

**CADT 191: Introduction to 3-D Printing.** (4) The purpose of this course is to introduce students to the current state of 3-D printing technology. Students will learn about the cross-disciplinary nature of 3-D printing as an accessible, cost-effective and green prototyping and manufacturing solution. The course is taught in a lecture/lab format using two different 3-D printers and related software. Lecture/lab. Prerequisite: CADT 150.

**CADT 195: Introduction to Technical Drafting.** (4) Includes basic drafting skills, geometric construction, multi-view projection and dimensioning.

**CADT 255: Introduction to Architectural Modeling.** (4) Students will use design software to create 3-D models of buildings, generate floor plans and other working drawings, create a “walk through,” and generate construction estimates. This class can be used for elective credit in the CAD certificate and degree programs. Lecture/Lab. Prerequisite: IT 101 or equivalent computer literacy.

**CADT 260: Intermediate Computer-Aided Drafting.** (4) This course covers discipline, specific environment, and data input/export. Lecture/Lab. Prerequisite: CADT 150.

**CADT 270: Advanced Computer-Aided Drafting.** (4) Course in advanced CAD techniques, including macro programming and production drafting. Prerequisites: CADT 260.

**CADT 293: Topics in CADT.** (1-4)

**CADT 294: 3-D Printing Project.** (4) This is the capstone course for the 3-D Printing Certificate. CADT 294 is an independent study course for students with existing modeling and 3-D printing skills. Students are required to log eight hours per week (two of the eight hours must be completed in the CAD lab). The 3-D printing project(s) and project milestones are chosen in consultation with the instructor. Lecture/lab. Prerequisites: CADT 191 and CADT 171.

**CADT 295: Practicum/Cooperative Education.** (1-4) Students are placed in a business in order to gain on-the-job skills and knowledge. Prerequisite: approval of the instructor; enrolled in the last semester of their associate degree or certificate program.

## Computer Science (CS)

**CS 108L: Computer Science for All: An Introduction to Computational Science and Modeling.** (3) This course offers an introduction to computer science through modeling and simulation. Students will learn agent-based modeling of complex systems and see the applicability of computer science across fields. Course cannot apply to major in computer science or any other SOE major.

**CS 150L: Computing for Business Students.** (3) Students will use personal computers in campus laboratories to learn to use a word processor, a spreadsheet, and a database management program. The course will also cover access to the internet and other topics of current importance to business students. Course cannot apply to major or minor in Computer Science. Prerequisite: MATH 120.

**CS 151L: Computer Programming Fundamentals for Non-Majors.** (3) An introduction to the art of computing. Not intended for Computer Science majors or minors. The objective of the course is an understanding of the relationship between computing and problem solving. Lecture: 3 hours, recitation: 1 hour.



**CS 152L: Computer Programming Fundamental for Computer Science Majors.** (3) Also offered as MATH 151L An introduction to the art of computing. Intended for Computer Science majors or minors. The objective of the course is an understanding of the relationship between computing and problem solving. Lecture: 3 hours, recitation: 1 hour.

## Construction Technology (CNST)

**CNST 104: Required Introduction to the National Center for Construction Education and Research for Certification.** (4) Topics studied include basic math, communications prints, methods, and ethics. Students demonstrate skills level through laboratory assignments.

**CNST 120: Principles of Electricity.** (3) This course focuses on practical applications of electrical principles. The working principles and proper use of various types of electric motors are covered using circuit board calculations according to formulas of electrical functions.

**CNST 122: Commercial Wiring.** (3) This course covers commercial electrical wiring using New Mexico State Codes and the National Electric Code. Wiring problems in business and manufacturing locations and lighting, motor controls, appliance circuits, and other electrical projects are studied.

**CNST 123: Automation and Robotics Manufacturing I.** (3) This course introduces the basic theory, operation, and programming of automated manufacturing systems. The course will focus on three main types of manufacturing automation: Programmable Logic Controllers (PLC), Computer Numerically Controlled Machines (CNC), and Robotics. Prerequisite: CNST 120.

**CNST 128: Motor and Motor Controls.** (3) This course introduces common types of electric motors and includes motor theory, magnetism and motor rotation, motor starting components, and protective devices. Heat dissipation, motor slippage, wiring, speeds, and capacitors in motor circuits are included. Prerequisite: CNST 120.

**CNST 129: Electrical Circuits.** (3) This course provides a general understanding of common electric motors (from small shaded pole fans to large three-phase and direct currents) and motor operation and circuits using alternating current (single and three-phase). Prerequisite: CNST 126. Co-requisite: CNST 128.

**CNST 204: Timber Framing.** (4) Plan reading, elementary construction techniques, materials and construction documents; primary emphasis is on the current building code plan checking. Prerequisite: CNST 104.

**CNST 205: Programmable Controllers I.** (3) This course introduces the basic theory, operation, and programming of programmable logic controllers (PLC). Students will demonstrate programming examples, set-up examples and troubleshoot, as well as study PLC timing, counting, arithmetic, logic, and sequences. Prerequisite: CNST 120.

**CNST 293: Topics in Construction Technology.** (3-6) This course of study provides a basic introduction to construction skills for all crafts. Topics include basic safety in the construction setting, an introduction to construction mathematics, introduction to blue-prints, effective use of hand and power tools, and basic rigging.



## Criminal Justice (CRJS)

**CRJS 111: Introduction to Criminal Justice. (3)** This course provides an overall exploration of the historical development and structure of the United States criminal justice system, with emphasis on how the varied components of the justice system intertwine to protect and preserve individual rights. The course covers critical analysis of criminal justice processes and the ethical, legal, and political factors affecting the exercise of discretion by criminal justice professionals.

**CRJS 132: Introduction to Criminology. (3)** The course will explore the crime problem, its context, and especially to explain causes of crime. The course will cover Foundations for Criminology, Theories of Crime, and Types of Crime.

## Digital Media Arts (DMA)

**DMA 102: Digital Media Arts Foundations. (3)** This course is designed to provide students with a fundamental working knowledge of the technical, aesthetic, and conceptual aspects of creating digital artwork using variety of tools in the Adobe Creative Suite.

**DMA 120: Introduction to Television and Film Production. (4)** This is a comprehensive course that introduces students to the basics in producing short films and documentaries. Students will learn hands on by using and experimenting with equipment.

**DMA 125: Introduction to Post-Production Editing. (4)** This is a comprehensive introduction to the basics of editing short films and documentaries. Students will work with post-production software like Final Cut X for editing.

**DMA 130: Cinematography. (4)** This course introduces students to the world of cinematography. Students will learn about different cameras and lighting, scene study, shooting and editing scenes, and casting – all the techniques that comprise the making of motion pictures. Prerequisites: DMA 120 and DMA 125.

**DMA 135: Short Film Production. (4)** Students will learn the basics of pre-production to include lighting, casting, and shooting and editing, as it applies to short film production. Prerequisites: DMA 120 and DMA 125.

**DMA 140: Commercial Production. (4)** Students will learn the basics of commercials to include script writing, breakdown, and shooting and editing, as it applies to commercial production. Prerequisites: DMA 120 and DMA 125.

**DMA 145: Documentary Film Production. (4)** Students will learn the basics of documentary films and genres to include scriptwriting, cameras and lighting, and shooting and editing, as it applies to documentary film production. Prerequisites: DMA 120 and DMA 125.

**DMA 150: Television and Film On-Set Internship. (4)** Students will work on set for a television or film production company getting hands-on experience in the field. Students are required to keep a daily production journal. Prerequisites: DMA 120 and DMA 125.

**DMA 155: Co-op Feature Film Production. (4)** Students will co-op with a production company working on feature films. Students are required to keep a daily production journal. Prerequisites: DMA 120 and DMA 125.



**DMA 210: Blogging as a Tool.** (3) This course is designed to provide students with a fundamental working knowledge of blogging. Students will investigate blogging and contribute their own content to the Web, enhancing their critical view of our online universe.

**DMA 220: Social Media Marketing Tools.** (3) This course will teach students how to create and maintain a social media presence for business. Students will learn to use social media and content marketing to grow a business and engage with customers.

**DMA 270: Capstone: Portfolio-Practicum.** (3) This course is designed to provide students with an opportunity to concentrate on a specific portfolio project. Students will develop a portfolio helpful for an entry-level position in digital media. This course should be taken in the final semester. Prerequisite: Instructor approval.

**DMA 293: Topics: Digital Media Arts II.** (1-4) May be repeated for credit provided content is not the same.

## Early Childhood Multicultural Education (ECME)

**ECME 101: Child Growth, Development and Learning.** (3) This basic course in the growth, development, and learning of young children, prenatal through age eight, provides students with the foundation for becoming competent early childhood professionals and knowledge of how young children grow, develop and learn. Major theories of child development are integrated with all aspects of development, including biological-physical, social, cultural, emotional, cognitive, and language domains. The adult's role in supporting each child's growth, development and learning will be emphasized.

**ECME 103: Health, Safety and Nutrition.** (2) This course provides information related to standards and practices that promote children's physical and mental well-being, sound nutritional practices, and maintenance of safe learning environments. It includes information for developing sound health and safety management procedures for the prevention of childhood illnesses and communicable diseases. The course examines the many nutritional factors that are important for children's total development, healthy eating habits, physical activity, and rest. Students gain knowledge necessary for creating safe teaming environments for decreasing risk and preventing childhood injury.

**ECME 111: Family and Community Collaboration I.** (3) This course examines the involvement of families from diverse cultural and linguistic backgrounds in early childhood programs. Ways to establish collaborative relationships with parents and others involved with children in early childhood settings are discussed. Strategies for communicating with parents and guardians about their children and incorporating the families' goals and desires for their children into the early childhood program will be included.

**ECME 115: Guiding Young Children.** (3) This course explores various theories of child guidance and the practical application of each. It provides developmentally appropriate methods for guiding children and effective strategies and suggestions for facilitating positive social interactions. Appropriate strategies for preventing and dealing with violence, aggression, anger, and stress will be included. Emphasis is placed on helping children become self-responsible, competent, independent, and cooperative learners.



**ECME 117: Curriculum Development through Play – Birth through Age 4 (Pre-K).** (3) This beginning curriculum course focuses on developmentally appropriate content in early childhood programs. It addresses content that is relevant for children birth through age eight and developmentally appropriate ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with special needs and the development of IFSPs and IEPs are included. Curriculum development in all areas, including literacy, numeracy, the arts, health, science, social skills, and adaptive learning for children, birth through age eight, is emphasized. Co-requisite: ECME 117L. Prerequisite: ECME 101.

**ECME 117L: Practicum for Curriculum Development through Play – Birth through Age 4 (Pre-K).** (2) This course provides opportunities for students to apply knowledge gained from Curriculum Development and Implementation I and develop skills in planning Developmentally appropriate learning experiences for young children from birth through age eight, including young children with special needs. Learning experiences will cover all content areas, including literacy, math, science, social studies, health/wellness, the arts, and adaptive skills for children, birth through age eight. Co-requisite: ECME 117. Prerequisite: ECME 101.

**ECME 202: Introduction to Reading and Literacy Development.** (3) This course is designed to prepare early childhood professionals for promoting children's emergent literacy and reading development. Through a developmental approach, the course addresses ways in which early childhood professionals can foster young children's phonemic awareness, literacy problem solving skills, fluency, vocabulary, comprehension, and language development. This course provides the foundation for early childhood professionals to become knowledgeable about literacy development in young children. An integrated language arts perspective and an interdisciplinary approach as it address's developing writing, reading, and oral language in the home and school contexts will be addressed. Instructional approaches and theory- and research-based strategies to support the emergent literacy and reading skills of native speakers and English language learners will be presented.

**ECME 217: Curriculum Development – Age 3 (Pre-K) through Grade 3.** (3) This basic course focuses on the learning environment and the implementation of curriculum in early childhood programs. Students will use their knowledge of content, developmentally appropriate practices, and language and culture to design and implement experiences and environments that promote optimal development and learning for children from birth through age 8, including children with special needs. Various curriculum models and teaching and learning strategies will be included. Co-requisite: ECME 217L. Prerequisite: ECME 101.

**ECME 217L: Practicum for Curriculum Development – Age 3 (Pre-K) through Grade 3.** (2) This course provides opportunities for students to apply knowledge gained from Curriculum Development and Implementation II and develop skills in planning learning environments and implementing curriculum in programs serving young children, birth through age eight, including those with special needs. Co-requisite: ECME 217. Prerequisite: ECME 101.

**ECME 220: Assessment of Children and Evaluation of Programs I.** (3) This basic course familiarizes students with a variety of culturally appropriate assessment methods and instruments, including systematic observation. The course addresses the development and use of formative and summative program evaluation to ensure comprehensive quality of the total environment for children, families, and the community. Students will develop skills for evaluating the assessment process and involving other teachers, professionals and families in the process.



**ECME 230: Professionalism.** (2) This course provides a broad-based orientation to the field of early care and education. Early childhood history, philosophy, ethics and advocacy are introduced. Basic principles of early childhood systems are explored. Multiple perspectives on early care and education are introduced. Professional responsibilities such as cultural responsiveness and reflective practice are examined.

