

COURSE # MATH 1050

College Algebra

*2018 - 2019*

**Instructor**

**Instructor:**

**Phone:**

**Email:**

**Office Hours:**

**Course**

## Course Description

***This is a Concurrent Enrollment Course, offering both high school credit through \_\_\_\_\_\_\_\_\_\_\_\_\_\_ High School and college credit through Utah Valley University. Credit from this course is transferable to all colleges and universities. Contact the receiving institution for how the credits will be applied.***

Includes inequalities, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, systems of linear and nonlinear equations and inequalities, matrices and determinants, arithmetic and geometric sequences, and the Binomial Theorem.

**Catalog Description**

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.

**Course Prerequisites**

This class is available to all high school students in good academic standing. High school prerequisites apply.

* Complete Secondary Math 1, 2 and 3 courses with a C average each year.
* **AND** have a math ACT score of 23+ or a grade of C or better from a MAT 1010 course.
* You may substitute an ACT score with a Math ACCUPLACER or an ALEKS Placement Test
* Math 1050 requires an ACCUPLACER College Level Math score of ≥60.
* Math 1050 requires an ALEKS score of ≥46-60

Any student enrolled in this class who does not meet this requirement may be administratively withdrawn from this class at any time.

## Course Objectives or Learning Outcomes

• Perform basic algebraic and arithmetic operations using their knowledge of mathematical facts, rules, and properties;

• Recognize and use their knowledge of a wide variety of mathematical definitions, terms, symbols, expressions, statements, formulas, procedures, and methods taught or used in the course; and

• Solve problems by selecting the most appropriate mathematical formula, procedure, or methods from among several formulas, procedures, or methods known by the student.

Course Outcomes: Upon successful completion of this course a student is able to:

1. Use algebraic methods to solve a variety of problems involving exponential, logarithmic, polynomial, and rational functions, systems of equations and inequalities, sequences notation.
2. Solve equations by correctly completing several logical steps before arriving at a final answer, and when possible, check solutions.
3. Graph linear, power, root, reciprocal, absolute value, polynomial, rational, exponential, logarithmic functions and conic sections along with basic transformations.
4. Analyze real world problems such as population growth, half-life, compound interest, and optimization. Select appropriate mathematical models to aid in finding solutions.
5. Demonstrate understanding by interpreting mathematical vocabulary and symbols representing mathematical information.
6. Use algebraic manipulations to rewrite equations and expressions, including rewriting in standard form, factoring, and completing the square. Use matrix methods such as Gaussian elimination, inverse matrices, and determinants to solve systems of linear equations.

**Essential Learning Outcome:**  This course is part of UVU’s general education program and is intended to address the Essential Learning Outcome: Intellectual and Practical Skills foundation.

See <https://www.uvu.edu/math/1050_course_resource.html> for more on student skill and proficiency

**Required Text and Materials**

*College Algebra,* Stewart/Redlin/Watson 7th Edition. [Minimum sections to cover: 2.1-2.4, 2.6-2.8, 3.1-3.6, 4.1-4.6, 5.1-5.5 and Linear Programing, 6.1-6.4, 8.1-8.3, & 8.6.]

**Department Policies**

**Assessment**

Homework problems will be assigned daily. The HW assignments for the entire course are provided on a separate handout. ***Mastering the HW problems is the key to success in this class.***

Most of the learning that takes place during this course will occur outside of class. This will typically be done by studying lecture notes, studying the textbook, and working through homework problems. An average student should plan to spend approximately 8 to 12 hours per week outside of class doing homework in order to master the material.

**Exams**

There will 4 unit exams worth 100 points each and a comprehensive final exam worth 200 points. All exams will be closed book, closed notes, and taken in class under reasonable time constraints. Exam problems are similar to problems from the homework or problems discussed in class.

No early exams are given under any circumstances. An exam can be taken only once; an exam cannot be taken more than once to improve a low score. Late exams are not allowed unless the student provides a written and verifiable document that justifies the student’s absence on exam day.

**Final Exam**

The final exam is a comprehensive exam worth 20-30% of the student’s final course grade. The final exam for this course will be \_\_\_\_\_\_\_\_\_\_\_.Failure to take the final exam will result in a grade of UW or E (based on last date of attendance) for the course regardless of other grades. It is University policy that no one will be permitted to take a final exam early.

