Utah; Ph.D., Physics, Stanford University.

**WASSINK, Benjamin** (2018); *Lecturer.* Faculty, Communication; B.S., Speech Communication, Utah Valley University, M.A., Communication, University of Montana.

**WATERS, Sandie** (2008); *Associate Professor.* Faculty, Elementary Education; B.A., Sociology, St. Mary's University; M.A., Instructional Systems Technology, Indiana University; Ph.D., Instructional Technology, Utah State University.

**WATHEN, Mark** (2014); *Associate Professor.* Faculty, Chemistry; B.S., Chemistry, M.S., Organic Chemistry, Utah State University; Ph.D., Chemical Education, University of Northern Colorado.

**WAYMAN, Mina** (2003); *Associate Professor.* Faculty and Faculty, Nursing; A.S., Nursing, Brigham Young University - Provo; B.S.N., Nursing, M.S.N., Geriatric Nurse Practitioner, University of Utah.

**WEBER, Paul** (2012); *Associate Professor.* Faculty, Physics; B.S., Physics & Mathematics, Bemidji State University; M.S., Physics, Ph.D., Experimental Particle Physics, University of Colorado.

**WEIGEL, Christine** (2002); *Professor.* Faculty, Philosophy & Humanities; B.A., Philosophy, B.M., Music Performance, Lawrence University; M.A., Ph.D., Philosophy, Temple University.

**WELKER, Adam** (2019); *Assistant Professor.* Faculty, Finance and Economics; B.S., Finance, Utah State University, M.S., Financial Economics, Utah State University, Ph.D., Finance, Pennsylvania State University.

**WELLES, Shana** (2021); *Assistant Professor.* Faculty, Biology; B.S., Evolution, Ecology and Biodiversity, University of California, Davis; Ph.D., Plant Biology, University of California, Riverside.

**WESTOVER, Jonathan** (2008); *Associate Professor.* Faculty, Organizational Leadership; B.S., Sociology (emphasis in Research and Analysis, Business Minor, Korean Minor), M.P.A., Human Resources and Organizational Behavior, Brigham Young University; M.S., Sociology, Ph.D., Sociology, University of Utah.

**WHALEY, Brian** (2003); *Associate Professor.* Faculty, English & Literature; B.A., History, University of California at Santa Barbara; M.A., English, University of Montana; Ph.D., English, University of Oregon.

**WHALEY, Wayne** (1991); *Professor.* Faculty, Biology; A.A., Biology, Ricks College; B.S, Ph.D., Zoology, Brigham Young University; M.S., Wildlife Ecology, University of Arizona.

**WHEATLEY, Laura** (2016); *Lecturer.* Faculty, Exercise Science & Outdoor Recreation; B.A., Social Sciences Education,M.S., Exercise Physiology, Illinois State University; Ph.D., (ABD), Exercise Physiology, University of Utah.

**WHIPPLE, Graham** (2019); *Assistant Professor.* Faculty, Theatrical Arts for Stage & Screen; B.A., Brigham Young University; M.F.A., Northern Illinois University.

**WHITE, Frederick** (2018); *Professor.* Faculty, Languages & Cultures; B.A., Russian Languages & Literature, The Ohio State University; M.A., Slavic Lanuages & Literature, University of Kansas; Ph.D., Slavic Languages & Literature, University of Souther California.

**WHITE, Keith** (2005); *Professor.* Faculty, Developmental Mathematics; B.S., M.S., Mechanical Engineering, Brigham Young University.

**WHITE, Lilia** (2016); *Lecturer.* Faculty, Chemistry; M.S., Chemical Engineering, Moscow University of Chemical Technology.

**WIBERG, Darren** (2000); *Associate Professor.* Faculty, Developmental Mathematics; A.A., General Studies, Columbia Basin College; B.A., Mathematics, Teaching Secondary, M.A.T., Mathematics, Central Washington University.

**WILBER, Jason** (2016); *Lecturer.* Faculty, Languages & Cultures; B.A., Spanish, M.A., Hispanic Linguistics, Brigham Young University.

**WILKEY, Patrick** (2007); *Associate Professor.* Faculty, Art & Design; B.F.A., M.F.A., Graphic Design, Utah State University.

**WILLARDSON, Bennington** (2019); *Assistant Professor.* Faculty, Engineering; B.S., Civil & Environmental Engineering, Utah State University, M.S., Civil and Environmental Engineeringq, Utah State University, Ph.D., Water Resources Engineering, University of Southern California.

**WILLIAMS, Brice** (2001); *Associate Professor.* Faculty, Aviation Science; B.S., Engineering Science and Technology, Brigham Young University; M.Ed., Utah State University.

**WILLIAMS, Jeffrey** (2020); *Assistant Professor.* Faculty, Accounting; B.S., M.Acc., Acccounting, Brigham Young University; Ph.D. (ABD), Accounting, University of Illinois at Urbana-Champaign.

**WILLIAMS, Lashawn** (2016); *Assistant Professor.* Faculty, Behavioral Science; B.A., Sociology, B.A., Psychology, Duke University; M.P.A., Criminal Justice, M.S.W., Marywood University; Ph.D., (ABD), Health Professions Education, College of Saint Mary.

**WILLIAMS, Scott** (2007); *Associate Professor.* Faculty, Exercise Science & Outdoor Recreation; B.A., German Studies, Weber State University; M.S., Recreation, M.S., Business Management, Ph.D. (ABD), Health & Human Performance, University of Florida.

**WILSON, Bruce** (2001); *Associate Professor.* Faculty, Chemistry; B.S., M.S., Chemistry (minor Physics), Brigham Young University; Ph.D., Chemistry, Texas A&M University.

**WILSON, Don** (1995); *Associate Professor.* Department Chair and Faculty, Transportation Technologies; A.A.S., Collision Repair Technology, B.S., Technology Management, Utah Valley State College; M.Ed., Instructional Technology, Utah State University.