## Earth and Planetary Science (EPS)

**EPS 101: How the Earth Works - An Introduction to Geology.** (3) A fascinating tour of our active planet. Explore Earth's materials (rocks and minerals), the continents' motions and related origins of earthquakes, volcanoes, mountain building, oceans, landscapes, natural energy and economic resources, global warming, and other topics. Students are encouraged but not required to enroll in EPS 105L. *Meets UNMCC - Area 3: Physical and Natural Sciences; meets NMCC - Area III: Laboratory Science.*

**EPS 105L: Physical Geology Laboratory.** (1) Minerals, rocks, and topographic and geologic maps; field trips. 2 hrs. lab. Pre or co-requisite: EPS 101. *Meets UNMCC - Area 3: Physical and Natural Sciences; meets NMCC - Area III: Laboratory Science.*

**EPS 110: Topics in the Earth Sciences.** (1-3) Eight- to 16-week courses on selected topics relating directly to the human experience, e.g., volcanoes, extinctions, weather, earthquakes, New Mexico's water, soils, nuclear hazards, geomagnetism, Albuquerque field geology and the geology of everyday life.

**EPS 115: Geological Disasters.** (3) Causes and effects of disastrous geological events, including earthquakes, volcanic eruptions, tsunamis, landslides, and floods.

**EPS 201L: Earth History.** (4) Origin and history of the earth, including age of the planet and dating of rocks, changing configurations of oceans and continents as a result of plate tectonics, records of climate change, history of formation and erosion of mountain chains, origins and evolution of life and causes of extinction. Required field trip and lab exercises permit understanding of how Earth's history is interpreted from the geologic rock record. Prerequisite: EPS 101 or ENVS 101; pre or co-requisite: EPS 105L or ENVS 102L. *Meets UNMCC - Area 3: Physical and Natural Sciences; meets NMCC - Area III: Laboratory Science.*

**EPS 250: Geology of New Mexico.** (3) Survey of geologic features of New Mexico including structures, land forms, stratigraphy, fossils, geologic history and mineral resources. A course in elementary geology recommended.

## Economics (ECON)

**ECON 105: Introductory Macroeconomics.** (3) Economics on a national scale: determination of national income, employment level, inflation, and impact of policies affecting money supply, interest rates and government programs. Current macroeconomic issues and problems. Suggested prerequisites: ENGL 101 and MATH 120. *Meets UNMCC - Area 4: Social and Behavioral Sciences; meets NMCC- Area IV: Social/Behavioral Sciences.*



**ECON 106: Introductory Microeconomics.** (3) Exploration of individual consumer behavior, production decisions by the firm, and supply and demand relationships in the marketplace. Examination of the international dimension of production and consumption courses. Suggested prerequisites: ENGL 101, MATH 120, and ECON 105. *Meets UNMCC – Area 4: Social and Behavioral Sciences; meets NMCC– Area IV: Social/Behavioral Sciences.*

## Education (EDUC)

**EDUC 124: Introduction to Computers for Educators.** (1) An introduction to microcomputers, software, and telecommunications. Emphasis placed on educational applications of software and hardware.

**EDUC 183: Introduction to Education in New Mexico.** (3) An exploration of contemporary issues around diversity, culture, and education in New Mexico.

**EDUC 293: Topics in Education.** (1-3) Various topics related to education from an interdisciplinary perspective. May be repeated for credit, no limit.

## Emergency Medical Services (EMS)

**EMS 106: Emergency Medical Responder.** (4) A 60-hour course designed specifically for personnel who are first at the scene of an accident or emergency. This course offers a foundation for advanced EMS courses. *Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). Additional requirements for EMS classes.*

**EMS 111: EMS Combination Refresher.** (1) A 24-hour required course for EMT-First Responders, Basics, and Intermediates to maintain state and National Registry licensure that reviews current treatment in pre-hospital emergency patient care and updates the student in any changes to the New Mexico Scope of Practice for EMT's. Student must have a current EMT License to take this course.

**EMS 113: EMT-Basic.** (8) This EMS certification level is the foundation level for all emergency medical responders. This course consists of 96 hours of didactic instruction and 80 hours of lab instruction, including individual instruction for a range of basic skills. Upon successful completion of the course, graduates will be eligible to sit for the National Registry EMT licensing examination. Corequisite: 142. Restriction: program permission. *Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). Additional requirements for EMS classes.*



**EMS 120: Introduction to EMS System.** (3) Covers the history of emergency medical services and the development of EMS systems and current trends and issues in EMS. Ideal for students considering a career in EMS. Available online.

**EMS 142: EMT-Basic Lab.** (2) Meets the EMT Basic national standard curriculum requirements and incorporates NM EMT –B scope of practice. Provides lab instruction to prepare the student to sit for the NM and National Registry testing. Co-requisite EMS 113. Restriction: program permission. *Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). Additional requirements for EMS classes.*

**EMS 143: EMT- Intermediate Lab.** (1) Meets New Mexico requirements for EMT-Intermediate skills training, including intravenous fluid administration and pharmacology. Prerequisite EMS 113 and EMS 142. Co-requisite: EMS 180, EMS 151 Restriction: program permission. *Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). Additional requirements for EMS classes.*

**EMS 151: EMT-Intermediate Clinical and Field Experience.** (2) Meets New Mexico requirements for EMT-Intermediate field and clinical training, including emergency department and pre-hospital experience. Prerequisite: EMS 113 and EMS 142. Co-requisite: EMS 180 and EMS 143 Restriction: program permission. *Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). Additional requirements for EMS classes.*

**EMS 180: EMT-Intermediate.** (5) Meets New Mexico requirements and incorporates EMT-Intermediate scope of practice, to include lecture and lab instruction, including intravenous fluid administration and pharmacology. This course prepares the student to sit for New Mexico and National Registry testing. Restriction: program permission. *Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). Additional requirements for EMS classes.*

**EMS 193: Emergency Medicine Topics** (1-3) Titles will vary.

## Engineering (ENG)





**CE 202: Engineering Statics.** (3) Statics of particles and rigid bodies, in two and three dimensions using vector algebra as an analytical tool; centroids; distributed loads; trusses, frames, internal forces, friction. Prerequisites: PHYC 160 and MATH 163.

**ECE 131: Programming Fundamentals.** (3) Fundamental programming concepts, including consideration of abstract machine models with emphasis on the memory hierarchy, basic programming constructs, functions, parameter passing, pointers and arrays, file I/O, bit-level operations and interfacing to external devices.

**ECE 203: Circuit Analysis I.** (3) Basic elements and sources. Energy and power. Ohm's law and Kirchhoff's laws. Resistive networks, node and loop analysis. Network theorems. First-order and second-order circuits. Sinusoidal sources and complex representations: impedance, phasors, complex power. Three-phase circuits. Prerequisite: ENG 120 or MATH 163. Pre or co-requisite: PHYC 161.

**ENG 116: Introduction to Engineering.** (1) Description of the engineering profession, orientation to engineering education, introduction to the engineering design process. Does not count toward degree credit in the College of Arts and Sciences or in the School of Engineering. Two hours lecture and demonstrations.

**ENG 120: Mathematics for Engineering Applications.** (4) Provides an overview of basic engineering mathematics topics necessary for success in second-year engineering courses. Topics are presented in the context of engineering applications and reinforced through labs and examples from core engineering courses. Prerequisite: MATH 121.

**ENG 144 (co-listed as MATH 153): Pre-Calculus and Trigonometry.** (5) Algebraic expressions, algebraic equations, inequalities, functions, graphing. Exponential, logarithmic, and trigonometric functions. Complex numbers and vectors. Limits. Prerequisites/placement: Successful completion of MATH 121, or ACCUPLACER score of 69-99 (College-Level Math) or ACT  $\geq 25$  or SAT  $\geq 590$ .

**ENG 195: Special Topics in Engineering.** (1-6) Selected topics in engineering and/or computer science at the introductory level.

**ENGF 293: Topics.** (1-6) Selected topics in engineering.

## English (ENGL)

### Developmental Writing Courses:

**ENGL 099: Developmental English.** (4) An intensive study of fundamental writing skills, focusing upon paragraph development and fluency; introduces essay writing and includes a skills laboratory. Grade option: RA, RB, RCR/RNC. Prerequisites/placement: Minimum writing ACCUPLACER score of  $\leq 55$ , or verbal ACT score of 14.

**ENGL 100: Writing Standard English.** (4) Developmental writing course providing concentrated practice writing and revising basic essays, as well as intensive study of grammar, punctuation, and usage and includes a skills laboratory. Grade option: RA, RB, RCR/RNC. Prerequisites/placement: Successful completion of ENGL 099 (RA, RB, or RCR) or minimum writing ACCUPLACER score of 55-68, or verbal ACT score of 17. Co-requisite: UNIV 101.

### Expository and Professional Writing Courses:



**ENGL 110: Accelerated Composition.** (3) Requires minimum ACT Verbal score of 19 for placement. Expository writing and reading. Concentrates on organizing and supporting ideas in writing. *Meets UNMCC – Area 1: Writing and Speaking; meets NMCC – Area I Communications.*

**ENGL 111: Composition I.** (3) For students with ACT Verbal score of <19; does not count toward Core Curriculum Writing and Speaking requirements, but does count as elective credit for graduation. This is the first term of a two-term “Stretch” sequence (with ENGL 112); the intention is that students remain with their cohort and their teacher over both courses in successive semesters.

**ENGL 112: Composition II.** (3) Students are placed in ENGL 112 after they have received a grade of “C” or higher in ENGL 111 in the previous term. *Meets UNMCC – Area 1: Writing and Speaking; meets NMCC – Area I Communications.*

**ENGL 113: Enhanced Composition.** (4) This “Studio” option covers the requirements and student learning outcomes of ENGL 110 with the addition of a 1 credit writing lab. All 4 credits generate undergraduate credit; 3 of the 4 credits meet core curriculum requirements. *Meets UNMCC – Area 1: Writing and Speaking; meets NMCC – Area I: Communications.*

**ENGL 119: Technical Communications.** (3) Introductory study of written and verbal communications used in the technical professions with emphasis in the planning, execution, and editing of professional and technical documents and other communication media. This course is not a substitute for ENGL 219 and generally applies to particular associate degree programs or as an elective credit. Students are encouraged to speak with an advisor about the applicability of this course. Prerequisite: ENGL 110.

**ENGL 120: Composition III.** (3) Practice writing analytic and argumentative essays based on expository and literary readings. Some research required. Can serve as initial composition course for students with ACT Verbal score of 26-28; serves as second course in composition sequence for students who have earned a “C” or higher in ENGL 110, 112, or 113. *Meets UNMCC – Area 1: Writing and Speaking; meets NMCC – Area I: Communications.*

**ENGL 219: Technical and Professional Writing.** (3) Practice in writing and editing of workplace documents, including correspondence, reports, and proposals. Prerequisite: ENGL 110 or 112 or 113 (B or higher), ENGL 120 (C or higher), or verbal ACT score <sup>3</sup> 26, or verbal SAT score <sup>3</sup> 610. *Meets UNMCC – Area 1: Writing and Speaking; meets NMCC – Area I: Communications.*

**ENGL 220: Expository Writing.** (3 to a maximum of 6) An intermediate course with emphasis on rhetorical types, structure, and style. Prerequisite: ENGL 110 or 112 or 113 (B or higher), ENGL 120 (C or higher), or verbal ACT score <sup>3</sup> 26, or verbal SAT score <sup>3</sup> 610. *Meets UNMCC – Area 1: Writing and Speaking; meets NMCC – Area I: Communications.*

**ENGL 224: Introduction to Creative Writing.** (3) A beginning course in the writing of diction, poetry, and creative nonfiction. Emphasis on process over product. Introduces issues of craft, workshop vocabulary, strategies for revision, and the habit of reading as a writer. Prerequisite: ENGL 110 or 112 or 113.

**ENGL 290: Introduction to Professional Writing.** (3) A beginning course in the professional writing concentration. Study of technical writing, public information and public relations writing and freelance nonfiction writing. Prerequisite: ENGL 120.

**ENGL 298: Workshop in Literature or Writing.** (1-3, maximum of 6) Various topics in literature, language and writing.



## Literature and Language Courses:

**ENGL 107: Greek Mythology.** (3) Introduction to mythology; primary readings in stories about the gods and heroes, usually including Homer, Hesiod, Homeric Hymns and Tragedies.

**ENGL 150: The Study of Literature.** (3) An introduction to the study and appreciation of literature for non-English majors. Shows how understanding writers' techniques increases enjoyment of their work; relates these techniques to literary conventions; teaches recognition, analysis, discussion of important themes. *Meets UNMCC - Area 5: Humanities; meets NMCC - Area V: Humanities and Fine Arts.*

**ENGL 211: Topics in Literature.** (3 to a maximum of 6) Surveys a specific type or area in literature, e.g., the American Novel, the satiric novel, southern fiction, the western novel, American poetry, feminist literature, Chicano literature, Native American literature African-American literature, Medieval, and Viking literature. Primarily for non-majors. Prerequisite: ENGL 150.

**ENGL 240: Traditional Grammar.** (3) A study of the basic analysis of English sentences offered by traditional grammar. Presents the terminology and methods for identifying parts of speech, functional units of sentences, and basic sentence patterns. Suggested prerequisite: ENGL 100.

**ENGL 248: Topics in Popular Medieval Literature and Studies.** (3 to a maximum of 9) Reading and analysis of popular contemporary literature and film of the medieval period, including Tolkien's works; mystery novels; fantasy; Viking language and saga.