**Calculators**

At the instructor’s discretion, a scientific calculator is allowed in this course either at all times or at the times the instructor deems appropriate. Use of a graphing calculator is prohibited. Also, no phone-calculators or other smart device calculators are allowed in this course, for exams. (Instructors please determine your own calculator policy from the above guideline. Please, edit your syllabus to reflect your chosen policy.)

**Grading Scale**

A = 93-100% B - = 80-82.9 D+ = 67-69.9

 A - = 90-92.9 C+ = 77-79.9 D = 63-66.9

 B+ = 87-89.9 C = 73-76.9 D - = 60-62.9

 B = 83-86.9 C - = 70-72.9 F = 0-59.9

Final grades are calculated as follows:

|  |  |
| --- | --- |
| Final Exam | 20-30% |
| Homework, participation (which includes attendance), and quizzes | No more than 20% |
| Homework and participation (no quizzes) | No more than 15% |
| Unit Exams (at least 4) | 50-65% |
| Total | 100% |

(Instructors please determine your own grading scale according to the above guidelines and note the following policies. Please, edit your syllabus to reflect your chosen policies.)

* The Final Exam and Unit Exams must be proctored. (No take-home exams, no open-book exams, or no online exams should be given. No cheat cards are allowed.)
* The majority of exams must be work-out problems. To earn full credit, students must show their work. Multiple choice exams are discouraged.

**Grades and Credit**

Your grade for this class will become part of your permanent college transcript and will affect your GPA. A low grade in this course can affect college acceptance and scholarship eligibility.

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.

**Learning Strategist**

The Learning Strategist offers learning assistance to students who are having problems with test taking, concentration, attendance, and all types of study skills. The Learning Strategist is Pat Nelson in LC-404H or at 801-863-7418. Website http://www.uvu.edu/learningstrategies/

**Math Lab**

The Math Lab, located in LA 201, is a free service. Tutors are available to give one-on-one help with concepts, skills and applications. The Math Lab hours are Monday-Thursday 8:00 am – 8:00 pm, Friday 8:00 am – 5:00 pm, and Saturday 10:00 am – 3:00 pm. The Math Lab also has Online Tutoring at https://uvu.upswing.io/. Website http://www.uvu.edu/mathlab/#

**University Policies**

**Academic Integrity**

Utah Valley University expects all students to maintain integrity and high standards of individual honesty in academic work, to obey the law, and to show respect for others. Students of this class are expected to support an environment of academic integrity, have the right to such an environment, and should avoid all aspects of academic dishonesty. Examples of academic dishonesty include plagiarizing, faking of data, sharing information during an exam, discussing an exam with another student who has not taken the exam, consulting reference material during an exam, submitting a written assignment which was authored by someone other than you, and/or cheating in any form.

In keeping with UVU policy, evidence of academic dishonesty may result in a failing grade in the course and disciplinary review by the college.  Any student caught cheating will receive, at minimum, zero points on that particular assignment for the first offense.  A second offense can result in failing the course and will entail being reported to Student Advising.  Academic dishonesty includes, in part, using materials obtained from another student, published literature, and the Internet without proper acknowledgment of the source.   Additional information on this topic is published in the student handbook and is available on the UVU website.

### **Student Code of Conduct**

All UVU students are expected to conduct themselves in an appropriate manner acceptable at an institution of higher learning. All students are expected to **obey the law**, to **perform contracted obligations**, to **maintain absolute integrity and high standards** of individual honesty in academic work, and to observe a **high standard of conduct for the academic environment**.

The Student Rights and Responsibilities Code, or Code of Conduct, outlines for students what they can expect from the University and what the University expects of them.

Students should review their Rights and Responsibilities. The Code of Conduct also outlines the process for academic appeals, and appeals related to misconduct and sanctions. It can be found at <http://www.uvu.edu/studentconduct/students/>

**Student Responsibilities**

You are expected to take an active role in the learning process by meeting course requirements as specified in written syllabi. Faculty members have the right to establish classroom standards of behavior and attendance requirements. You are expected to meet these requirements and make contact with faculty members when unable to do so.

**Withdrawal Policy**

If you do not wish to take this course or find that you are unable to continue, you should officially withdraw by the deadline stated in the current semester UVU Student Timetable.

You can officially withdraw from a course by dropping it through the online registration system or the campus One Stop desk (BA 106) by the listed date. If you officially withdraw from a course by the "Last Day to Drop and Not Show on Transcript," the course will not appear on your academic transcripts. If you officially withdraw from a course by the "Last Day to Withdraw," a "W" will appear on your transcripts. Although your GPA will not be affected — a "W" will indicate that you chose to withdraw. If you fail to complete the course and do not drop it before the "Last Day to Withdraw," a "UW" or "E" (a failing grade) will appear on your transcripts.