**WILSON, Sandra** (2015); *Associate Professor.* Faculty, Allied Health; A.A.S., Dental Hygiene, Colorado Northwestern Community College; B.A., Broadcast Journalism, Brigham Young University; M.A., Curriculum & Instruction, Colorado Christian University.

**WILSON, Troy** (2001); *Associate Professor.* Department Chair and Faculty, Culinary Arts Institute; A.O.S., Culinary Arts, The Culinary Institute of America, Certified Executive Chef.

**WILSON-ASHWORTH, Heather** (2000); *Professor.* Faculty, Biology; B.A., Math Education, Ph.D., Physiology and Anatomy, Brigham Young University.

**WINANS, Adrienne** (2015); *Assistant Professor.* Faculty, History & Political Science; B.A., History, University of Chicago; M.A., World History, New York University; Ph.D., History, Ohio State University.

**WISLAND, Michael** (2003); *Associate Professor.* Faculty, Digital Media; B.S., M.S., Electrical Engineering, University of Missouri.

**WITESMAN, J. David** (2016); *Assistant Professor.* Faculty, Accounting; B.S., Accounting, M.Acc., Taxation, Weber State University; Ph.D., Business Administration, Syracuse University.

**WITT, Christopher** (2007); *Associate Professor.* Faculty, Dance; B.S., Business Management, M.A., Dance, Brigham Young University.

**WITT, Phillip** (2018); *Assistant Professor.* Faculty, Strategic Management & Operations; B.S., Statistics, Brigham Young University - Provo, M.S., Statistics, Ph.D., Operations Management, Washington State University, M.B.A., Business Administration, Utah State University.

**WONG, Cynthia** (2015); *Assistant Professor.* Faculty, Student Leadership & Success Studies; B.A., Psychology, Brigham Young University, Hawaii; M.M.F.T., University of Southern California; Ed.D., Educational Psychology, University of Southern California.

**WOODWARD, Scott** (2016); *Lecturer.* Faculty, Biology; A.S., College of Eastern Utah; B.S., Biology, Ph.D., Genetics, Utah State University.

**WORKMAN, Letty** (2000); *Associate Professor.* Faculty, Marketing; B.A., Philosophy, University of Missouri-St. Louis; M.B.A., Marketing, Southern Illinois University-Carbondale; Ph.D., MIS/Marketing Education, Utah State University.

**WORTHEN, Cherilyn** (2011); *Associate Professor.* Faculty, Music; B.M., Choral Music Education, M.M., Choral Conducting, Brigham Young University.

**WYATT, Brittney** (2020); *Assistant Professor.* Faculty, Biology; B.S., Microbiology, Colorado State University; Ph.D., Biological Sciences, Marquette University.

**Y**

**YOAST, Tiffany** (2011); *Professional in Residence.* Faculty, Student Leadership & Success Studies; B.S., English, Utah Valley University; M.S., Education, Nova Southeastern University.

**YOUNG, Christopher** (2015); *Assistant Professor.* Faculty, Art & Design; B.F.A., Brigham Young University.

**YOUNG, Kathleen** (2015); *Assistant Professor.* Faculty, Allied Health; A.S., Dental Hygiene, Cabrillo College; B.S., Dental Hygiene, Utah Valley University; M.Ed., Instructional Technology, University of Utah.

**YOUNG, Travas** (2010); *Lecturer.* Faculty, Languages & Cultures; B.S., Geography, Utah State University; M.A., Linguistics, Gallaudet University.

**YOUNG, York E.** (2020); *Assistant Professor.* Faculty, Physics; B.S., Physics, Brigham Young University, M.A., Physics, University of Rochester, Ph.D., Physics, University of Rochester.

**YOUNGBULL, Kristin** (2019); *Lecturer.* Faculty, History and Political Science; B.A., Brigham Young University, M.A., University of Oklahoma, Ph.D., Arizona State University.

**YU, Ming** (2016); *Assistant Professor.* Faculty, Chemistry; B.S., Chemical Engineering, Heilongjiang University, China; Ph.D., Chemistry, Colorado State University.

**YUAN, Guofang** (2010); *Associate Professor.* Faculty, Languages & Cultures; B.A., English Language and Literature and Teaching, Shanghai Teachers' University; M.A., English Teaching, Beijing Normal University; Ph.D., Educational Policy, Cleveland State University.

**YUREVITCH, Theo** (2020); *Lecturer - Placeholder.* Faculty, History and Political Science; B.A., English and History, M.A., English, Vanderbilt University; M.F.A., Creative Writing, Florida State University.

**Z**

**ZAHADAT, Nima** (2021); *Assistant Professor.* Faculty, Information Systems & Technology; B.S., Theoretical and Applied Mathematics, M.S., Management of Informattion Systems, Ph.D., Systems Engineering/Engineering Management, George Washington University.

**ZAHN, Geoffrey** (2017); *Assistant Professor.* Faculty, Biology; M.S., Biology, Missouri State University; Ph.D., Biology, University of Arkansas.

**ZANAZZI, Alessandro** (2011); *Associate Professor.* Faculty, Earth Science; B.S., M.S., Geology, University of Padua, Italy; M.S., Geology, Iowa State University; Ph.D., Geology, University of South Carolina.

**ZENG, Larry** (2019); *Associate Professor.* Faculty and Faculty, Engineering; B.S., Applied Mathematics, Xidian University; M.S., Ph.D., Electrical Engineering, University of New Mexico.

**ZHU, Yingxian** (2002); *Associate Professor.* Faculty, Mathematics; B.S., Mathematics, Anhui University, China; M.S., Mathematics, Dalian University of Science and Technology, China; Ph.D., Mathematics (Graph Theory), Arizona State University.

**ZUBAL, Stefan** (2020); *Associate Professor.* Faculty and Faculty, Dance; B.A., Theatre, Purdue University at Fort Wayne; M.F.A., Florida State University.