**Engl 250: The Analysis of Literature.** (3) First course required of all English majors. Concentrates on methods of literary analysis and critical thinking. Prerequisite: ENGL 120.

**ENGL 264: Survey of Native Literatures and Rhetorics.** (3) A general overview of the history and diversity of the literatures and rhetorics of Native peoples, including oral tradition, film, autobiography fiction, poetry, art, drama and ceremony. Focus is on American Indian texts.

**ENGL 265: Introduction to Chicana/o Literature.** (3) A survey of Chicana/o novels, short stories, essays, poetry, and drama, from nineteenth century to the present, with emphasis on major themes such as history, culture, identity, language, and region.

**ENGL 281: African-American Literature I.** (3) This course introduces students to the African-American classics of the slavery era. Daily experiences of the characters in these books become the basis for discussing race, class, gender, revolt, freedom, peace and humanity.

**ENGL 287: Topics in Introductory Studies in Genre.** (3 to 6) Introductory study in any one genre, including narrative, comedy, satire, tragedy, fiction, poetics, or stylistic analysis of nonfiction.

**ENGL 292: World Literatures: Ancient World through the 16<sup>th</sup> Century.** (3) Survey of key texts in world literature from the ancient world through the 16<sup>th</sup> century. *Meets UNMCC - Area 1: Writing and Speaking; meets NMCC - Area I: Communications.*

**ENGL 293: World Literatures: 17<sup>th</sup> Century through the Present.** (3) Survey of key texts in world literature from the 17<sup>th</sup> century through the present. *Meets UNMCC - Area 1: Writing and Speaking; meets NMCC - Area I: Communications.*

**ENGL 294: Survey of Earlier English Literature.** (3) From Old English to 1798. A study of the principal literary and intellectual movements and selected writers and literary works from Beowulf through Johnson.



**ENGL 295: Survey of Later English Literature.** (3) From 1798 to present. Study of principal literary and intellectual movements and selected writers and literary works.

**ENGL 296: Earlier American Literature.** (3) A general survey of American Literature to the mid-19<sup>th</sup> century.

**ENGL 297: Later American Literature.** (3) A general survey of American Literature from the mid-19<sup>th</sup> century to present.

## Environmental Science (ENVS)

**ENVS 101: The Blue Planet.** (3) To understand global change and environmental concerns, this course weaves together an understanding of Earth's lithosphere, atmosphere and oceans and how ecosystems are linked to the physical environment. Students are encouraged, but not required, to enroll concurrently in 102L.

**ENVS 102L: The Blue Planet Laboratory.** (1) Introductory environmental earth science laboratory. Includes minerals, rocks, and rock cycle, topographic maps, local geology and groundwater, weather and climate.

## Fine Arts (FA)

**FA 229: Topics.** (1-3 for a maximum of 12) Interdisciplinary topics in fine arts.

## French (FREN)

**FREN 101: Elementary French I.** (3) Beginning French for students with no previous exposure to French. *Meets UNMCC - Area 6: Foreign Language.*

**FREN 102: Elementary French II.** (3) Beginning French for students who have completed FREN 101 or equivalent. *Meets UNMCC - Area 6: Foreign Language.*

**FREN 103: Elementary French Conversation.** (1) Supplementary course to FREN 101, 102, for students interested in additional practice in speaking. Grading option: CR/NC. Pre or co-requisite: FREN 101 or FREN 102.

**FREN 108: Elementary French Reading.** (1) Continuation and enrichment of elementary curriculum, conducted entirely in French.

**FREN 175: Accelerated Elementary French.** (6) Encompasses the work of FREN 101, 102. FREN 101-102 and FREN 175 may not both be counted for credit.

**FREN 201: Intermediate French I.** (3) Review of grammar and development of communication skills, conducted mostly in French. *Meets UNMCC - Area 6: Foreign Language.*

**FREN 202: Intermediate French II.** (3) Review of grammar and development of communication skills, introduction to reading of French literature, conducted entirely in French. *Meets UNMCC - Area 6: Foreign Language.*



**FREN 203: Intermediate French Conversation.** (3) Designed primarily to give qualified students of FREN 201, 202 extra practice in the oral use of the language. It is recommended that this course be taken concurrently with FREN 201 or FREN 202.

## Game Design and Simulation (GAME)

**GAME 101: Introduction to Game Development.** (3) Introductory game development concepts and techniques. Topics common to all game development: history of modern games, player considerations, game elements, storytelling and narrative, character development, game play experience, levels, interface design, audio, strategy, and project management.

**GAME 102: Introduction to Game Engines.** (3) This course focuses on real-time programming, using event-driven game scripting languages in both commercial and open-source gaming engines but mainly focusing on the Unity Game Engine. Students participate in both individual, hands-on exercises, as well as game development teamwork to design and build functional games, using existing game engines, including discussions and recommendations for game engines to fit industry specifications. Prerequisites: GAME 101 and GAME 150.

**GAME 120: Game Testing.** (3) Testing and debugging gaming and simulation applications in the Alpha and Beta stages of production. Product critiques and written documentation of testing and debugging processes. Assigned projects, readings, presentations, exams and group critiques will assist in preparing the student for further study in game development.

**GAME 125: 3-D Modeling and Animation.** (3) This course focuses on skill development covering the 3-D computer graphics pipeline, using Autodesk Maya, 3-DS Ma, and/or Blender and other software. Upon completion of this course, students will gain the foundation needed to create games and game assets.

**GAME 130: Digital Imaging Techniques.** (3) This course provides students with a fundamental working knowledge of the technical, aesthetic, and conceptual aspects of digital imaging techniques, digital photography, and the Adobe Photoshop Creative Suite software to provide a foundation in game asset building, texturing and design. Lectures, demonstrations, group/online discussions, and other online content will introduce various issues associated with the digital media presented and accompanying technologies.

**GAME 150: Character Animation and Rigging.** (3) Create computer games utilizing game development tools that require no programming including 2D graphics, 3-D modeling, music and sound effects. Tasks include: game setup, development studio, manipulating graphic images, creating sounds/music, pictures and animation. Prerequisite: GAME 125.

**GAME 160: Game Engine Scripting.** (3) This course focuses on game scripting programming languages with an emphasis on game concepts and simulations directly related to game engines, both commercial and open-source, although a focus will be on the Unity game engine C++ and JavaScript. Students will work in small teams to produce a 2D or 3-D computer game, using the Unity Game Engine. Students will be expected to fill multiple roles in the production process and gain hands-on experience in the collaborative processes of game design, project management, programming, graphics and animation, and playtesting. Prerequisite: GAME 102.



**GAME 180: Game Programming.** (3) The course focuses on game programming, using various languages, such as C++. Topics will include points and vectors, sound, and graphics. Lectures, demonstrations, discussions, and other content will introduce various issues of game programming. Prerequisite: GAME 102.

**GAME 220: Environmental Modeling.** (3) This course teaches students how to create full scale environments working within small production teams. Students will create full realistic and stylized environments in 3-D Studio Max, covering the modeling and texturing required. Prerequisite: GAME 125.

**GAME 250: Character and Creature Modeling.** (3) This course continues the focus on core methodologies for collaborative game development. The iterative development process will be enhanced through online communication strategies, version control and a rigorous review process. Independent online marketing strategies will be introduced and utilized for the final project. Prerequisite: GAME 125.

**GAME 260: Level Design.** (3) This course introduces the tools and concepts used to create levels for games and simulations. The course focuses on level design: architecture theory, concepts of critical path and flow, balancing, play testing, and storytelling, utilizing toolsets from industry titles. Lectures, demonstrations, discussions, and other content will introduce various issues of game-level design. Prerequisite: GAME 125.

**GAME 275: 3-D Lighting and Shading.** (3) This course is a study of various global, scene and character lighting techniques, shading and shadowing, and atmospheres and reflections that bring computer-generated 3-D scenes to life in the digital production process. Prerequisite: GAME 125.

**GAME 280: Audio for Gaming.** (3) This course examines the art, craft, and business of video game audio, including music, sound design and voice-over. It is an exploration of how the game development process works and the evolution of game audio and related topics. Prerequisite: GAME 102.

**GAME 293: Topics: Game Production II.** (1-4) Game design and simulation topics course. May be repeated for credit provided content is not the same.

**GAME 296: Capstone: Production and Portfolio.** (3) Students are tasked with creating a portfolio and/or reel highlighting their work, skills, and ability for job placement in the field. Permission of instructor required. Student must be enrolled in the last semester of their program.

## General Studies (GNST)

**GNST 193: Topics.** (1-3) General reading and class discussion in topical areas of interest requested by students or community entities.

## Health Career Health Sciences (HCHS)

**HCHS 111: Medical Terminology.** (3) An introduction to terminology used in health careers. It will provide a basic knowledge of prefixes, suffixes, and root words used in describing anatomical parts of the human body as well as general terms relating to disease processes.



**HCHS 113: Basic Body Structures and Functions.** (4) An introductory course in anatomy and physiology for students from diverse backgrounds and varying levels of educational preparation. No prior knowledge of biology or chemistry is assumed.

**HCHS 115: Pharmacology for Health Occupations.** (3) An introduction to principles for drug classification, usage, contraindications, dosage, and computations.

## Health Career Health Technology (HCHT)

**HCHT 121: Health Technology I.** (4) An introduction to health technology, with topics to include: the history and regulation of medical record documentation, public health initiatives, the structure and language of healthcare delivery, reimbursement and billing practices, electronic health records and coding, patient privacy and security, and certification processes in health technology.

**HCHT 211: Basic ICD/CPT Coding.** (4) Students will learn the coding nomenclature and coding conventions for the CPT, ICD-10-CM, and Level II (HCPCS) coding systems, and apply the coding conventions and guidelines to code patient diagnoses, outpatient services, and medical supplies and pharmaceuticals. A variety of payment systems are also presented, along with Medicare fraud and abuse information. Prerequisite: HCHS 111.

**HCHT 213: Principles of Disease.** (4) An introduction to human pathophysiology for non-nursing health professionals, with topics to include: cellular function, immunity, cancer, and human systems (gastrointestinal, hematologic, nervous, skeletal, reproductive, and cardiovascular). Prerequisites: HCHS 111, HCHS 113.

**HCHT 215: Advanced OP Coding.** (2) Topics related to medical coding will include: format of CPT and ICD, coding guidelines, descriptions and definitions of symbols, correct use of modifiers, accessing Encoder coding resources, and payment methodology. Prerequisite: HCHT 211.

**HCHT 219: Advanced IP Coding** (3) Practice assigning ICD-9, ICD-10, and ICD-10 PCS codes using inpatient diagnosis, procedures and reports, using the 3M encode. Prerequisite: HCHT 211.

**HCHT 221: Medical-Legal and Quality Management.** (4) This course explores the management of healthcare-related information by Health Information Management (HIM) departments in the United States. Prerequisite: HCHT 121.

**HCHT 222: Health Technology II.** (4) This course covers supervisory principles and electronic medical records, including collection, arrangement, presentation and verification of healthcare data. Also included are reimbursement methodologies, confidentiality rules and regulations, and uses of coded data. Prerequisite: HCHT 121.

**HCHT 231: Computer Applications and Healthcare Statistics.** (4) This course introduces the student to computer applications in the healthcare industry and methods used to control the security of information, with topics to include: the concepts and procedures used in the preparation of statistical reports, including vital statistics, census systems, rates and percentages. Prerequisites: HCHT 121, CS 150L, or permission of instructor.

**HCHT 232: Reimbursement Methodologies.** (3) This course presents information about insurance programs and federal healthcare legislation. It provides a basic knowledge of claims management, medical necessity and coding systems. Pre or co-requisite: HCHT 211.



**HCHT 233: Professional Practicum Experience.** (6) The student will receive hands-on experience in a Health Information Management setting under a Practicum Site Manager, who is trained in the specific areas of Health Information Technology in which the student will be gaining experience. Prerequisites: Satisfactory completion of all HCHT program core courses.

## Health Education (HED)

**HED 164L: Standard First Aid.** (1-3) Preparation in knowledge and skills to meet the needs in situations when basic first aid care is needed. Students eligible for Standard First Aid Certification and CPR Certificate. May be repeated for credit up to 3 credit hours.

**HED 171: Personal Health Management.** (3) Exploration of the major areas of health information pertinent to understanding how to achieve, maintain, and promote positive health. Topics covered include mental health, drugs, human sexuality, prevention and control of diseases, nutrition, consumer health, and ecology.

**HED 209: Education for AIDS Prevention.** (1) This course is designed to familiarize students about the HIV/AIDS epidemic with HIV/AIDS awareness including basic information, prevention, history, compassion, legal issues, testing and societal implications.

**HED 212: Fundamentals of Human Sexuality.** (3) Basic knowledge about human sexuality including anatomical, physiological, psycho-social, and ethical components. Reproduction, contraception, sexually transmitted disease, sexual health and sexual dysfunctions are among areas examined.

**HED 247: Consumer Health.** (1) Preparation in knowledge and skills related to consumers of health products and services.

**HED 260: Foundations of Health Promotion.** (3) For those considering becoming health majors or minors in school health or community health. Exploration of the basic philosophy and fundamental practices currently utilized in health education.

