

Course Catalog Year 2017-2018

CRN	Class	Description
ART 1010	Introduction to Visual Arts	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	Basic Drawing for Non-Majors	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 homework assignments.
ART 1050	Photography I	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 \$20 applies. Course fee of \$11 for equipment applies. Lab access fee of \$25 for computers applies.
ART 1120	2D Design	Core course for all Art and Design majors. Introduces the elements and principles of design. Studies two-dimensional formats as they relate to a series of different design problems. Uses principles such as line, shape, rhythm, contour, value, and contrast in creative assignments.
ART 1400	Graphic Computer Applications	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 \$20 applies. Lab access fee of \$25 for computers applies.
ASL 1020	Beginning American Sign Language II	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. Lab access fee of \$10 applies.
ASL 2010	Intermediate American Sign Language I	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. Lab access fee of \$10 for applies.
ASTR 1040	Elementary Astronomy	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 \$60/Pearson applies
AUT 1000	Survey of Automotive Technology	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 1110	Brake Systems	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	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 1130	Engine Repair	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 113L	Engine Repair Lab	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 1210	Suspension and Steering Systems	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.
AUT121L	Suspension and Steering Systems Lab	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 1230	Engine Performance	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 123L	Engine Performance Lab	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.
AVSC 1010	Survey of Aviation Science	Designed for all students interested in aviation careers. Includes a general knowledge of aviation, historical events, and aerospace studies/ development opportunities. Studies aviation and aerospace terminology, how aircraft and spacecraft fly, research and development of future systems, government and industry roles in the growth of aviation, and potential careers in aviation. May be delivered online.
AVSC 1100	Ground Private Pilot	Introduces the airplane to entry-level student pilots 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. May be delivered online.
BIOL 1010	General Biology	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 1015	General Biology Laboratory	A general laboratory experience covering introductory topics in general biology. Designed to complement 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, field excursions and an introduction to techniques used in the study of life. Course lab fee of \$13 for supplies applies.
BIOL 1610	College Biology I	Designed to give biology majors a broad exposure to many aspects of the life sciences. Covers topics of biochemistry, energetics, cell structure and function, genetics, and evolution.
BIOL 1615	College Biology I Laboratory	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 \$20 applies.
BTEC 1010	Fundamentals of Biotechnology I Career Survey	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.
CAW 140R	Millwork Technology	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.
CHEM 1010	Introduction to Chemistry	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	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.
CHIN 1020	Beginning Chinese II	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 2010	Intermediate Chinese I	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.
CJ 1010	Introduction to Criminal	Presents the processes, institution, and administration of

	Justice	criminal justice in the United States. Examines the crime problem and criminal law. Discusses criminal law, law enforcement, criminal prosecution, criminal defense, bail, the jury system, and sentencing. Explores the correctional system; namely, probation, prisons, inmates' rights, and parole.
CJ 1330	Criminal Law	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	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	Studies the importance of proper identification, collection and preservation of physical evidence. Teaches laboratory techniques and services available to the law enforcement professional as they relate to physical evidence.
CMGT 1190	Concrete and Framing Lab	Offers learning experience in concrete and framing applied construction methods. Course Lab Supply fee of \$10 for materials applies.
CMGT 1220	Finishing Lab	Offers lab experience in finishing methods and techniques. Course Lab Supply fee of \$10 for materials applies.
COMM 1020	Public Speaking	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, the development of critical thinking skills, arrangement of ideas, and use of evidence and reasoning to support claims. Explains how culture influences what is considered effective public speaking. May be delivered online. Canvas Course Mats \$78/McGraw applies
COMM 1050	Introduction to Speech Communication	Surveys the questions, methods, and current status of knowledge in the discipline of speech communication. Explores communication theory and practice across a variety of context and forms, including verbal,

		non-verbal, interpersonal, group, organization, and mass communication.
COMM 2110	Interpersonal Communication	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. Canvas Course Mats \$78/McGraw applies
CRT 1110	Surface Preparation	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	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	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	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	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	Provides a laboratory experience for overall refinishing and problem solving techniques aligning with lectures from CRT1130. 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 \$10 for equipment applies. Course Lab fee of \$74 for materials applies..
CRT 1140	Panel Replacement and Adjustment	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	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	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	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	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	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.
CS 1030	Foundations of Computer Science	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 \$35 computers applies.
CS 1400	Fundamentals of Programming	For Majors in Computer Science, Computer Engineering, Software Engineering, and other majors requiring computer programming skills. Introduces the fundamental concepts of computer programming. Presents the ideas, tools, structure, syntax, and design techniques for developing well-formed programs. Studies problem solving, program structure, data types, decision logic, loops, functions, input and output, and arrays. Introduces the basic ideas of classes and objects. Requires students to program a number of assignments that demonstrate their understanding of these concepts. May be delivered online. Lab access fee of \$35 for computers applies.
CS 1410	Object Oriented Programming	Introduces the key concepts of object-oriented programming. Includes pointers and dynamic memory allocation, linked lists, inheritance and polymorphism, the development of graphical user interfaces, operator overloading, memory management, exceptions, templates and the standard template library, and an overview of object-oriented analysis and design. May be delivered online. Lab access fee of \$35 for computers