# Administration

## General Officers

**President, Astrid S. Tuminez (2018)**
B.A., International Relations and Russian Literature, Brigham Young University; M.S., Soviet Studies, Harvard University; Ph.D., Political Science, Massachusetts Institute of Technology

**Provost & Senior Vice President, Academic Affairs, F. Wayne Vaught (2019)**
B.A., Philosophy, Psychology, and Religion, Georgetown College; M.A., Philosophy, Baylor University; Ph.D., Philosophy and Bioethics, The University of Tennessee - Knoxville

**Vice President, Finance & Administration, Val L. Peterson (1988)**
B.S., Political Science, Boise State University; M.P.A., Idaho State University; Ph.D., Public Policy and Administration ABD, Boise State University; Certified Fundraising Executive (CFRE)

**Vice President, Institutional Advancement, Mark H. Arstein (2021)**
B.B.A, Marketing, Texas Tech University; Certified Fundraising Executive (CFRE)

**Vice President, Planning, Budget, & Human Resources, Linda J. Makin (1980)**
B.S., Accounting, Utah Valley University; M.P.A., Brigham Young University

**Vice President, Student Affairs, Kyle A. Reyes (2003)**
B.S., Graphic Design, M.Ed., Educational Leadership, Brigham Young University; Ph.D., Educational Leadership and Policy, University of Utah

**Vice President, University Marketing & Communications, Kara L. Schneck (2020)**
B.A., Communication, Brigham Young University

## President's Office

**President, Astrid S. Tuminez (2018)**
B.A., International Relations and Russian Literature, Brigham Young University; M.S., Soviet Studies, Harvard University; Ph.D., Political Science, Massachusetts Institute of Technology

**Chief of Staff, Kara L. Schneck (2020)**
B.A., Communication, Brigham Young University

**General Counsel, Clark Collings (2017)**
J.D., S.J. Quincey College of Law; B.S., Business Management, Brigham Young University

**Chief Inclusion and Diversity Officer, Belinda ʻOtukolo Saltiban (2018)**
B.A./B.S. Sociology and Human Development, M.A., Social Work, Ph.D., Education, University of Utah

## Academic Affairs

**Provost & Senior Vice President, Academic Affairs, F. Wayne Vaught (2019)**
B.A., Philosophy, Psychology, and Religion, Georgetown College; M.A., Philosophy, Baylor University; Ph.D., Philosophy and Bioethics, The University of Tennessee - Knoxville

**Associate Provost, Academic Programs, David Connelly**
B.A., History, M.P.A., Marriott School of Management, Brigham Young University; Ph.D., Public Administration, SUNY Albany

**Deputy Provost, Academic Administration, Kathren Brown (2002)**
B.A., History, Alma College; M.A., Ph.D., Russian History, Bowling Green State University

**Associate Provost, Community Outreach & Economic Development, Belkis Torres-Capeles (2021)**
A.A., Cuyahoga Community College; B.A., Communications, M.A., Liberal Studies, Counseling & Conflict Management, Ph.D., Cultural Foundations of Education, Leadership & Administration, Kent State University

**Interim Associate Provost, Engaged Learning, Janet Colvin (2007)**
Associate Professor, Department Chair and Faculty, Communication; B.A., Public Relations, Brigham Young University; M.A., Instructional Technology, Ph.D., Speech Communication, University of Utah.

**Dean, College of Humanities & Social Sciences, Steven Clark (2000)**
B.S., Psychology, Brigham Young University; M.A., Ph.D., Psychology, University of New Hampshire

**Associate Dean, College of Humanities & Social Sciences, Janet Colvin (2007)**
Associate Professor. Department Chair and Faculty, Communication; B.A., Public Relations, Brigham Young University; M.A., Instructional Technology, Ph.D., Speech Communication, University of Utah.

**Assistant Dean, College of Humanities & Social Sciences, Toni Harris (2008)**
B.S., Business Management, M.B.A., Business Administration, Almeda University

**Dean, College of Science, Daniel Horns (1997)**
B.S., Applied Geophysics, UCLA; Ph.D., Geology (Tectonics, Structural Geology), U.C. Davis

**Associate Dean, College of Science, Fern Caka (2001)**
B.A., Chemistry, M.S., Ph.D., Analytical Chemistry, Brigham Young University.

**Associate Dean, College of Science, Jason Slack (2000)**
B.A., Physical Education, Southern Utah University; M.S., Exercise Physiology, Brigham Young University; Ph.D., Exercise and Sport Science, University of Utah

**Assistant Dean, College of Science, TBA**

**Dean, College of Engineering & Technology, Saeed Moaveni (2017)**
B.S.M.E., Mechanical Engineering; M.S., Engineering Systems, The University of Louisiana; Ph.D., Mechanical Engineering, Colorado State University

**Associate Dean, College of Engineering & Technology, Kazem Sohraby (2018)**
B.S., Electrical Engineering, Amir Kabir University; M.B.A., Wharton School, University of Pennsylvania; Ph.D., Electrical Engineering, New York University (Polytechnic)

**Associate Dean, College of Engineering & Technology, Keith Mulbery (2011)**
B.S., M.Ed., Education, Southwestern Oklahoma State University; Ph.D., Business Information Systems, Utah State University

**Dean, College of Health & Public Service, Cheryl Hanewicz (2011)**
B.S., Individualized, M.A., Liberal Studies, Ed.D., Education in Educational Leadership, Eastern Michigan University

**Associate Dean, College of Health & Public Service, Thomas Sturtevant (2012)**
A.S., General Studies/Fire Science, Georgia Military College; B.S., Applied Organizational Management, Tusculum College; M.P.A., Public Policy, Ed.D., Education, University of Tennessee

**Assistant Dean, College of Health & Public Service, Barbara Burr (2015)**
B.S., Sociology, Brigham Young University; M.H.A., Health Administration; University of La Verne

**Assistant Dean, College of Health & Public Service, Dustin Berlin (2006)**
B.S., Aviation Professional Pilot, Utah Valley University; M.B.A., Liberty University