**HED 293: Topics.** (1-3) May be repeated for credit, no limit.

## History (HIST)

**HIST 101: Western Civilization to 1648.** (3) Ancient times to 1648. *Meets UNMCC - Area 5: Humanities; meets NMCC - Area V: Humanities and Fine Arts.*

**HIST 102: Western Civilization Post 1648.** (3) 1648 to present. *Meets UNMCC - Area 5: Humanities; meets NMCC - Area V: Humanities and Fine Arts.*

**HIST 161: History of the United States to 1877.** (3) Survey of the economic, political, intellectual, and social development of the United States, including the place of the U.S. in world affairs from 1607 to 1877. *Meets UNMCC - Area 5: Humanities; meets NMCC - Area V: Humanities and Fine Arts.*

**HIST 162: History of the United States Since 1877.** (3) Survey of the economic, political, intellectual, and social development of the United States, including the place of the U.S. in world affairs from 1877 to the present. *Meets UNMCC - Area 5: Humanities; meets NMCC - Area V: Humanities and Fine Arts.*





**HIST 181: History of Latin America.** (3) An introduction to indigenous, African and Iberian backgrounds. Examines colonial societies through social economic and political institutions with attention to the contributions of Indians, Africans and Europeans to the creation of Latin America's diverse societies. Meets UNMCC – Area 5: Humanities.

**HIST 182: Modern Latin American History.** (3) Surveys the nations of Latin America from their independence until the present. Emphasizes the process of nation-building, governance, socioeconomic integration and coping with modernization. Special attention given to the great leaders of Latin America.

**HIST 201: The Medieval World.** (3) A broad survey of the history, literature, and culture of the medieval period, from the fall of the Roman Empire to the eve of the Renaissance.

**HIST 220: Studies in History.** (1-3) Will vary from instructor to instructor, but will offer a review of particular historical issues designed for the non-specialist. For content of particular courses, contact the CHESS division. May be repeated for credit without limit provided the topics vary. Suggested prerequisite: ENGL 110.

**HIST 251: Traditional Eastern Civilizations.** (3) The origin and development of the traditional societies and cultures of India, Southeast Asia, China, Japan and the Middle East.

**HIST 252: Modern Eastern Civilizations.** (3) The emergence of modern Asia from the impact of western colonialism and imperialism to nationalism, modernization and revolution.

**HIST 260: History of New Mexico.** (3) Introduction to New Mexico history from earliest human settlement to present day.

## **Information Technology (IT)**

**IT 101: Computer Fundamentals.** (1-3) This course is designed for students with little or no computer experience. The course will prepare the student to utilize computer hardware and software effectively and efficiently. The student is given the opportunity to learn to use electronic mail, explore the web, perform basic file management procedures (copy, rename, create subdirectories, etc.), and edit, format, and print simple documents. The student will also have an opportunity to learn basic information of computer systems to include the functions of various hardware components, the importance of software programs, how information is processed, and the social and ethical implications of the computer generation. Suggested pre or co-requisite: OBT 105.

**IT 110: Introduction to Online Publications and Presentations.** (1) This course provides the student with basic information about the graphics arts career and corresponding skills. The student is given the opportunity to learn various terminology associated with desktop publishing and presentation graphics as well as the basic skills to produce simple yet effective publications and electronic slide presentations. Suggested prerequisite: IT 101 or prior experience with computers.

**IT 116: Fundamentals of Graphic Design.** (3) This course is designed to provide students with a fundamental working knowledge of computer-generated graphics and two-dimensional media work, preparing the student for further study in graphic and media arts.

**IT 121: Electronic Spreadsheets.** (3) Introduction to concepts and applications of electronic spreadsheets. Suggested pre or co-requisite: CS 150 with grade of C or better.



**IT 122: Introduction to Database Management Systems.** (3) Students will study theory of database management systems (DBMS) and will write generic and reusable programs using DBMS software. Suggested prerequisite: CS 150 with grade of C or better.

**IT 125: Microcomputer Operating Systems.** (3) Introductory concepts in microcomputer operating systems. Acquaints students with practical aspects of microcomputer operating systems including file management systems, utilities, and computer peripherals. Suggested prerequisite: CS 150 with grade of C or better.

**IT 131: Introduction to Hardware Installation.** (3) The purpose of this course is to prepare students to take and pass the CompTIA national certification test. Students will learn function, structure, operations, file management, and memory management. Students will also practice proper safety procedures, scheduled preventative maintenance, and installation of computer components. In addition, students will configure, diagnose, and troubleshoot stand-alone computers. Finally, students will learn and apply industry accepted customer service skills. Prerequisite: IT 125.

**IT 140: Technical Customer Service.** (3) The purpose of the course is to expose students to a wide range of customer concerns regarding the software and hardware problems. Students will identify the problem with the computer and/or software, then explain it in layman's terms and recommend corrective actions. This will be accomplished by simulating real-life hardware/software problems. A portion of the class will address customer expectations, handling irate customers, and proactive problem control. Pre or co-requisites: IT 205, IT 222, IT 230.

**IT 193: Topics I.** (1-4) May be repeated for credit provided content is not the same.

**IT 205: Web Design Methodology.** (3) Students will create and manage Web sites using various programming languages, multimedia and CSS standards. This course focuses on theory, design and Web construction, along with information architecture concepts, Web project management, scenario development and performance evaluations.

**IT 222: Database Management Systems.** (3) This course is a continuation of IT 122. Students will write more complex generic and reusable DBMS programs to build finished, turnkey applications. Prerequisite: IT 122.

**IT 230: Computer Networking.** (4) Students will learn the fundamentals of network technology, technical concepts of network environments, identify the basic characteristics for local and wide area networks, list and describe the layers of the OSI networking model, list and identify the use of common network devices, describe the procedure for installing and configuring network adapters, list common network protocols, identify the best network protocol, describe the physical characteristics of a LAN, identify inter-network connectivity hardware by sight, define the roles of clients, servers, and peers on a network, list the most common network operating systems, identify potential network bottlenecks, and list fault tolerance procedures. Prerequisites: IT 125 and IT 131.

**IT 262: Scripting for Network Defense.** (3) Scripting programming for security purposes. Students build on prior programming, operating systems, and security knowledge to develop, code, use, and debug new and existing scripts.

**IT 270: Graphics and Animation.** (3) This course introduces the student to the concepts, tools, and techniques of microcomputer-based, two-dimensional graphics and animation. Students use microcomputer painting software to create visual effects and still images, and they use animation



software to produce the illusion of movement. Students are taught design fundamentals, as well as the essentials of color theory, and they explore the differences between pigment color and light color.

**IT 293: Topics II.** (1-4) May be repeated for credit provided content is not the same.

**IT 295: Practicum/Cooperative Education.** (3) Students are placed in a business in order to gain on-the-job skills and knowledge. Prerequisite: approval of the instructor; enrolled in the last semester of the associate degree or certificate program.

## **Linguistics (LING)**

**LING 101: Introduction to the Study of Language.** (3) Also offered as ANTH 110. Broad overview of the nature of language: language structure, biology of language, language learning, language and thought, bilingualism, social and regional variation, and educational implications. Intended to fulfill breadth requirements in any college. Meets UNMCC– Area 4: Social and Behavioral Sciences.

**LING 295: Special Topics in Current Language Issues.** (3) Special topics motivated by expertise of instructor and interest of students. Topics may include language and gender, language and politics, animal communication, language and aging, and languages of the world. May be repeated for credit, since topics vary by term.

## **Manufacturing and Electro-Mechanical Technology (MFGT, ELCT)**

**ELCT 105L: Industrial Shop Practice.** (3) This course covers principles of and practice with hand and machine tools used by electromechanical technicians, including lathe and milling machines, drilling, welding, sawing, grinding, soldering, brazing, measurements, sheet metal work, and benchwork.

**MFGT 101: Technology Foundations.** (3) This course prepares students for analytical and critical thinking in an integrated approach to learning and applying mathematical, reading, writing, and oral communication skills in manufacturing and industrial technology programs of study.

**MFGT 103: Technology in Advanced Manufacturing.** (3) This course introduces manufacturing processes and basic mechanical, electrical, and fluid power principles and practices used in manufacturing environments. Students will study product life cycle, and focus on technologies used in the production process. Pre or co-requisite: MFGT 101.

**MFGT 104: Fluid Power Basics.** (3) This course introduces the student to fluid power principles and components. It teaches basic circuit design through the use of symbols and schematic diagrams to build a foundation for career work in fluid power technology. Pre or co-requisite: MFGT 101 or MATH 115.

**MFGT 105: Manufacturing Materials and Processes.** (3) In this modern, quantitative approach to manufacturing, there will be balanced coverage of the three basic engineering materials – metals, ceramics, polymers, as well as composites – along with recently-developed manufacturing processes and electronics manufacturing technologies.

**MFGT 105L: Manufacturing Materials and Processes Laboratory.** (1) In this modern, quantitative approach to manufacturing, there will be balanced coverage of the three basic engineering materials – metals, ceramics, polymers, as well as composites – along with recently-developed manufacturing



processes and electronics manufacturing technologies.

**MFGT 106: Key Principles of Advanced Manufacturing.** (3) This course introduces the basic principles and practices of safety and quality and covers current quality control concepts and techniques in industry with emphasis on modern manufacturing requirements and environments. MSSC and OSHA certifications possible. Pre or co-requisite: MFGT 101.

**MFGT 150: Machine Maintenance and Installation.** (3) This course examines procedures for the removal, repair, and installation of machine components, including lubrication practices and maintenance procedures. Techniques in calibration and repair and practice in computations pertaining to industrial machinery are also covered. Prerequisite: MFGT 101 or MATH 115.

**MFGT 160: Automation: Mechatronics Mechanical Systems** (3). This course covers the basics and roles of the mechanical components and electrical drives in a complex mechatronic system. Strategies on maintaining, troubleshooting, documenting, and following safety measures will also be presented. Pre or co-requisite: MFGT 150.

**MFGT 204: Fluid Power Systems: Hydraulics and Pneumatics** (3). This course introduces complex fluid power circuits and the designing, analyzing and troubleshooting of complex circuits using schematic diagrams. Detailed construction, disassembling and evaluating of typical industrial fluid power components is covered. Prerequisite: MFGT 104.

**MFGT 210: Metrology** (3). This course emphasizes the theoretical and practical applications of measurement principles as applied to various physical properties. It introduces students to measurement of pressure, mass, force, torque, temperature, humidity, flow, and rotational motion.

**MFGT 215: Mechanical Behavior of Materials** (3). The study of mechanical properties of materials and their limitations in engineering design by the study of stresses, strains, torsion forces, shear forces, and deflections placed upon these materials.

**MFGT 217: Mechanical Design Processes** (3). Students learn how to identify customer needs, develop product specification, apply structured methods to generate product concepts, evaluate diverse product concepts, and select and refine the most promising design through project work.

**MFGT 222: Automation: Mechatronics Pressurized Systems** (3). This course covers the basics of pneumatic, electro pneumatic, and hydraulic control circuits in a complex mechatronics system. By learning the functions and properties of control elements, students will chart, measure, troubleshoot, and correct malfunctions. Pre or co-requisite: MFGT 104.

**MFGT 260: Projects in Manufacturing** (3). Students will formally display their knowledge and implementation of a broad range of skills by working in teams to develop and complete a manufacturing project, resulting in a product or service that solves a need. Pre or co-requisite: ENGL 110 and MATH 115. Permission of Division Chair Required.

**MFGT 295: Technical Concentration I: Practicum On-the-Job Training** (3). Students are placed in a business in order to gain on-the-job skills and knowledge. Permission of Division Chair Required.

**MFGT 296: Technical Concentration II: Practicum On-the-Job Training** (3). Students are placed in a business in order to gain on-the-job skills and knowledge. Prerequisite: MFGT 295. Permission of Division Chair Required.



**MFGT 297: Technical Concentration III: Practicum On-the-Job Training (3).** Students are placed in a business in order to gain on-the-job skills and knowledge. Prerequisite: MFGT 295 and MFGT 296. Permission of Division Chair Required.

**MFGT 298: Technical Concentration IV: Practicum On-the-Job Training (3).** Students are placed in a business in order to gain on-the-job skills and knowledge. Prerequisite: MFGT 295, MFGT 296, and MFGT 297. Permission of Division Chair Required.

## **Mathematics and Statistics (MATH, STAT)**

**Note:** For courses requiring a grade of C or higher in a prerequisite course, a grade of C- is not sufficient to satisfy the prerequisites for mathematics and statistics courses.

### **Developmental Mathematics Courses:**

**MATH 011: Pre-algebra Part I.** (1-2 credits) This course includes the first half of a prealgebra course including whole numbers, fractions, decimals, ratio and proportions, and percent. Prerequisites/placement: Minimum ACCUPLACER score of 35-56 (Arithmetic), or math ACT score of 14.

**MATH 012: Pre-algebra Part II.** (1-2 credits) This is the second half of a prealgebra course and covers measurement and geometry, real numbers, introduction to algebra and basic equation solving, and applications. Prerequisite: MATH 011.

**MATH 021: Introduction to Algebra Part I.** (1 to 2 credits) This course includes the first half of a beginning algebra course including a review of basic arithmetic, real numbers, integer exponents, linear inequalities, and an introduction to application problems. Prerequisites/placement: Successful completion of MATH 099 or MATH 012 or minimum ACCUPLACER score of 57-101 (Arithmetic), or math ACT score of 16. Co-requisite: MATH 193: Critical Thinking for Math.