		applies
CS 2420	Introduction to Algorithms and Data Structures	Introduces data structures using an object-oriented programming language, and paradigm. Studies data abstraction as a design tool. Includes advanced arrays, records, dynamic data structures, searching and sorting, vectors, trees, linked lists, and graphs. Uses file I/O to store data structures. Discusses algorithm metrics. Lab access fee of \$35 for computers applies.
DANC 141R	Introduction to Modern Dance Technique and Theory	For students desiring to increase their 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.
DGM 1110	Digital Media Essentials I	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 \$35 applies.
DGM 1520	Corporate and Documentary Production	Presents professional video production techniques used in documentaries and corporate video. Covers production processes such as working with corporations, scripting, 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 corporate or documentary project through the entire pre-production, production and post-production process. Software fee of \$15 applies. Lab access fee of \$35 for computers applies.
DGM 2110	Digital Motion Picture Essentials	Presents professional digital film production techniques used in feature films, documentaries and corporate video. Covers production processes such as story

		structure and script development, camera techniques, basic lighting techniques, production management and basic non-linear editing techniques. Addresses problem solving issues related to pre-production, production and post production. Each student will participate in a high-quality semester project that will take a story through the entire digital film pre-production, production and post-production process. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$35 for computers applies.
DGM 2120	Web Essentials	Designed to provide students with the fundamentals necessary to plan, design, develop, deploy, and critique a website which includes images, sound, video, forms, and separates content from presentation. Requires students to demonstrate the fundamentals of web programming languages including XHTML, CSS, and JavaScript. Examines various ways to build an accessible web page. Utilizes collaborative document sharing as they work in a group to research and present on server technologies. Culminates in a final project in which students will design and deploy a working site. May be delivered hybrid and/or online. Software fee of \$15 applies. Lab access fee of \$35 for computers applies
DGM 2130	Digital Audio Essentials	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 \$35 for computers applies.
DGM 2210	3D Modeling and Animation Essentials	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. May be delivered online. Software fee of \$15 applies. Course fee of \$19 for equipment applies. Lab access fee of \$35 for computers applies.
ECON	Economics as a Social	An introductory course which studies the operation of a

1010	Science	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
EDEL 1010	Introduction to Education	For students interested in careers in education. 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	For Elementary Education students and others interested in evaluation, selection, and use of technology for children. Covers limitations of computer applications for children. Provides criteria for selecting software appropriate for children's use and strategies for teaching computer skills to children. Includes hands-on experience with computers. May be delivered online. Lab access fee of \$20 for computers applies
EGDT 1020	3D Architectural Modeling	For Engineering Graphics and Design Technology and Construction Management majors. Utilizes a Building Information Modeling system (BIM) to design 3D architectural models. Covers model design theory, parametric modeling methods, generation of residential and commercial construction plans and details, building components and systems, and manipulation of model information. Software fee of \$35 applies. Lab access fee of \$35 for computers applies.
EGDT 1040	Computer Aided Drafting AutoCAD	Teaches drafting using AutoCAD (or other) software system. Includes enough exposure to Windows to create files, read directories, create directories and operate the AutoCAD software as it applies to Windows and Graphics. Uses CAD system to produce, plot, print, check, and correct drawings. Applies other drafting skills and standards. Software fee of \$18 applies. Lab access fee of \$35 for computers applies.
EGDT 1070	3 Dimensional Modeling Inventor	Teaches basic 3D computer modeling course which emphasizes the development of 3D machine parts, assemblies, and drawings in a constraint-based

		<p>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 \$35 for computers applies</p>
EGDT 1071	3 Dimensional Modeling - Solidworks	<p>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 \$35 for computers applies.</p>
EGDT 1090	Introduction to Architectural Drafting and Design	<p>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 \$35 for computers applies</p>
ENGL 1010	Introduction to Writing	<p>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. May be delivered hybrid and/or online. Lab access fee of \$12 for computers applies.</p>
ENGL 2010	Intermediate Writing Humanities	<p>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,</p>

		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. May be delivered hybrid and/or online. Lab access fee of \$12 for computers applies.
ENGR 1000	Introduction to Engineering	Introduces engineering-problem-solving techniques, design processes, modelling of simple structural and mechanical 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 \$35 for computers applies.
ENVT 1110	Introduction to Environmental Management	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
ESEC 1140	Emergency Medical Technician Basic	For first semester Fire Science students. Prepares students for certification as an Emergency Medical Technician-Basic through the Utah Bureau of EMS. Includes CPR, automatic defibrillation, patient assessment and treatment, legal issues, airway support, medical and trauma emergencies, emergency childbirth, pediatric emergencies and patient movement/transport. Course fee of \$72 for materials/supplies applies.
ESFF 1000	Introduction to Emergency Services and Ability Testing	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 1120	Principles of Fire and Emergency Services Safety Survival	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.