**Dean, School of Education, Vessela Ilieva (2010)**
B.S., Mathematics Education, Utah State University; M.S., Electronics Engineering, Technical University; M.Ed., English as a Second Language, Ph.D., Curriculum and Instruction, Utah State University

**Associate Dean, School of Education, Stan Harward (2006)**
B.S., Elementary Education; M.S., Curriculum Development and Instruction, Ed.D., Reading, Brigham Young University

**Assistant Dean, School of Education, Benton Brown (2020)**
BA, Political Science, George Washington University; M.S., Community and Economic Development, University of Central Arkansas; Ph.D., Public Policy K-12 Education, University of Arkansas

**Dean and Creative Director, School of the Arts, Stephen Pullen (2017)**
B.A., Acting, Playwriting, Classical Texts, Directing, Brigham Young University; M.F.A., Cinematic Arts, Film and Television Production, University of Southern California; Diploma Drama Studies, London Academy of Music and Dramatic Arts

**Associate Dean, School of the Arts, Jim Godfrey (2002)**
B.F.A, Advertising Design; M.F.A., Graphic Design, Utah State University

**Assistant Dean, Administration, School of the Arts, E. Linda Moore (2002)**
A.S., B.S., Behavioral Science, Utah Valley University; M.P.A., Brigham Young University

**Dean, University College, Forrest Williams (1994)**
A.A., Secondary Education, Ricks College; B.A., English; M.Ed., Educational Leadership; Ed.D., Educational Leadership and Foundations, Brigham Young University

**Associate Dean, University College, Deborah Marrott (1992)**
B.A., Basic Composition/English as a Second Language, M.A., English, Brigham Young University; Ph.D., Education, Culture, and Society, University of Utah

**Assistant Dean, University College, Christopher Sutherland (2019)**
B.S., Construction Management, Brigham Young University – Idaho; M.A., Education – Counseling and Guidance, California Polytechnic State University

**Dean, Woodbury School of Business, Norman S. Wright (2010)**
B.S., Economics, M.P.A., Public Administration, Brigham Young University; M.A., Ph.D., Management, University of Pennsylvania

**Associate Dean, Woodbury School of Business, Jacob Sybrowsky (2010)**

B.A., Linguistics, M.S., Marriage, Family, and Human Development, Brigham Young University; Ph.D., Personal Financial Planning, Texas Tech University

**Associate Dean, Woodbury School of Business, Don Capener (2019)**
B.S., Political Science, Economics and Asian Studies, Brigham Young University; MBA, Thunderbird School of Global Management; Ph.D., International Management, International School of Management

**Assistant Dean, Woodbury School of Business, Mikki O'Connor (1996)**
B.A., Management, M.S., Organizational Management, University of Phoenix

**Assistant Dean, Woodbury School of Business, Tom Macdonald (2015)**
B.S., Accounting, Brigham Young University

**Chief International Officer, Office of Global Engagement, Baldomero Lago (2006)**
B.A., Spanish, Utah State University; M.A., Spanish Pedagogy, Brigham Young University; Ph.D., Instructional Technology, Universidad de Madrid

**Research Officer, Daniel Fairbanks (2019)**
B.S., Portuguese and Agronomy, Brigham Young Unviversity - Provo, M.S., Plant Breeding, University of Minnesota; Ph.D., Agronomy and Plant Genetics, University of Arizona

**Senior Director, Sponsored Programs, Curtis Pendleton (1990)**
M.S., Special Education, Utah State University; B.S., Family and Human Development and Psychology, Weber State University

**Director, Fulton Library, Lesli Baker (1998)**
M.Ed., Educational Technology, University of Missouri-Columbia; MLIS, Library and Information Science, Brigham Young University

**Director, Career & Technical Education, Kim Chiu (2004)**
A.A.S., Fashion Merchandizing, B.S., Information Technology, Utah Valley University

**Director, Academic Quality Assurance, Quinn Koller (2013)**
B.S., Geography and Liberal Studies, Excelsior College; M.S., Higher Education, Kaplan University

**Director, Concurrent Enrollment, Spencer Childs (2014)**
A.S., Business Management, Utah Valley University; B.A., American Studies, Brigham Young University

**Director, Program Completion, Tiffany Evans (2012)**
B.S., M.Ed., Psychology, Utah State University

**Director, First-Year Center, Elaine Lewis (2019)**
B.A., History and Political Science, University of Pittsburgh; M.Ed., Higher Education Administration, University of South Carolina

**Director, Graduate Studies, James Bailey (2009)**
B.S., Finance, Brigham Young University; B.S., Accounting, M.B.A., University of Utah; Ph.D., Business (Accountancy), University of Nebraska-Lincoln

**Senior Director, Office of Teaching & Learning, Wendy Athens (2017)**
B.S., Chemistry, Mansfield University; M.S., Industrial Administration, Purdue University; Ed.D., Curriculum and Instruction/Educational Technology, University of Florida

**Director, Teaching & Learning Design, Seth Gurell (2010)**
B.S., English, M.S., Instructional Technology, Utah State University; Ph.D., Instructional Psychology and Technology, Brigham Young University

**Director, Internship Services, McKay Isham (2015)**
B.S., Behavioral Science, Utah Valley University; M.P.A, Public Administration, Southern Utah University

**Director, Capitol Reef Station, Michael T. Stevens (2010)**
B.S., Conservation Biology, Brigham Young University; M.S., Ph.D., Botany, University of Wisconsin-Madison

**Director, Center for Constitutional Studies, TBA**

**Executive Program Director, Center for Constitutional Studies, Scott Paul (2009)**
B.S., Psychology with a Minor in Music,; JD, J. Reuben Clark Law School, Brigham Young University

**Associate Director, Center for Constitutional Studies, Andrew Bibby (2015)**
B.A., English & Political Science, Concordia University; Ph.D., Political Science, Michigan State University

**Director, Center for the Study of Ethics, Brian Birch (1999)**
B.S., M.S., Philosophy, University of Utah; Ph.D., Philosophy of Religion, Claremont Graduate School