**MATH 022: Introduction to Algebra Part II.** (1 to 2 credits) This course includes the second half of a beginning algebra course including a review of the Cartesian coordinate system, graphing linear equations in two variables, properties of exponents, polynomials and an introduction to factoring. Prerequisite: MATH 021.

**MATH 099: Pre-Algebra.** (4) A pre-college mathematics course. Emphasis is placed on basic operations, fractions, decimals, percents, ratios, and introductory algebra and includes a skills laboratory. Prerequisites/placement: Minimum ACCUPLACER score of 35-56 (Arithmetic), or math ACT score of 14.

**MATH 100: Introduction to Algebra.** (4) Topics covered include linear equations, polynomials, factoring, formulas, graphing, and applications problems and include a skills laboratory. Prerequisites/placement: Successful completion of MATH 099 or minimum ACCUPLACER score of 57-101 (Arithmetic), or math ACT score of 16. Co-requisite: MATH 193: Critical Thinking for Math.

### **Study Session Courses:**

**MATH 106: Problems in Intermediate Algebra.** (1) A study session for MATH 120 students with an emphasis on problem solving. Grade option: CR/NC. Suggested co-requisite: MATH 101/102/103 or MATH 120.



**MATH 107: Problems in College Algebra.** (1) A study session for MATH 121 students with an emphasis on problem solving. Grade option: CR/NC. Suggested co-requisite: MATH 121.

**MATH 110: Problems in Elements of Calculus I.** (1) Study session for Math 180 with an emphasis on problem solving. Grade option: CR/NC. Suggested co-requisite: MATH 180.

### **College-Level Mathematics Courses:**

**MATH 101: Intermediate Algebra Part 1.** (1) This course includes equations and inequalities, applications and problem solving with linear equations, linear functions and the graph of a line, percent, perimeters, areas of simple geometric shapes. Prerequisite: Successful completion of MATH 022 or MATH 100, or minimum ACCUPLACER score of 102-120 (Arithmetic) or ACCUPLACER score of 41-65 (Elementary Algebra), or math ACT  $\geq 19$ , or math SAT  $\geq 450$ .

**MATH 102: Intermediate Algebra Part 2.** (1) This course includes quadratic equations, properties of exponents and scientific notation, simplifying polynomial expressions, factoring and introduction to functions. Prerequisite: Math 101.

**MATH 103: Intermediate Algebra Part 3.** (1) This course includes radical expressions and equations, rational expressions and equations, the exponential and logarithm functions. Prerequisite: Math 102.

**MATH 111: Mathematics for Elementary and Middle School Teachers I.** (3) Course offers an in-depth look at the representations of rational numbers, including base-ten and decimal numbers, integers, fractions, and arithmetic operations on these sets. Problem solving is emphasized throughout. Prerequisites/placement: Successful completion of MATH 102 or MATH 100 or MATH 120 or MATH 121 or MATH 123 or MATH 150 or MATH 162 or MATH 180 or STAT 145 or ISM 100 or ACT  $\geq 19$  or SAT  $\geq 450$  or ACCUPLACER score of 102-120 (Arithmetic) or 41-65 (Elementary Algebra).

**MATH 112: Mathematics for Elementary and Middle School Teachers II.** (3) This course develops basic geometric concepts including rigid transformations and congruence; dilations and similarity; length, area and volume; systems of measurement and unit conversions; connections to coordinate geometry. Problem solving is emphasized throughout. Prerequisite: Successful completion of MATH 111.

**MATH 115: Technical Mathematics.** (3) Intended for students in applied trade technologies. Topics include a review of basic arithmetic, elementary algebra, applied geometry, measuring instruments, and formulas. Prerequisite/placement: Successful completion of MATH 022 or MATH 100 or ACCUPLACER score of 102-120 (Arithmetic) or 41-65 (Elementary Algebra).

**MATH 120: Intermediate Algebra.** (3) Preparation for MATH 121, 129 and STAT 145. Covers linear equations and inequalities, polynomials, factoring, exponents, radicals, fractional expressions and equations, quadratic equations, perimeters, areas of simple geometric shapes, and logarithms. Emphasis on problem solving skills. Prerequisites/placement: Successful completion of MATH 022 or MATH 100 or minimum ACCUPLACER score of 102-120 (Arithmetic) or ACCUPLACER score of 41-65 (Elementary Algebra), or math ACT  $\geq 19$ , or math SAT  $\geq 450$ . Acceptable as credit toward graduation in some programs, but **not acceptable** to satisfy the UNMCC or NMCC requirement in Mathematics

**MATH 121: College Algebra.** (3) Preparation for MATH 150 and 180. The study of equations, functions and graphs, especially linear and quadratic functions. Introduction to polynomial, rational, exponential and logarithmic functions. Applications involving simple geometric objects. Emphasizes algebraic problem solving skills. Prerequisites/placement: Successful completion of MATH 119 or MATH 120 or MATH 103 or minimum ACCUPLACER score of 104-120 (Elementary Algebra) or ACCUPLACER score of 37-68 (College-Level Math), or math ACT  $\geq 22$ , or math SAT  $\geq 510$ . Meets UNMCC - Area 2: Mathematics; meets NMCC - Area II: Mathematics.



**MATH 123: Trigonometry.** (3) Definition of the trigonometric functions, radian and degree measure, graphs, basic trigonometric identities, inverse trigonometric functions, complex numbers, polar coordinates and graphs, vectors in 2 dimensions. May be taken concurrently with MATH 150. Prerequisites/placement: Successful completion of Math 121 or minimum ACCUPLACER score 69-99 (College-Level Math), or math ACT score  $\geq 25$ , or math SAT score  $\geq 570$ .

**MATH 129: A Survey of Mathematics.** (3) An introduction to some of the great ideas of mathematics, including logic, systems of numbers, sequences and series, geometry and probability. Emphasizes general problem-solving skills. Prerequisites/placement: Successful completion of MATH 119 or MATH 102 or MATH 120 or MATH 121 or MATH 123 or MATH 150 or MATH 162 or MATH 163 or MATH 180 or MATH 181 or MATH 264, or minimum ACCUPLACER score of 66-103 (Elementary Algebra) or 37-68 (College-Level Math), or math ACT score  $\geq 22$ , or math SAT score  $\geq 510$ . Meets UNMCC – Area 2: Mathematics; meets NMCC – Area II: Mathematics.

**MATH 130: Exploring Topics and Careers in Mathematics.** (2) This introduction course will prepare students planning to major in Mathematics or Statistics. The course will emphasize career options, concentrations, and research and job opportunities. Activities are designed to engage students in their chosen field. Prerequisites/placement: Successful completion of MATH 123 and MATH 150, or ACCUPLACER score of 100-120 (College-Level Math) or ACT  $\geq 32$  or SAT  $\geq 700$ .

**MATH 150: Pre-Calculus Mathematics.** (3) In-depth study of polynomial, rational, exponential and logarithmic functions and their graphs. Includes the fundamental theorem of algebra, systems of equations, conic sections, parametric equations and applications in geometry. Exploration of the graphing calculator. May be taken concurrently with MATH 123. Prerequisites/placement: Successful completion of Math 121 or minimum ACCUPLACER score of 69-99 (College-Level Math), or math ACT score  $\geq 25$ , or math SAT score  $\geq 570$ . Meets UNMCC – Area 2: Mathematics; meets NMCC – Area II: Mathematics.

**MATH 153: Pre-Calculus and Trigonometry.** (5) Algebraic expressions, algebraic equations, inequalities, functions, graphing. Exponential, logarithmic, and trigonometric functions. Complex numbers and vectors. Limits. Prerequisites/placement: Successful completion of MATH 121, or ACCUPLACER score of 69-99 (College-Level Math) or ACT  $\geq 25$  or SAT  $\geq 590$ .

**MATH 162: Calculus I.** (4) Limits. Continuity. Derivative: definition, rules, geometric and rate-of-change interpretations, applications to graphing, linearization and optimization. Integral: definition, fundamental theorem of calculus, substitution, applications to areas, volumes, work, average. Prerequisites/placement: Successful completion of MATH 123 and MATH 150, or ACCUPLACER score of 100-120 (College-Level Math) or ACT  $\geq 32$  or SAT  $\geq 700$ . Meets UNMCC – Area 2: Mathematics; meets NMCC – Area II: Mathematics.

**MATH 163: Calculus II.** (4) Transcendental functions, techniques of integration, numerical integration, improper integrals, sequences and series, Taylor series with applications, complex variables, differential equations. Credit not allowed for both MATH 163 and MATH 181. Prerequisite: Successful completion of Math 162. Meets UNMCC – Area 2: Mathematics; meets NMCC – Area II: Mathematics.

**MATH 180: Elements of Calculus I.** (3) Limits of functions and continuity, intuitive concepts and basic properties; derivative as rate of change, basic differentiation techniques; application of differential calculus to graphing and minima-maxima problems; exponential and logarithmic functions with applications. Credit not allowed for both MATH 162 and MATH 180. Prerequisites/placement: Successful completion of Math 121 or MATH 150 or minimum ACCUPLACER score of 69-99 (College-Level Math), or math ACT score of 26, or math SAT score of 600. Meets UNMCC – Area 2: Mathematics; meets NMCC – Area II: Mathematics.

**MATH 181: Elements of Calculus II.** (3) Includes the definite integral, multivariate calculus, simple differential equations, basic review of trigonometry and its relation to calculus. Credit not allowed for both MATH 163 and MATH 181. Prerequisite: Successful completion of Math 180. Meets UNMCC – Area 2: Mathematics; meets NMCC – Area II: Mathematics.



**MATH 193: Topics in Mathematics.** (1-3) Topics in mathematics including, but not limited to, tools and techniques designed to improve attitudes and performance in math class, and calculator usage. Generally, the co-requisite is MATH 021, MATH 022 or MATH 100. Consult with your instructor for details.

**MATH 215: Mathematics for Elementary and Middle School Teachers III.** (3) Algebra from the viewpoint of the elementary curriculum with emphasis on proportional and linear relationships. Also included: topics from probability and statistics with connections to other topics in elementary curriculum. Problem solving is emphasized throughout. Prerequisite: Successful completion of MATH 111. Meets UNMCC - Area 2: Mathematics.

**MATH 264: Calculus III.** (4) Vector operations, vector representation of planes and curves, functions of several variables, partial derivatives, gradient, tangent planes, optimization, multiple integrals in Cartesian cylindrical and spherical coordinates, vector fields, line integrals and Green's theorem. Prerequisite: Successful completion of MATH 163.

**STAT 145: An Introduction to Statistics.** (3) Techniques for the visual presentation of numerical data, descriptive statistics, introduction to probability and basic probability models used in statistics, introduction to sampling and statistical inference, illustrated by examples from a variety of fields. Prerequisites/placement: Successful completion of MATH 119 or MATH 102 or MATH 120 or MATH 121 or MATH 123 or MATH 150 or MATH 162 or MATH 163 or MATH 180 or MATH 181 or MATH 264, or minimum ACCUPLACER score of 37-68 (College-Level Math) or 66-103 (Elementary Algebra), or ACT score  $\geq 22$ , or SAT score  $\geq 510$ . Meets UNMCC - Area 2: Mathematics.

## Media Arts (MA)

**MA 110: Introduction to Mass Communication.** (3) Also offered as CJ 110. Study of the development of the mass media with emphasis on television in the areas of programming, policy, regulations, economics, and technology. Examination of the social, cultural, and political impact of the mass media on contemporary society.

**MA 111: Technical Introduction to Video Production.** (3) For the student who has no practical knowledge of video technology. Students learn about the camera and lens, sound recording, lighting, editing, and other elements of production. Special fee required.

**MA 210: Introduction to Film Studies.** (3) Analysis of film as a unique art, and a survey of main trends in film history. Screenings and critical study of major films.

**MA 212: Beyond Hollywood.** (3) An introduction to marginalized cinemas with screenings of major works.

**MA 216: Topics in Video Making.** (3-6) This course strengthens students' skills in video technology, while helping them write, direct, and edit video projects that begin to reflect a personal, artistic vision. Special fee required. Prerequisite: MA 111.

## Mechanical Engineering (ME)





**ME 217: Energy, Environment and Society.** (3) A look at the social, ethical, and environmental impacts of energy use in the contemporary world and throughout history. A survey of renewable energy and conservation and their impact on environmental and social systems.

## **Mechanical Technology (MCHT)**

**MCHT 101L: Basic Welding.** (4) This course focuses on fundamental techniques in the welding field including shop safety, hand and portable power tool usage, and welding (gas welding, oxy-acetylene, stick - SMAW, MIG -GMAW, TIG - GTAW, plasma arc cutting - PAC).

## **Music (MUS)**

**MUS 139: Music Appreciation.** (3) Designed to expand the student's ability to listen actively to Western classical art music; a survey of the various genres, including chamber music, symphonic and vocal repertoire. Includes live guest performances. Attendance at several on-campus concerts required. No musical background necessary. Meets UNMCC - Area 7: Fine Arts; meets NMCC- Area V: Humanities and Fine Arts.

**MUS 143: University Chorus.** (1) Mixed chorus. Open to all students; no audition required. May be repeated for credit for a maximum of 8 hours credit.