Withdrawing from a course may impact your financial aid status. For more information, see: UVU Financial Aid.

**Cheating and Plagiarism Policy Procedures**

This document was taken from the Utah Valley University Policy 541, The Student Rights and Responsibilities Code

5.4.4 Each student is expected to maintain academic ethics and honesty in all its forms, including, but not limited to, cheating and plagiarism as defined hereafter:

1) Cheating is the act of using or attempting to use or providing others with unauthorized information, materials, or study aids in academic work. Cheating includes, but is not limited to, passing examination answers to or taking examinations for someone else, or preparing or copying another's academic work.

2) Plagiarism is the act of appropriating another person's or group's ideas or work (written, computerized, artistic, etc.) or portions thereof and passing them off as the product of one's own work in any academic exercise or activity.

3) Fabrication is the use of invented information or the falsification of research or other findings. Examples include but are not limited to:

a) Citation of information not taken from the source indicated. This may include the incorrect documentation of secondary source materials.

b) Listing sources in a bibliography not used in the academic exercise.

c) Submission in a paper, thesis, lab report, or other academic exercise of falsified, invented, or fictitious data or evidence, or deliberate and knowing concealment or distortion of the true nature, origin, or function of such data or evidence.

 d) Submitting as your own any academic exercise (written work, printing, sculpture, etc.) prepared totally or in part by another.

### **Students with Disabilities**

**Students who need accommodations because of a disability** may contact the UVU Office of Accessibility Services (OAS), located on the Orem Campus in LC 312. To schedule an appointment or to speak with a counselor, call the OAS office at 801-863-8747. Deaf/Hard of Hearing individuals, email [nicole.hemmingsen@uvu.edu](https://owa.uvu.edu/owa/redir.aspx?C=r3xUa4y2bkalWljgIj1VXM3KzYlusNIIESMqIpkF5USfG-H3cUMstYl8DNScKc_quB49PvOQ-l0.&URL=mailto%3anicole.hemmingsen%40uvu.edu) or text 385-208-2677.

**Religious Accommodations**

At the beginning of each semester, you shall promptly review the course syllabus and class schedule and notify faculty to request an accommodation for sincerely held religious beliefs and practices using the *Religious Accommodation Request Form*.

**Dangerous Behavior**

The faculty member has the right to demand and secure the immediate removal of any person from the classroom whenever the faculty member determines, to the best of his or her knowledge or belief, that the person's actions are threatening or dangerous to students or themselves. If the faculty member cannot resolve a disruptive situation, the faculty member may request that the disruptive person(s) leave the classroom. If the disruptive person(s) will not leave voluntarily, the faculty member may call University Police for assistance. The incident shall be reported to the Dean of Students and to the Director of Judicial Affairs in accordance with Policy 541 *Student Rights and Responsibilities Code*.

**Discriminatory, Exclusionary, or Disruptive Behavior**

Faculty members observing discriminatory, exclusionary, or disruptive behavior follow procedures described in UVU Policy 541 *Student Rights and Responsibilities Code.* 5.6

**Attendance**

Attendance in this class is not mandatory due to the different learning preferences with each student. However, class will be held according to the schedule on the top of this syllabus. Chapters will be covered in class as listed in the semester schedule below. Class will consist of chapter reviews, discussion and group activities.

**Policies/References**

1. Policy 541: Student Rights and Responsibilities Code <https://www.uvu.edu/catalog/current/policies-requirements/student-rights-and-responsibilities.html>
2. Policy 601: Classroom Instruction and Management. <https://policy.uvu.edu/getDisplayFile/5750ed2697e4c89872d95664>
3. Policy 635: Faculty Rights and Professional Responsibilities. <https://policy.uvu.edu/getDisplayFile/563a40bc65db23201153c27d>

**Definitions**

* 1. Syllabus: An agreement between faculty and students that communicates course structure, schedule, student expectations, expected course outcomes, and methods of assessment to students.

### **Dropping the Class**

### \_\_\_\_\_\_\_\_\_ is the last day to drop the course without it showing on your transcript.

\_\_\_\_\_\_\_\_\_ is the last day to withdraw from the class.
If you drop the high school class, you must also withdraw from the UVU class to avoid receiving a failing grade.

**Due dates and this syllabus may change at the instructor’s discretion due to the needs of the class members.**