**Director, Honors Program, Kate McPherson (2000)**
B.A., M.A., English, University of New Mexico; Ph.D., English, Emory University

**Director, Academic Service Learning, Jon Westover (2009)**
B.S., Sociology (emphasis in Research and Analysis, Business Minor, Korean Minor), M.P.A., Human Resources and Organizational Behavior, Brigham Young University; M.S., Sociology, Ph.D. (ABD), Sociology, University of Utah

**Director, Career & Academic Counseling, Adam Black (2002)**
B.S., Sociology and Criminal Justice, Southern Utah University; M.C./M.H.C., Mental Health Counseling, University of Phoenix

**Director, Academic Standards, Kristen Nuesmeyer (2021)**
B.A., English, University of Puget Sound; M.Ed, Student Development Administration, Seattle University

# Digital Transformation.CIO

**Vice President/CIO, Kelly Flanagan (1988)**
B.S., M.S., Electrical Engineering; Ph.D., Electrical and Computer Engineering, Brigham Young University

**Associate Vice President, Academic & Student Digital Services, Christina Baum (2020)**
B.A., History, Brigham Young University; M.B.A., Washington State University
**Associate Vice President/CTO, Office of Information Technology, M. Troy Martin (2020)**
B.S., Electronics Engineering Technology, Brigham Young University; M.S., Instructional Psychology and Technology, University of Phoenix; Ph.D., Instructional Psychology and Technology, Brigham Young University

**Senior Director, Product Portfolio Management, Brett McKeachnie (1993)**
A.S., Computer Science, B.S., Information Technology, Utah Valley University; M.B.A., Information Technology Management, Western Governors University; Fellow, Utah Valley Senior Executive Leadership Forum (UVSELF), Certified ScrumMaster, ScrumAlliance, Certified Information Technology Infrastructure Library (ITIL) Foundation v.3 & v.4, AXELOS, Certified Project Management Professional (PMP), Project Management Institute

**Controller, Digital Transformation, Ben Metzger (2016)**
A.S., B.S.. Accounting, Utah Valley University; B.A., History, Brigham Young University

**IT Officer 2-Security/IT Services, LeRoy Brown (1993)**
A.A.S., Air Conditioning Refrigeration, A.S., Pre-Radiology, B.S., Technology Management, Utah Valley University

**Senior Director, Infrastructure Services, Eddie Sorensen (1989)**
A.A.S., Computer Science, Utah Valley University; 2008-09 Utah Valley Senior Executive Leadership Fellow, Certified ITIL Change Mgmt., Certified ITIL ITSM Foundation, Certified Project Management ScrumMaster, Certified Netware Engineer, Sniffer University Certification

**Director, Network & Telecom Services, Kurt Olsen (2001)**
A.S., Telecommunications, B.S., Technology Management, Utah Valley University

**Director, Systems Administration, Reed Warner (2016)**
A.S., Web Publishing, B.S., Information Systems Security, American Military University (AMU); MBA, IT Management, Western Governors University

**Director, Infrastructure Operations, Jim Condie (2010)**
A. A.S., Technology, BS., Technology Management, Utah Valley University; Six Sigma Green Belt Certification, Certified ITIL Change Mgmt., Certified ITIL ITSM Foundation, Axelos, Professional Certified ITIL Hardware Asset Management, IAITAM, Certified Project Management ScrumMaster – Scrum Alliance

**Senior Director, IT Support & Programming Services, David Tobler (1990)**
B.A., Business Administration, Canadore College

**Director, Administrative Programming Services, Jeff Anderson (2017)**
B.S., Computer Science, Brigham Young University

**Director, Automation & Integration Services, Michael Duffin (1996)**
A.A.S., Electronics Technology, Utah Valley University

**Director, Digital Service Management, Bobby Lott (2008)**
B.S., Technology Management, Utah Valley University

**Director, Desktop Support, John Berry (2010)**
B.A., Political Science, Brigham Young University; M.B.A., Utah Valley University

**Director, Service Desk, Jessica Houston (2008)**
B.S., Behavioral Science, Utah Valley University

**Senior Director, Special Projects for IT, Joe Belnap (2004)**
B.A., Spanish, University of Utah; M.A., Organizational Leadership, Gonzaga University; Utah Secondary Education Teaching Certification, Oracle Database Certified Master, Project Management Professional (PMP) Certification

**Director, Academic IT & Analytics, Laura Busby (2003)**
A.S., Business Management, B.S., Information Technology, Utah Valley University

**Director, Student Computing, Kim Lesesberg (1999)**
A.S., A.A.S., Computer Science and Information Systems, B.S., Information Technology, MBA, Technology Management (expected Aug 2021), Utah Valley University

**Director, Audio/Visual Services, Travis Tasker (1998)**

A.A.S., Electronics and Computers, Utah Valley Community College; A.S., Spanish, Utah Valley State College; B.S., Technology Management, Utah Valley University; M.P.A., Public Administration, Brigham Young University; Six Sigma Green Belt Certified, ITIL Certified Foundations, CTS Certified Technology

**Director, Web Development Services, Nathan Gerber (1994)**
A.A.S., A.S., B.S., Computer Science, Utah Valley University

**Director, Learning Systems, Jason Hill (2014)**
B.S., Digital Media, M.B.A., Business Administration, Utah Valley University

**Director, Business Intelligence, Ken Dahl (2015)**
B.A., Communications – Public Relations, M.B.A., Brigham Young University

# Finance & Administration

**Vice President, Val L. Peterson (1988)**
B.A., M.S., Strategic Studies, U.S. War College; M.A., Mass Communication, Ph.D., Educational Leadership, Brigham Young University

**Associate Vice President, Facilities/Planning, Frank Young (2001)**
B.S., Construction Management, Brigham Young University

**Senior Director, Engineering/Space, Kurt Baxter (2015)**
A.S., Business Administration, Snow College; B.A., Political Science, Brigham Young University