## **Natural Science (NTSC)**

**NTSC 261L: Physical Science.** (4) For pre-service K-8 teachers only. A broad, interdisciplinary introduction to the science of geology, chemistry, physics and astronomy, with emphasis on the sciences processes, inquiry and the integration of technology. The course is activity-based, utilizing a problems-and-issues based approach; various teaching methods are modeled and practiced by students; some field trips may be required. Meets UNMCC - Area 3: Physical and Natural Sciences.

**NTSC 262L: Life Science.** (4) For pre-service K-8 teachers only. An activity-based study of science topics including botany, cell biology, genetics, microbiology, and zoology with emphasis on science processes, inquiry and integration of technology. Various teaching methods are modeled, and practiced by students; some field trips may be required. Meets UNMCC - Area 3: Physical and Natural Sciences.

**NTSC 263L: Environmental Science.** (4) For pre-service K-8 teachers only. An activity-based interdisciplinary study of major issues in environmental science with emphasis on science process, scientific investigations, and field-based activities, and the integration of technology. Course topics include current issues on population, healthy ecosystems, and natural resources. Various teaching methods are modeled, and practiced by students. Meets UNMCC - Area 3: Physical and Natural Sciences.

## **Nursing (NURS)**



**Note:** NURS 110, 115, 130, 131, 230, 232, 234, 235, 242L, 243, and 245 are restricted to students in the Associate Degree in Nursing (ADN) program. Only students enrolled in the ADN program will be allowed to enroll in these courses. In addition, CPR certification is required to participate in clinical rotation of nursing courses. You must sign up for a CPR class if you are not currently certified. The CPR class must be a Health Care Providers course. Background checks are required for clinical rotations, be expected to have a background check done per the Patient Care Act. The fee may cost up to \$130. Immunizations are required for all health care providers. Documentation will be required in order to go into clinical rotation. MMR, Hepatitis B vaccine, TB screening, and Varicella are all required. Students must get a physical clearing them to lift 50 lbs. in order to go into clinical rotation. Make your doctor appointments early if you are signing up for this course. Finally, Needle Stick insurance coverage is mandatory for students enrolled in the ADN program. All UNM students who are at risk for body fluid and blood-borne pathogen exposure, and coverage is for academic-related exposures only. Cost for coverage is \$30.00 per semester/per student, and is subject to change. Coverage will start the first day of the semester and end the day before the first day of the next semester. Students will be required to obtain this insurance before any academic-related training will take place.

### **Nursing Courses for Traditional Curriculum that expire at the end of AY2018-2019**

**NURS 230: Women's Health Nursing.** (4) Focuses on the application of the nursing process to care for female clients, neonates, and families, before, during and after the birth process. Students will care for clients in a variety of inpatient and community settings. Prerequisite: HCHS 125, NURS 110, NURS 115, NURS 130, NURS 131, PSYC 220. Co-requisites: NURS 232, NURS 234.

**NURS 232: Pediatric Nursing.** (4) Focuses on application of the nursing process to care for the child and family. Students will care for clients in a variety of inpatient and community settings. Prerequisite: HCHS 125, NURS 110, NURS 115, NURS 130, NURS 131, PSYC 220. Co-requisites: NURS 230, NURS 234.

**NURS 234: Medical-Surgical Nursing II.** (5) Focuses on application of the nursing process to care for one or more adult clients and families with acute and chronic multisystem health problems. Clinical learning takes place in acute and community-based facilities and simulations labs. Prerequisite: HCHS 125, NURS 110, NURS 115, NURS 130, NURS 131, PSYC 220. Co-requisites: NURS 230, NURS 232.

**NURS 242L: Nursing Practicum.** (2) This clinical course provides assessment of the student's Nursing knowledge, skills, and abilities in preparation for graduation, while the student works with a preceptor RN in the acute, long-term, or community setting. Prerequisites: HCHS 125, NURS 110, NURS 115, NURS 130, NURS 131, NURS 230, NURS 232, NURS 234. Co-requisites: NURS 243, NURS 245.

**NURS 243: Medical Surgical Nursing III.** (9) The nursing process is applied in the care of the adult client with complex acute, life-threatening, multi-system health problems. Clinical learning will take place in outpatient and inpatient acute care settings and simulation labs. Prerequisites: HCHS 125, NURS 110, NURS 115, NURS 130, NURS 131, NURS 230, NURS 232, NURS 234. Co-requisites: NURS 242, NURS 245.

**NURS 245: Professional Seminar.** (1) This capstone course explores the theoretical application of Nursing practice to develop expertise in management and leadership roles. Emphasis is on professional role development. Prerequisites: HCHS 125, NURS 110, NURS 115, NURS 130, NURS 131, NURS 230, NURS 232, NURS 234. Co-requisites: NURS 242, NURS 243.

### **NMNEC Curriculum Courses**

**NURS 202: Introduction to Nursing Concepts.** (3) This course introduces the nursing student to the concepts of nursing practice and conceptual learning.



**NURS 203: Health Care Participant.** (3) This course introduces the nursing student to the attributes of the health care participant as an individual, a family, or a community.

**NURS 204L: Principles of Nursing Practice.** (4) This course introduces the nursing student to the application of concepts through clinical skills in seminar, laboratory, and/or clinical settings. Principles of communication, assessments, safety, and interventions, including accurate calculation, measurement, and administration of medications will be included.

**NURS 219: ADN Capstone.** (2)

**NURS 221L: Assessment and Health Promotion.** (4) This course introduces the nursing student to the assessment of and the health promotion for the health care participant as an individual, a family, or a community. This course uses seminar, laboratory and/or clinical settings.

**NURS 222L: Care of Patients with Chronic Conditions.** (4) The focus of this course is to provide safe, evidence-based nursing care for patients with chronic conditions, across the lifespan in a variety of settings. This course builds upon curricular concepts. This course is a combination of lab and clinical.

**NURS 238: Nursing Pharmacology.** (3) This course introduces the nursing student to pharmacologic nursing practice from a conceptual approach.

**NURS 239: Pathophysiology I.** (3) An introduction to human pathophysiology. The course focuses on forming a basic understanding of pathophysiology for nursing students.

**NURS 240: Pathophysiology II.** (3) This course is a continuation of Pathophysiology I. The course focuses on forming a basic understanding of Pathophysiology for nursing students.

**NURS 251: Health and Illness Concepts I.** (3) This course will focus on health and illness concepts across the lifespan. Concepts covered are related to homeostasis/regulation, sexuality/reproductive, protection/movement, and emotional processes.

**NURS 252: Health and Illness Concepts II.** (3) This course covers health and illness concepts across the lifespan with the focus on chronic conditions. Concepts covered are related to oxygenation and hemostasis, homeostasis and regulation, protection and movement, and cognition and behavior processes.

**NURS 253: Health and Illness Concepts III.** (4) This course will cover health and illness concepts, with the focus on acute conditions across the lifespan. Concepts covered are related to homeostasis/regulation, oxygenation/hemostasis, protection/movement, and emotional processes.

**NURS 258L: Clinical Intensive I.** (4) This is the first of two Level Four clinical courses in which the student will apply the curricular concepts in the management of care participants with acute conditions across the lifespan.

**NURS 291: Professional Nursing Concepts.** (3) This course covers foundational concepts for professional development, including selected professional attributes and care competencies.

## **Nursing Assistant (CNA)**

**CNA 101L: Nursing Assistant.** (8) This course prepares students to provide patient care in a home, health care center, or hospital under the supervision of a professional health care provider (RN). Prepares students for the NM Nurse Aide Competency Evaluation (Prometric) exam. 128 total clock hours; 96 hours lecture/skills lab; 32 hours clinical. Prerequisites: Satisfactory score on placement tests



for writing, reading, and mathematics or completion of ENGL 100 and MATH 099 with a grade of "CR". Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). A UNM Certificate is awarded upon successful completion of this course.

## **Nutrition (NUTR)**

**NUTR 120: Nutrition for Health.** (3) General concepts of nutrition applied to food choices that support health. Cultural, psychological and economic implications of food choices.

**NUTR 244: Human Nutrition.** (3) This course provides an overview of all the nutrients including functions in the body and food sources. Dietary guidelines intended to promote long term health are stressed. Prerequisite: BIOL 123 or BIOL 201 and CHEM 111L or CHEM 121 and CHEM 123L.

## **Office and Business Technology (OBT)**

**OBT 101: Introduction to Accounting.** (3) This is a beginning course in secretarial accounting. Students are taught the basics of accounting and to complete a worksheet. Also covered are assets, liabilities, and owner's equity.

**OBT 105: Basic Keyboarding.** (1) Designed for students who have no keyboarding background or for students who want to improve/increase keyboarding skills. Students will learn the proper techniques for using the alpha-numeric keyboard using tutorial software on microcomputers. Not recommended for Office and Business Technology majors.

**OBT 111: Keyboarding and Word Processing I.** (3) Keyboarding is emphasized to develop speed and accuracy using the computer and current word processing software. Students will focus on creating, saving and retrieving, editing and formatting the following types of documents: business letters, memorandums, and manuscripts.

**OBT 112: Keyboarding and Word Processing II.** (3) Students will learn to format business letters, business forms, manuscripts and tables with accuracy and speed using the computer and current word processing software. Resumes, application letters, itineraries, labels and news releases will be introduced. Speed goal: 45 words per minute minimum. Prerequisite: OBT 111.

**OBT 205: Business Math Applications.** (3) This course shows the student how to operate an electronic calculator through the "touch" method. Business problems in banking, payroll, merchandising, interest, compound interest, finance charges, amortization, depreciation, working capital ratios, and securities purchases are covered. Prerequisite: MATH 100.

**OBT 219: Legal Terminology/Transcription.** (3) This course emphasizes legal terminology, and preparation and transcription of legal documents on a microcomputer. It is individualized and self-paced through the use of tapes. Prerequisites: OBT 112 (with minimum typing speed of 45 words per minute) and ENGL 100 or equivalent.



**OBT 221: Medical Transcription.** (3) Students will learn to transcribe medical reports on a microcomputer. This course is individualized and self-paced through the use of tapes. Prerequisites: OBT 112 (with minimum typing speed of 45 words per minute) and ENGL 100.

**OBT 235: Records Management.** (3) A management course pertaining to a vital office function—the storage and control of records. Students will acquire knowledge and gain experience in using traditional and computerized storage systems.

**OBT 257: Administrative Procedures.** (3) This course will provide students with an understanding of the role of administrative support personnel: employment skills, office health and safety issues, organization and time management, records management, information and communications, meeting and travel planning, reprographics, and critical thinking skills. Prerequisite: OBT 112.

**OBT 260: Desktop Publishing and Presentation.** (3) Students get hands-on training in desktop publishing and presentation graphics software as they are taught to produce flyers, newsletters, brochures, and professional presentations. Prerequisite: OBT 112 or approval of the instructor.

**OBT 263: Preparation for Microsoft Word Certification.** (3) Students will refine their word processing skills and apply them to more advanced operations (e.g., math functions, sorting, merging and graphics) which will help them prepare for Microsoft Word Certification. Certification testing is not provided; students wishing to take the exam will need to make their own arrangements. Prerequisite: OBT 112 or approval of the instructor.

**OBT 265: Business Communications.** (3) Students will prepare business correspondence, deliver oral presentations, and be introduced to grant writing. Correct and forceful English will be emphasized. Students will develop sensitivity in communicating with a diverse workforce.

**OBT 293: Topics in OBT.** (1-4) Focuses on topics of special interest in Office and Business Technology. May be repeated for credit up to 9 credit hours.

**OBT 295: Practicum/Cooperative Education.** (1-3) Students are placed in an office-related work situation to gain skills and knowledge on the job. Prerequisite: approval of the instructor.

## **Personal Care Attendant (PCA)**

**PCA 101L: Personal Care Attendant.** (5) (Home Health Aide) Students prepare to work as a Personal Care Attendants in home healthcare, as independent contractors/self-employment, or to provide care for a relative. Course includes lectures, group learning, video instruction, workbook exercises, instructor demonstrations, hands-on skills practice and exams. Skills Lab: 64 hours; job shadowing: 16 hours in a home healthcare or assisted living facility. Prerequisites: Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 100 and MATH 099 with a grade of "CR". Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). A UNM Certificate is awarded upon successful completion of this course.



## Philosophy (PHIL)

**PHIL 101: Introduction to Philosophical Problems.** (3) Philosophical issues and methodology illustrated through selected problems concerning values, knowledge, reality; and in social, political, and religious philosophy. Meets UNMCC - Area 5: Humanities; meets NMCC- Area V: Humanities and Fine Arts.

**PHIL 102: Current Moral Problems.** (3) Ethical issues arising in contemporary society; sexual morality, preferential treatment, racism, punishment, war, and world food distribution.

**PHIL 108: Introduction to Asian Philosophies.** (3) Philosophical issues and methodology illustrated in relation to South and East Asian thought: Hinduism, Buddhism, Taoism, and Confucianism.

**PHIL 111: Humanities I.** (3) Comparative introduction to the development of human civilizations, emphasizing philosophic thought, religious practice and artistic expression.

**PHIL 156: Reasoning and Critical Thinking.** (3) The purpose of this course is to help students learn how to analyze, critique, and construct arguments in context, in other words, how to read and write argumentative essays. Meets NMCC - Area V: Humanities and Fine Arts.