FIN 1060	Personal Finance	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 \$32 for computers applies. Canvas Course Mats \$78/McGraw applies
FREN 1020	Beginning French II	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 2010	Intermediate French I	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.
GEO 1010	Introduction to Geology	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	Designed to be taken in conjunction with GEO 1010. Includes the identification of rocks, minerals, basic landforms and structures. Studies geologic processes occurring in desert, glacial, mountainous and other environments. Taken with GEO1010, the class will articulate as an introductory earth science class. Course Lab fee of \$11 for transportation, lab applies.
GEO 1020	Prehistoric Life	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 2010	Intermediate German I	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.
HIST 1700	American Civilization	Stresses movements and developing institutions that are important for an appreciation of American History from the Pre-Columbian 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.
HLTH 1200	First Aid	For allied health professions such as nursing, community health, gerontology, radiology, physical therapy, sports medicine, and for other students and community members. Provides emergency first aid care training. Structured to meet National Safety Council First Aid requirements. Successful completers will be certified in First Aid and CPR. Includes lectures, lab with hands-on experience with mannequins, audiovisuals, discussions, and field trips.
HLTH 1300	Medical Terminology I	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.
HM 1110	Culinary Basics	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. Lab access fee of \$32 for computers applies. Course fee of \$150 for materials applies.
HM 1180	Food and Beverage Management	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 \$32 for computers applies. Canvas Course Mats \$54/Wiley applies
HUM 1010	Humanities Through the Arts	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.
IM 2010	Business Computer Proficiency	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 \$35 for computers applies. Canvas Course Mats \$88/Pearson applies. Software fee of \$18 applies.
IM 2800	Integrated Software Projects	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 workforce, 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 \$35 for computers applies
INFO	Information Systems and	Explores the fundamental concepts of information

1120	Technology Fundamentals	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 \$35 for computers applies
INFO 2420	Web Application Design	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 \$35 for computers applies.
IT 1600	Computer Architecture and Systems Software	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 \$35 for computers applies.
JPNS 1020	Beginning Japanese II	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 2010	Intermediate Japanese I	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.
MAT 1010	Intermediate Algebra	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. Lab

		access fee of \$3 applies.
MAT 1030	Quantitative Reasoning	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.
MATH 1050	College Algebra	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
MATH 1060	Trigonometry	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.
MECH 1010	Introduction to Mechatronics	Exposes students to Mechatronics through integrated system design that combines electrical, mechanical, and microprocessor programming theory. Discusses the fundamentals of materials science, manufacturing processes, and the application of automation systems in a production environment. Presents the fundamentals of the structure of metals, classification of steel and aluminum, and introduces the basics of the mechanical properties of metals. Covers common manufacturing processes such as casting, forming, metal removal, and heat treating. Introduces the application of automation in manufacturing and production systems and illustrates overall system control and data management methods. Course fee of \$20 for materials applies. Lab access fee of \$35 applies.
METO 1010	Introduction to Meteorology	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. Course fee of \$10 for lab applies.
MGMT 1010	Introduction to Business	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 \$7/Lumen applies.
MGMT 1250	Principles of Leadership	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 \$32 for computers applies.
MUSC 1010	Introduction to Music	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 1030	American Popular Music	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 1110	Music Theory I	Studies the fundamentals of music theory including elementary harmony, primary and secondary triads with inversions, non-harmonic tones and modulation.
NUTR 1020	Foundations of Human Nutrition	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.
PES 2400	Sports Injuries	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, environmental factors,

		and nutritional considerations. Reviews injuries which occur to specific populations such as adolescent and elderly athletes. Course fee of \$20 for materials applies.
PHIL 2050	Ethics and Values	Challenges students to (1) explore and clarify their values; (2) critically read works of philosophy, literature, religion, and history toward understanding the basis of their ethical views; and (3) 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.
PHYS 1010	Elementary Physics	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.
POLS 1020	Political Ideologies	Surveys the major historical and current political ideologies including liberalism, Marxism, fascism and Islamism.
POLS 1100	American National Government	Studies history and structure of American National Government, rights and responsibilities of citizens, political institutions, political processes, and governmental policies.
POLS 1000	American Heritage	Studies the founding of American constitutional government. Considers the cultural, economic, legal, political, and social ramifications of the Constitution of the United States.
PSY 1010	General Psychology	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.
PSY 1100	Human Development Life Span	Explores human development from conception and birth to old age and death. Examines growth and developmental patterns and describes the characteristics of various developmental stages. Studies the major

		physical, cognitive and psychosocial themes and issues of human development. Includes genetics, prenatal development, birth, early/middle/late childhood, adolescence, early/middle/late adulthood, and death.
SLSS 1000	University Student Success	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 2100	Major and Career Exploration	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 \$22 for materials applies.
SOC 1010	Introduction to Sociology	Studies and compares social groups and institutions and their inter-relationships. Includes culture, socialization, deviance, stratification, race, ethnicity, social change, and collective behavior.
SPAN 1020	Beginning Spanish II	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 2010	Intermediate Spanish I	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.
STAT 1040	Introduction to Statistics	A quantitative literacy course with a statistical theme. Includes descriptive statistics, sampling, and inferential methods. Emphasizes problem solving and critical

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