**Director, Public Safety Chief of Police, Matthew Pedersen (2017)**
Police Officer Standards and Training: B.S., Sociology, M.P.A., Masters of Public Administration, Sociology, Brigham Young University

**Director, Campus Services, Cory Fralick (2017)**
B.S., Technology Management with Facilities Management Emphasis, Utah Valley University; M.P.A., Public Management, University of Nebraska

**Director, Facilities/Grounds, John Hansen (2019)**
B.S., Accounting, M.B.A., Business of Administration, Utah Valley University

**Associate Vice President, Finance/GRAMA, Jacob Atkin (2004)**
A.S., Pre-Engineering, B.S., Accounting, Utah Valley University; M.T., Weber State University; CPA

**Controller, Business Services, Kedric Black (2003)**
B.S., Accounting, M.B.A., Business Administration, Utah State University

**Senior Director, Accounting, Joe Martin (2010)**
B.S., Accounting, Southern Utah University; M.B.A., Accounting, Utah State University; CPA

**Bursar, Business Services, David Phillips (2012)**
B.A., Accounting, Weber State University; M.B.A., Business Administration, Utah State University

**Director, Dining Services, Ibrahim Tashman (2020)**
B.S.,Business Management, Utah Valley University

**Director, Bookstore, Louise Bridge (1996)**
A.S., Dixie College; B.S., Business Management, Brigham Young University; M.B.A., Human Resources and Organizational Behavior

**Senior Director, Procurement/Contract Services, Ryan Lindstrom (1992)**
B.S., Accounting, Brigham Young University; M.B.A., University of Utah; Certified Purchasing Manager

**Director, Printing Services, David Scott (2003)**
B.S., Sociology, Brigham Young University; M.P.A., Public Administration, University of Hawaii

**Associate Vice President/Athletic Director, Jared Sumsion (2005)**
A.S., Utah Valley University; B.S., Integrated Studies, Leadership & Community Health, Utah Valley University; M.B.A., Westminster College/ University of Phoenix; Ed.D., Organizational Leadership, Nova Southeastern University

**Associate Athletic Director, Communications & Marketing, Athletics, Clint Burgi (1996)**
A.S., General Education, Utah Valley University; B.S., Communication, University of Utah; M.S., Recreation and Sport Administration, Western Kentucky University

**Senior Associate Athletic Director, Compliance, Athletics, Adam Sanft (2016)**
B.A., Political Science, Brigham Young University

**Associate Athletic Director, Business and Finance, Athletics, Nikki Scott (2006)**
B.S., Business/Accounting, University of Phoenix; M.B.A., emphasis in Accounting, Freed Hardman University

**Director, UCCU Center, Jared Kearns (2018)**
B.S., Business Management, Utah Valley University; IAVM Venue Management School, OGLEBAY

**Director, Internal Audit, Peter VanderHeide (2016)**

B.S., Accounting, Brigham Young University; M.B.A., University of Nevada, Reno; Certified Public Accountant; Certified Management Accountant, Certified Fraud Examiner

**Director, Emergency Management & Safety, Robin Ebmeyer (2012)**
A.S., Nursing, Brigham Young University - Idaho; B.S., Nursing, Weber State University; M.P.A., Public Administration and Emergency Management, Jacksonville State University

# Institutional Advancement

**Vice President, Institutional Advancement; CEO UVU Foundation, Mark Arstein (2021)**
Masters in Public Education Idaho State University; Certified Fundraising Executive (CFRE)

**Associate Vice President, Major Gifts & Development Programs, TBA**

**Associate Vice President, Central Advancement and UVU Foundation COO, Jefferson Moss (2016)**
B.A., Political Science; M.B.A., Entrepreneurship & Finance, Brigham Young University

**Director, Gift Planning, Cristina Pianezzola (2000)**
A.S., General Ed., Utah Valley University; B.A. Philosophy, Texas Tech., J.D., Law, Brigham Young University

**Executive Director of Institutional Advancement, UVU Foundation Director and Board Secretary, Julie Anderson (2016)**
B.S., Theatre, Utah Valley University, M.S, Entertainment and Business Entrepreneurship, Full Sail University

**Senior Director, Alumni Relations, Alexx Tobeck (2021)**
B.A., Psychology, California State University Los Angeles

**Senior Director, Donor Relations and Annual Giving, Justin Jones (2016)**
B.S. Business Administration, Utah Valley University, Masters, Intermodal Transportation Management Logistics, Materials, and Supply Chain Management, University of Denver

**Director, Annual Giving, Vicky Hopper (2013)**
Masters in Public Administration, Brigham Young University; B.A. Communications, Brigham Young University

**Senior Director, Executive Events, Ashton Stitt (2016)**
B.S., Event Management, Brigham Young University

**Director, Executive Events, Deirdre Miller (2020)**
B.A., Communications with a Minor in Business Management, Brigham Young University

**Senior Director, Advancement Services & IT, Bart Jacobs (1989)**
A.S., Accounting, B.S., Business Management/Accounting, Utah Valley University; M.B.A., Accounting, Utah State University

**Director, Prospect Research, Katie Scott (2017)**

**Senior Database Administrator, Nilsen Septon (2013)**
B.S., Brigham Young University

**Senior Director, Communications, Christie Denniston (2020)**
Masters in Public Administration with an emphasis Executive Leadership, Drake University

**Managing Accountant of Institutional Advancement, UVU Foundation Controller, Aaron Price (2018)**
B.B.A. Finance, University of Oklahoma; M.S. Accountancy, University of Illinois at UC; J.D. Law, University of Illinois at UC

# Planning, Budget, and Human Resources

**Vice President, Planning, Budget, and Human Resources, Linda J. Makin (1980)**
B.S., Accounting, Utah Valley University; M.P.A., Brigham Young University

**Associate Vice President, Human Resources, Marilyn S. Meyer (2019)**
B.S., Management Information System, UNLV; M.S., HR Management, Golden Gate University