**PHIL 201: Greek Thought.** (3) An introductory survey of early and classical Greek philosophy, literature, and history. Figures: Presocratics, Socrates, Plato, and Aristotle; Homer and Sophocles; Herodotus and Thucydides. Meets UNMCC - Area 5: Humanities; meets NMCC- Area V: Humanities and Fine Arts.

**PHIL 202: From Descartes to Kant.** (3) An historical study of philosophical trends and controversies that characterize the development of early modern philosophy. This survey will cover the philosophies of Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. Meets UNMCC - Area 5: Humanities; meets NMCC- Area V: Humanities and Fine Arts.

and ethical problems associated with the business, engineering, medical and legal professions. Meets NMCC - Area V: Humanities and Fine Arts.

## Phlebotomy Technician (PBT)

**Note:** Needle Stick insurance coverage is mandatory for PBT 101L/102L. All UNM students may be at risk for body fluid and blood-borne pathogen exposure, and coverage is for academic-related exposures only. Cost for coverage is \$30.00 per semester/per student, and is subject to change. Coverage will start the first day of the semester and end the day before the first day of the next semester. Students will be required to obtain this insurance before any academic-related training will take place.

**PBT 101L: Phlebotomy Technician.** (8) This course prepares students to become a Phlebotomy Technician. Training includes anatomy, safety, blood-drawing techniques, specimen preparation, equipment maintenance, and associated clerical, customer service and basic work skills. Prerequisites: Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 100 and MATH 099 with a grade of "CR". Co-requisite: PBT 102L. Prior to entering the clinical setting in the final week of class, students must have completed the following requirements: American Heart Association Healthcare Provider CPR Certification; program health form signed by physician; caregiver background screening and finger printing (\$73.30 fee); immunizations to include Measles-Mumps-Rubella (MMR), Varicella (chicken pox), Hepatitis B series, Diphtheria-Pertussis-Tetanus (DPT), adult



*Tetanus, and Influenza (flu shot); Tuberculosis exam (TB). Phlebotomy students must also purchase Needle-Stick Insurance (\$30 fee). A UNM Certificate is awarded upon successful completion of this course.*

**PBT 102L: Phlebotomy Technician Clinical.** (4) Clinical apprenticeship program for PBT 101L. Successful completion required for credit in PBT 101L. Clinical: 120 hours total.

## **Physical Education (PENP, PEP)**

**PENP 101: Beginning Swimming.** (1) Designed as an introduction to the fundamentals of swimming. Emphasis is placed on learning basic swimming techniques for fun, fitness, health and personal safety. Students are introduced to and explore the various skills and techniques necessary for successful swimming.

**PENP 113: Aikido.** (1) Instruction and practice of the basic skills and techniques of Aikido

**PENP 114: Weight Training and Physical Conditioning.** (1) Individual training programs for development of general strength, tone, endurance, and weight control.

**PENP 115: Intermediate Weight Training.** (1) Instruction in advanced weight-lifting principles and techniques as well as fitness related topics.

**PENP 120: Nia Dance Fitness.** (1) Instruction and practice in the basic movements in Nia, a fitness program designed to increase participant's strength, endurance and balance.

**PENP 121: Beginning Belly Dance.** (1) Instruction in the basic moving steps and rhythms of the oriental dance

**PENP 122: Intermediate Belly Dance.** (1) Instruction on the isolation and slow movements of Middle Eastern dance, including use of the veil and improvisation

**PENP 124: Ballroom Dance.** (1) Instruction in the basic movements of social dances such as the fox trot, waltz, lindy, rhumba, tango, and cha-cha.

**PENP 125: Intermediate Ballroom Dance.** (1) Instruction dependent upon experience of students in basic movements of all segments of ballroom dance.

**PENP 128: Beginning Country Western Dance.** (1) Instruction in the basic movements of the waltz, two-step, swing and polka.

**PENP 129: Intermediate Country Western Dance.** (1) Instruction dependent upon experience of students in basic movements of all segments of Country Western dance.

**PENP 130-131: T'ai Chi Ch'uan.** (1) Instruction and practice in techniques to enhance body awareness, reduces stress, improve balance and increase strength.

**PENP 132: Beginning Tae Kwan Do.** (1) Instruction in the basic skills, blocks, strikes and kicks of Tae Kwan Do.

**PENP 133: Intermediate Tae Kwan Do.** (1) Advanced instruction in the basic skills, blocks, strikes and kicks of Tae Kwan Do

**PENP 134: Beginning Kung Fu.** (1) Instruction in the basic skills, blocks, strikes and kicks of Kung Fu



**PENP 135: Intermediate Kung Fu.** (1) Advanced instruction in the basic skills, blocks, strikes and kicks of Kung Fu

**PENP 136: Personal Defense.** (1) Instruction in the basic skills needed to defend one's self against assault.

**PENP 138-139: Karate.** (1-2) Instruction in the basic skills, blocks, strikes, and kicks of Japanese karate.

**PENP 140: Beginning Golf.** (1) Instruction in basic skills, equipment, rules, etiquette, and shot-making.

**PENP 141: Intermediate Golf.** (1) Instruction emphasizes actual play.

**PENP 143: Beginning Tennis.** (1) Instruction in basic skills and rules of tennis.

**PENP 144: Intermediate Tennis.** (1) Instruction dependent upon skills of students in basic fundamentals. Perfection of strokes.

**PENP 146: Bowling.** (1) Special fees. Instruction and practice in the basic skills of bowling.

**PENP 148: Archery.** (1) Instruction in the basic skills and knowledge of range archery.

**PENP 155-156: Pilates.** (1) Instruction in movements that increase balance, core fitness and cardiorespiratory endurance.

**PENP 158: Aerobic Dance I.** (1) Instruction in continuous movement using basic dance steps for improved cardio-respiratory endurance.

**PENP 159: Aerobic Dance II.** (1) Instruction in a longer aerobic workout using more advanced dance steps for improved cardio-respiratory endurance.

**PENP 161-162: Jogging Fitness.** (1) Individualized running programs for improved cardio-respiratory endurance.

**PENP 165: Yoga.** (1) Introduction to five areas of yoga which are particularly significant to the Western World.

**PENP 166: Intermediate Yoga.** (1) Instruction in more advanced techniques of Yoga emphasizing the physical aspects of Hatha Yoga.

**PENP 177-178: Fundamentals of Stretching and Relaxation Techniques.** (1) Instruction and practice of various techniques to enhance flexibility and reduce stress.

**PENP 180-181: Feldenkrais: Awareness Through Movement.** (1) A class to develop and experience a deeper awareness of a person's body and its capabilities.

**PENP 188: Modified Physical Education.** (1) An activity class designed to meet the individual needs of students who require various modifications for exercise.

**PENP 193: Topics.** (1-2) May be repeated for credit, no limit. New activities offered on an exploratory basis.

**PENP 293: Topics.** (1-3) May be repeated for credit, no limit.

## **Physics (PHYC)**





**PHYC 151: General Physics.** (3) Mechanics, sound, heat, fluid, waves. The sequence (PHYC 151, 151L, 152, 152L) is required of pre-medical, pre-dental, and pre-optometry students. Only PHYC 151 and 152 are required of pharmacy students. Prerequisite: Successful completion of MATH 150 or MATH 153 or MATH 162 or MATH 180 or ACCUPLACER score of 100-120 (College-Level Math) or ACT score  $\geq 28$ , or SAT score  $\geq 660$ . Meets UNMCC – Area 3: Physical and Natural Sciences; meets NMCC– Area III: Laboratory Science.

**PHYC 151L: General Physics Laboratory.** (1) Mechanics, sound, heat. Lab: 3 hours. Pre or co-requisite: PHYS 151. Meets UNMCC – Area 3: Physical and Natural Sciences; meets NMCC– Area III: Laboratory Science.

**PHYC 152: General Physics.** (3) Electricity, magnetism, optics. Prerequisite: PHYS 151. Meets UNMCC – Area 3: Physical and Natural Sciences; meets NMCC– Area III: Laboratory Science.

**PHYC 152L: General Physics Laboratory.** (1) Electricity, magnetism, optics. Lab: 3 hours. Pre or co-requisite: PHYS 152. Meets UNMCC – Area 3: Physical and Natural Sciences; meets NMCC– Area III: Laboratory Science.

**PHYC 160: General Physics.** (3) Mechanics, sound. Pre or co-requisite: MATH 162. Meets UNMCC – Area 3: Physical and Natural Sciences; meets NMCC– Area III: Laboratory Science.

**PHYC 160L: General Physics Laboratory.** (1) Mechanics, sound. Pre or co-requisite: PHYC 160. Meets UNMCC – Area 3: Physical and Natural Sciences; meets NMCC– Area III: Laboratory Science.

**PHYC 161: General Physics.** (3) Heat, electricity, magnetism. Prerequisite: PHYC 160. Pre or co-requisite: MATH 163. Meets UNMCC – Area 3: Physical and Natural Sciences; meets NMCC– Area III: Laboratory Science.

**PHYC 161L: General Physics Laboratory.** (1) Electricity and magnetism. Pre or co-requisite: PHYC 161. Meets UNMCC – Area 3: Physical and Natural Sciences; meets NMCC– Area III: Laboratory Science.

## Political Science (POLS)

**POLS 110: The Political World.** (3) An introduction to politics, with emphasis on the ways people can understand their own political systems and those of others. Students who have already had courses in political science may not count POLS 110 toward a major at UNM. Meets UNMCC – Area 4: Social and Behavioral Sciences; meets NMCC– Area IV: Social/Behavioral Sciences.

**POLS 200: American Politics.** (3) Survey of American politics, including political behavior of the American electorate, the theory of democracy, the structure and function of American political institutions, and contemporary issues. Meets UNMCC – Area 4: Social and Behavioral Sciences; meets NMCC– Area IV: Social/Behavioral Sciences.

**POLS 220: Comparative Politics** (3). Designed to give students the ability to understand and evaluate political regimes by focusing on the political history, socioeconomic structure and contemporary political institutions and behavior. Includes consideration of European and developing systems. Meets UNMCC – Area 4: Social and Behavioral Sciences.

**POLS 240: International Politics.** (3). Analyzes significant factors in world politics, including nationalism, national interest, ideology, international conflict and collaboration, balance of power, deterrence, international law and international organization. Meets UNMCC – Area 4: Social and Behavioral Sciences.



**POLS 260: Political Ideas.** (3) Introduces many of the enduring political issues in descriptive, analytical and normative terms. Will include discussion of both classical and contemporary political ideas and ideologies.

**POLS 270: Public Policy and Administration.** (3) Introduces public policy and bureaucracy, including decision-making and implementation.

**POLS 280: Introduction to Political Analysis.** (3) Discovery of causal patterns in political behavior, evaluation of effectiveness of political reforms and campaign techniques, analysis of the logic of scientific research and related topics. No knowledge of statistics, computers or research methods assumed.

## **Psychology (PSY)**

**PSY 105: General Psychology.** (3) Overview of the major content areas in psychology. Topics to be covered include learning, cognition, perception, motivation, biological systems, social and abnormal psychology, development, personality, and approaches to psychotherapy. Meets UNMCC - Area 4: Social and Behavioral Sciences; meets NMCC- Area IV: Social/Behavioral Sciences.

**PSY 211: Applied Psychology.** (3) Topics in applications to everyday life, such as personnel selection, consumer psychology, and environmental problems.

**PSY 220: Developmental Psychology.** (3) Overview of the physical, perceptual, motor, cognitive, emotional, and social development of children from infancy through adolescence. Prerequisite: PSY 105.

**PSY 231: Psychology of Human Sexuality.** (3). Exploration of the physiological, cultural, social and individual factors that influence sexual behavior, sex roles, and sexual identity. Prerequisite: PSY 105.

**PSY 240: Brain and Behavior.** (3) A general survey of the biological foundations of behavior. Emphasis is on the central nervous system. Prerequisite: PSY 105, or BIOL 110, or BIOL 123.

**PSY 265: Cognitive Psychology.** (3) Study of the cognitive processes involved in the encoding, storage, retrieval and use of knowledge, including attention, memory, comprehension, categorization, reasoning, problem-solving, and language. Prerequisite: PSY 105.

**PSY 271: Social Psychology.** (3) Study of social influence: perception of oneself and others, attitudes, conformity, attraction, altruism, aggression, groups. Prerequisite: PSY 105. Suggested prerequisite: ENGL 110.

**PSY 280: Health Psychology.** (3) This introduction to Health Psychology covers the role of stress in illness, coping with chronic illness, stress, and pain, and the role of health behavior in health and disease. Prerequisite: PSY 105.

## **Religious Studies (RELG)**

**RELG 107: Living World Religions.** (3) Introduction to major living world religions, such as Buddhism, Christianity, Hinduism, Islam, and Judaism. Suggested prerequisite: ENGL 110. Meets UNMCC - Area5: Humanities.



## **Signed Language (SIGN)**

**SIGN 201: Introduction to Signed Language.** (3) Overview of signed language studies and related issues. Introduction to American Sign Language (ASL); signed communication systems most frequently used by deaf and hard of hearing individuals; the study of fingerspelling. Meets UNMCC – Area 6: Foreign Language.

## **Sociology (SOC)**

**SOC 101: Introduction to Sociology.** (3) Basic concepts, topics, and theories of contemporary sociology. Prerequisite for more advanced courses in sociology. Meets UNMCC – Area 4: Social and Behavioral Sciences; meets NMCC– Area IV: Social/Behavioral Sciences.