**Director, HR HRIS Records, Colby Callahan (2004)**
B.S., Human Resource Management, Utah State University; PHR

**Director, HR Benefits, Talent & Compensation, Judy Martindale (1996)**
Associate of Science, Utah Valley University; CCP, CBP, MHFA

**Director, Budgets, Scott Wood (2001)**
B.S., Accounting, Utah Valley University; MBA, Accounting, Utah State University

**Director, Equal Opportunity/Affirmative Action and Title IX Coordinator, Laura Carlson (2004)**
B.S., Business Management, Utah Valley University; ATIXA; NACUA, SPHR

**Director, Institutional Effectiveness, Planning & Accreditation Support, Jeff Johnson (2009)**

B.A., Political Science, California State Polytechnic University, Pomona; M.A.,Ph.D., Political Science, University of Wisconsin - Madison

**Director, Policy Office, Cara O'Sullivan (2010)**
B.A., M.A., English, Brigham Young University

**Director, Institutional Research, Tim Stanley (2005)**
B.S., Sociology; M.P.A., Brigham Young University; Ph.D. Educational Leadership & Policy, University of Utah

**Associate Director, Reporting and Analysis, Geoff Matthews (2009)**
M.S., Sociology, Utah State University

**Associate Director, Data Collection/Assessment, Todd Harper (2015)**
B.S., Consumer & Community Studies, B.S., Human Dev. & Family Studies, University of Utah; MBA, Western Governors University, Utah State University

## Student Affairs

**Vice President, Student Affairs, Kyle A. Reyes (2003)**
M.Ed., Educational Leadership, Brigham Young University; Ph.D. Educational Leadership and Policy, University of Utah

**Associate Vice President, Enrollment Management, Michelle Kearns (1992)**
B.S., Business Management, Utah Valley University; M.P.A., Public Administration, Brigham Young University, Ed.D. Northwestern University

**Director, Financial Aid, John Curl (2016)**
B.S., Business Management, Brigham Young University; M.B.A., University of Utah

**Assistant Director, Financial Aid Scholarships, Carla Morgan (1999)**
A.A.S., Utah Valley University

**Director, Grants Development Student Affairs, Greg Jackson (2003)**
B.A., Chinese and History, Brigham Young University; M.B.A., Finance, American Graduate School of International Management; Ph.D., University of Buckingham

**University Registrar, Registrar's Office, Eric Humphrey (2016)**
B.A., German, Utah State University

**Associate Registrar, Catalog/Graduation/Transfer Credit, Chris Alldredge (2009)**
B.S., Business Management, University of Utah

**Associate Registrar, Degree Audit/Registration/Records/NCAA, Bryant Bradt (2019)**
A.A.S., Computer Technology and Networking, Stevens-Henager College

**Assistant Registrar, Degree Audit, Kris Clayton (2013)**
A.S., LDS Business College

**Assistant Registrar, Registration and Records, Dona Barlow (2017)**
B.A., History, Brigham Young University

**Assistant Registrar, NCAA Eligibility Certification, Chris Case (2019)**
B.S., Sport Sciences, Ohio University; M.S., Counseling and Student Development, Kansas State University

**Assistant Registrar, Graduation, Angela Bolduc (2014)**
A.S., B.S., Behavioral Science, Utah Valley University

**Assistant Registrar, Transfer Credit, Mallory Wilsted (2016)**
A.A., B.A., History, Utah Valley University

**Program Coordinator, Leave of Absence, Mayra Powell (2017)**
B.S., Behavioral Science, Utah Valley University

**Director, Veteran Student Success Center, Sheldon Holgreen (2015)**
A.A.S., Chinese/Mandarin, Defense Language Institute; B.S., Liberal Arts, Excelsior College

**Coordinator, Veteran Success Center, Lauren Norried (2018)**
B.S., Exercise Science, Utah Valley University

**Associate Vice President, Pk-16, Grants, Outreach & Partnerships, William Barney Nye (1999)**
A.S., B.S., Integrated Studies, Utah Valley University; MPA/Ph.D. Educational Leadership & Policy, University of Utah

**Interim Director, Admissions, Chad Johnson (2012)**
B.S., Business Management/Marketing, Utah Valley University; M.B.A., University of Utah

**Associate Director, Admissions, Melissa Kimball (2014)**
B.S., Community Health, Utah Valley University

**Coordinator, Residency, Patty Coombs (2008)**

**Coordinator, Residency, Nels Hansen (2016)**
B.A., Behavioral Science, Psychology; Utah Valley University

**Coordinator, International Admissions, Connie Whaley (2000)**
B.A., English, Brigham Young University

**Associate Director, Prospective Student Services, Chad Johnson (2012)**
B.S., Business Management/Marketing, Utah Valley University; M.B.A., University of Utah

**Director, Center for the Advancement of Leadership, Belinda Han (2011)**
A.S., Individualized, B.S., Behavioral Science, Utah Valley University; M.A., Organizational Leadership, Gonzaga, University; Ph.D., Educational Leadership, Creighton University

**Coordinator, STEM Academic Support, Skyler Meeks (2018)**
M.A., English, Rhetoric and Composition, Boise State University

**Director, Statewide GEAR UP, Laurie Miller (2006)**
B.S., Elementary Education, Brigham Young University; Ph.D., Instructional Systems Design, Indiana University Bloomington

**Director, TRIO/UpwardBound/Talent Search, Michael Campbell**
B.A., Music, Brigham Young University; J.D., Law, University of Buffalo Law School

**Director, First Year Experience & Student Retention, Marcy Glassford (1991)**
A.S., Executive Assistant, Utah Valley University, B.S, Behavioral Science, Utah Valley University; M.P.A, Public Administration, Brigham Young University

**Assistant Director, First Year Experience & Student Retention, Noemy Medina (2014)**
B.A.., Spanish Linguistics, University of California; M.S. Education, California State University, Fullerton

**Senior Director, Women's Success Center, Tara Ivie (2008)**
A.A., Political Science, Utah Valley University, B.A, History/Political Science, Utah Valley University; M.S, Administration of Academic Advising, Kansas State University; Ph.D. Education Leadership, Utah State University

**Assistant Director, Women's Success Center, Jolene Merica (2017)**
B.A., Broadcast Communications, M.Ed., Community Education Leadership, Ph.D. Instructional Psychology & Technology, Brigham Young University

**Program Director, Care About Child Care, Joyce Hasting (2017)**
A.S. Early Childhood Education, Brigham Young University

**Director, Wee Care Childcare Center, Todd Harper (2015)**
B.S., Family Human Development, B.S. Consumer & Community Studies, University of Utah

**Director, Multicultural Student Services, Darah Snow (2012)**
B.S., Criminal Justice, Utah Valley University; M.Ed., Education Culture and Society, University of Utah

**Assistant Director, Multicultural Student Services, Kumen Louis (2012)**
B.A., M.Ed., Curriculum, Instructional Design and Educational Technology, Utah Valley University

**Program Director, Latino Initiative, Yudi Lewis (1998)**
A.A.S., Legal Assistant, B.S., Business Management, Utah Valley University; M.B.A., Business Management, University of Phoenix

**Interim Program Director, Native American Initiative, Justin Allison (2011)**
B.S., University Studies, Utah Valley University

**Director, International Student Services, Stephen Crook (2007)**
B.S., M.AC., Accounting, Brigham Young University

**Director, Advisor Training & Development, Wade Oliver (2010)**
B.S., Sociology, University of Utah; M.S., Instructional Technology, Utah State University

**Director, TRiO Support Services, Keith Jensen (1993)**
B.S., International Relations, Brigham Young University; M.S., Educational Leadership, Troy State University

**Director, Career Development Center, Michael Snapp (2001)**
B.S., Communications, Weber State University; M.A., Educational Counseling, University of Phoenix

**Assistant Director, Career Development Center, Jordan Doman (2010)**
B.S., Communications, M.Coun. Counseling, Idaho State University

**Career Development Counselor, NSE Program Manager, Sue Stephenson (2003)**
B.S. Recreation Management; M.P.A. Master of Public Administration, Brigham Young University

**Associate Vice President, Student Life/Dean of Students, Alexis Palmer (2004)**

B.A., Elementary Education, Boise State University; M. S. Family Recreation and Youth Leadership, Brigham Young University

**Associate Dean of Students, Ashley Larsen (2010)**
B.S., English, Utah Valley University; M.Ed., University of Utah

**Director, Accessibility Services, Sherry Page (2020)**
B.A. History, University of Texas, M.Ed. Instructional Technology, Texas Tech University

**Assistant Director, Accessibility Services, Carolyn Johnson (1991)**
A.S., Recreation, Brigham Young University - Idaho; B.S., Recreation Management, M.A., Recreation and Youth Leadership, Brigham Young University

**Manager, Deaf & Hard of Hearing Services, Nicole Hemmingsen (2011)**
A. A.S., Sign Language Interpreting and Translating, Saint Paul College; B.A., Metropolitan University

**Manager, Accommodative Services, Jason McKenna (2007)**
A.S., University Studies, Utah Valley University

**Director, Event Services & SSC/SLWC Operations, Joel Herd (2001)**
B.S., Marketing, Utah State University

**Senior Director, Student Health Services, Bill Erb (2000)**
B.S., Psychology, University of Utah; M.S., Counseling and School Psychology, Brigham Young University

**Director, Mental Health Services, Taige Bybee (2007)**
B.A., Philosophy, Brigham Young University; Ph.D., Psychology-Clinical, Brigham Young University

**Nurse Practitioner Esme Anderson (2006)**
B.S., Nursing, Weber State University; M.S., Nursing, University of Utah

**Director, Student Conduct & Conflict Resolution, Maren Turnidge (2013)**
B.S. Political Science, Brigham Young University

**Director, Campus Recreation and Wellness, DaSheek Akwenye (2010)**
B.S., Journalism, M.S., Exercise Science, Utah State University

**Program Manager, Intramurals, Dustin Lamont (2017)**
B.S., Sports Management, University of Utah

**Director, Center for Social Impact, Summer Valente (2013)**
B.A., Humanities, M.P.A., Public Administration, Brigham Young University

**Program Director, Student Involvement, Grant Flygare (1989)**
A.S., Legal Assisting, Utah Valley University; B.A., M.A., Philosophy, Brigham Young University

**Program Coordinator, Housing and Resident Life, Matthew Robins (2016)**
B.S., Communication, Utah Valley University; M.Ed., Educational Leadership and Policy, University of Utah

**Campus Administrator, Wasatch, Tom Melville (2008)**
B.A., Political Science and German, M.S., Human Resources Management, University of Utah

## University Marketing and Communications

**Vice President, University Marketing & Communications, Kara L. Schneck (2020)**
B.A., Communication, Brigham Young University

**Associate Vice President, University Marketing & Communications, Henry Molina (2017)**
B.A., Communications, Brigham Young University; M.S., Integrated Marketing, Northwestern University

**Senior Director, Integrated Marketing, Jody Birch (2018)**
B.A., Marketing and Digital Media, Utah Valley University

**Senior Director, Strategic Marketing, Chris Meek (2017)**
B.A., International Relations: International Development Emphasis, Brigham Young University

**Senior Director, Public Relations, Scott Trotter (2017)**
B.A., Communications and Public Relations, Brigham Young University

**Senior Director, Studios & Broadcasting, Will McKinnon (1996)**
A.A.S., Multimedia Communication, A.S., Electronic Technology, Utah Valley University

**Director, Art, Shari Warnick (2016)**
B.A., Graphic Design, Brigham Young University

**Director, Photography, August Miller (2011)**
B.S., Journalism, Utah State University

**Director, Public Relations, Barb Smith (2018)**
A.S., Early Childhood Education, Utah Valley University; B.A. Communications, Brigham Young University

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