**SOC 205: Crime, Public Policy and the Criminal Justice System.** (3) The study of crime, the criminal justice system and crime-related public policy. Discussion of key criminology concepts. Measurement of crime and delinquency, its distribution in society, victimization, public opinion, the criminal justice system, crime control strategies and policies. Prerequisite: SOC 101.

**SOC 211: Social Problems.** (3) Description and analysis of major social problems facing American society. Foci may include: poverty, homelessness, alcohol and drug problems, race and ethnic relations, aging and mental illness. Prerequisite: SOC 101.

**SOC 213: Deviance.** (3) Survey of major forms of norm-violating behavior in American society, such as drug and alcohol abuse, mental illness, criminal behavior, and sexual deviance. Discussion of sociological explanations of the causes of, and attempts to address these behaviors. Prerequisite: SOC 101.

**SOC 216: The Dynamics of Difference, Power and Discrimination.** (3) The study of prejudice and discrimination, including their historical and contemporary sources and prospects for reduction, with applications to American institutions. Prerequisite: SOC 101.

**SOC 221: Global Issues.** (3) The global context of patterns of development in nation-states with an emphasis on industrialized countries. Selected topics of social, economic, and cultural change. Inequality, war, reform and revolution in global perspective.

**SOC 230: Society and Personality.** (3) The social psychology of personalities, relationships, small groups, and organizations. Prerequisite: SOC 101.

## **Spanish (SPAN)**

**SPAN 101: Elementary Spanish I.** (3) Beginning Spanish for students with no previous exposure to Spanish. Development of all four language skills, with emphasis on listening and speaking. Meets UNMCC – Area 6: Foreign Language.

**SPAN 102: Elementary Spanish II.** (3) Beginning Spanish for students who have completed SPAN 101 or equivalent. Continued development of four skills with emphasis on listening and speaking. Meets UNMCC – Area 6: Foreign Language.



**SPAN 103-104: Elementary Spanish Conversation.** (1) Supplementary course to SPAN 101-102 for students interested in additional practice in speaking. Grade option: CR/NC. Pre or co-requisite: SPAN 101 or SPAN 102.

**SPAN 111: Elementary SHL I.** (3) Beginning Spanish for students who grew up in a Spanish-speaking environment. Will build upon the language base which the students already possess. Development of all language skills: reading, writing, listening and speaking.

**SPAN 112: Elementary SHLII.** (3) Beginning Spanish for heritage language students who have completed SPAN 111 or equivalent. Continued development of the four skills with an emphasis on reading and writing, vocabulary building and review of grammar.

**Span 201: Intermediate Spanish I.** (3) Intermediate Spanish for students who have completed SPAN 102 or equivalent. Review of grammar and further development of all four skills. Meets UNMCC – Area 6: Foreign Language.

**Span 202: Intermediate Spanish II.** (3) Spanish for students who have completed SPAN 201 or equivalent. Continued development of all four skills with emphasis upon reading. Meets UNMCC – Area 6: Foreign Language.

**SPAN 203: Spanish Conversation.** (3) For students who have completed or are currently enrolled in SPAN 201 or SPAN 202. Small classes designed to increase skills in speaking Spanish. Not for native speakers. Pre- or co-requisite: SPAN 201, SPAN 202, SPAN 211.

**SPAN 211: Intermediate SHL I.** (3) Intermediate Spanish for heritage language students who have completed SPAN 102 or equivalent. Review of grammar and continued development of the four skills with an emphasis on literacy and speaking.

**SPAN 212: Intermediate SHL II.** (3) Intermediate Spanish for heritage language students who have completed SPAN 201 or equivalent. Further development of all four skills, with an emphasis on reading authentic materials, on practice writing needs and communicating with other native speakers.

## **Statistics (STAT) (see Mathematics and Statistics)**

## **Sustainable Building (SUST)**

**SUST 120: Introduction to Green Building.** (3) This course is an introduction to green building, principles, materials and methods of construction as they apply to sustainable residential construction. It provides the decision making framework for students to learn how homes can be built to be more energy efficient, healthy and comfortable.

**SUST 150: Renewable Energy in Buildings.** (3) This course is an introduction to solar and other renewable energy options for new and existing construction. Topics include: photovoltaic arrays, passive and active solar space heating and water heating, and wind energy. Students will use computer generated three-dimensional models to evaluate building performance and explore design options.

**SUST 230: Computer Assisted Sustainable Design (BIM).** (3) This course explores sustainable design using BIM (building information modeling) and specialized energy analysis software. Students will learn core concepts of sustainability in building design, including systems, and materials.



**SUST 295: Green Building Capstone Project/Internship.** (3) Students are assigned opportunities to expand their knowledge and skills by applying sustainable practices and policy. Students will work directly on sustainable projects and research in a workplace setting.

## **Theatre Arts (THEA)**

**THEA 105: Theatre Appreciation.** (3) For majors and non-majors. Study of the various elements of the practice of theatre: acting, directing, design, production, playwriting. Issues of spectatorship and criticism also addressed. Required attendance at a number of performances. Meets UNMCC - Area 7: Fine Arts; meets NMCC - Area V: Humanities and Fine Arts.

## **University Studies (UNIV)**

**UNIV 101: Freshman Interest Group Seminar.** (1-3 to a maximum of 3) Designed to accelerate successful transition to university life. Grade option: A, B, CR/NC.

**UNIV 102: Topics: Academic Foundations.** (1-3 to a maximum of 9) Designed to engage students who share academic interests with their intended major, college or school.

**UNIV 175: Experiential Learning Seminar.** (1-3 to a maximum of 3) Experiential learning involves collaborative, reflective investigation of real-world issues from a variety of personal, social and disciplinary perspective. Extensive off-campus participation may be required. UNIV 175 may be linked with a co-requisite course.

**UNIV 201: Topics in Career Exploration.** (1-3 to a maximum of 6) Both general and discipline-specific sections offered. Students will explore their goals, passions, and skills, and the steps and tools related to career decision making (general seminar). In the discipline-specific sections, students will explore specific career options.

## **Welding (WLDT)**

**WLDT 101: Blue Print Reading.** (4) An introductory course on welding blue print reading and related theory. Students will demonstrate competency by satisfactory completion of instruction modules and American Welding Society Standards. Course combines lecture and laboratory.

**WLDT 105: Arc Welding I.** (4) This course will introduce the student to the process of electrode manipulation, position welding and the use of different welding machines.

**WLDT 107: Advanced Arc Welding.** (4) Students will learn V-groove welds and how to set up welding equipment for making open V-groove welds. The course provides procedures for making flat, horizontal, vertical and overhead open V-groove welds.

**WLDT 108: Oxyacetylene Welding.** (4) This course will introduce the student to the gas welding process. The student will learn to handle and use the acetylene gas form of welding.

**WLDT 130: Pipe Welding.** (4) This course utilizes advanced Arc and oxyacetylene welding skills and techniques on ferrous pipe in a rotating and/or a fixed position. Emphasis is placed on the open groove pipe joint. The course will include alignment techniques, oxyacetylene cutting of pipe, pre-heat interpass temperatures, and mechanical preparation of the joints.



**WLDT 141: M.I.G. and T.I.G. Welding.** (4) This course begins with a brief review of pipe welding and groove welds on plate in all positions and covers stainless steel, cupro nickel alloys, hard facing processes, gas metal arc welding or M.I.G, and gas tungsten arc welding or T.I.G.

**WLDT 201: Welding Metallurgy Math and Communication.** (4) Students will study metallurgy, math and communication skills for welding technology.

## **Women's Studies (WMST)**

**WMST 200: Introduction to Women Studies** (3) This interdisciplinary course explores intersectional influences of gender, race, class, sexuality, and other factors of identity in regional, national, and international contexts; the critical historical study of feminist activity and Women's Studies in the U.S.

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## Attachment G ECHS Campus Map

Room 1 A & B  Vacant	Room 2 A & B  Ms K. Hajner  Science Lab	Room 3 A & B  Computer Lab #1	Room 4 A & B Mrs. Nelson & Mrs M. Dickenson, Social Workers Mrs. M. Carillo/Spec. Ed <b>ECHS CLASS</b> – EDUC 193	Room 5 Mr. D. Cole NM History/Health	Room 6 A & B Mr S. Buda <b>ECHS CLASS</b> Mrs A. Mendez English MS & HS CS108 & ENG 110/150	Room 7 Mr J. Jolly Guitar 7 <sup>th</sup> & 8 <sup>th</sup> grade High School	Room 8 Mr J. Landron Music 7 <sup>th</sup> & 8 <sup>th</sup> grade High School
Room 16 IT Bldg Mrs K. Howe Mr E. Brown, Support Services	Room 15 A & B Mrs P. Resendiz Math Mrs R. McNiel Language Arts	Room 14 A & B Mrs B.Dodge/ <b>ECHS</b> <b>CLASS</b> Science-High School DC Math 120	Room 13 Student Bathrooms	Room 12 Vacant	Room 11 Ms. A. Duran <b>ECHS CLASS</b> -HED 171 Gov/Econ High School	Room 10 A & B Mrs A. Quintana <b>ECHS CLASS</b> Mr C. Stephens Digital Media Art	Room 9 A/B Mr J. Viera Mr M. Henry High School Math

Room 36 PE Coach Cole
Room 36 Pre-K Mrs. D. Gabaldon EA Ms. Susan OPEN
Room 34 A & B Kinder Mrs. L Cordova EA Antonette Mrs. A. Griego EA J. Fernandez
Room 33 Elem. Library
Room 32 A & B Mrs. M. Asay Elem Special Ed Speech Therapy

Bus Pickup

Room 29 Cafeteria	Room 28 Ms. McNeil Dance 7 <sup>th</sup> & 8 <sup>th</sup> and High School
Playground Pre-K-2 <sup>nd</sup> grade	Room 27 Mrs. S.Watling/ <b>TECH VOC BLDG</b> FFA/ Engineering/Robotics 7 <sup>th</sup> & 8 <sup>th</sup> and High School
Room 30 A & B Mrs. A. Saiz Ms. C. Swanson	Room 26 A & B 3 <sup>rd</sup> & 4 <sup>th</sup> Grade Mrs J. Nilvo (3 <sup>rd</sup> grade) & Mrs B. Chavez(4 <sup>th</sup> grade)
Room 31 A & B Ms J. Sanchez 1 <sup>st</sup> grade	Room 25 Mr S. Morerod Special Education
Mrs T. Ogas Mrs L. Romero Childfind	Mr. M. Ogas Principal, Mrs A. Griego, Elem VP Mrs. Grace, Ms. Dorey, Mrs. D. Jarvis <b>MAIN ADMINISTRATION</b> – Room 24

Room 17 Student Bathrooms (yellow bldg)
Room 18 A & B Nurse's Office Mrs. J. Sena High School Adm. Office Mr Ogas/Mr Brown
Room 19 Teacher's Lounge
Room 20 Counselors (Elem & HS/ECHS)
Room 21 Elementary Computer Lab
Room 22 A/B Mr D.Poulin / <b>ECHS CLASS</b> HS Spanish & Span 101/ 102 Mrs. L. Herrera Testing Coordinator Ms R. Garcia, <b>ECHS Center</b>

## Attachment F ECHS CAMPUS MAP



Staff Parking Lot



Elementary Student Drop Off

MS & HS Student Drop Off Area

Room 23 A & B Graduate SODA / Credit Recovery- Mrs. Moyers Computer Lab #2 Green bldg
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Security  
Sign In



## Attachment H Valencia County Student population demographics

# ALBUQUERQUE MSA | CENTRAL WORKFORCE REGION

## IN-DEMAND OCCUPATIONS 2016

### CRITERIA

#### Projected Average ANNUAL Job Openings

**17**

or more

This represents the projected number of job openings from both new jobs and existing jobs that become available.

*In-demand occupations meet both of these criteria.*























#### Projected Employment Growth (%)

**8.0%**

or more

This represents how fast employment is projected to grow, with a higher percentage meaning faster growth.

### Occupation Code & Title

Occupation Code & Title	Jobs as of 2014	Pct. Growth	Annual Job Openings 14-24	2015 Wage			Job Zone	Job Postings 2015	Wage & Star Categories
				Entry	Median	Experienced			
<b>All Occupations</b>	<b>382,680</b>	<b>8.0%</b>	<b>12,310</b>	<b>\$19,710</b>	<b>\$33,390</b>	<b>\$56,800</b>	<b>n/a</b>	<b>158,890</b>	<b>n/a</b>
<b>Doctoral or Professional Degree</b>									
 25-1071 Health Specialties Teachers, Postsecondary	1,060	21.5%	40	\$67,990	\$128,620	\$184,110	5	30	TW 
29-1051 Pharmacists	1,100	9.9%	40	\$96,620	\$116,840	\$126,100	5	380	TW 
29-1123 Physical Therapists	580	32.8%	40	\$53,920	\$88,520	\$98,820	5	990	HW 
19-3031 Clinical, Counseling & School Psychologists	670	11.9%	20	\$37,640	\$60,910	\$72,210	5	170	HW 
29-1021 Dentists, General	570	13.8%	20	\$44,010	\$155,790	\$218,570	5	230	TW 
<b>Master's Degree</b>									
21-1014 Mental Health Counselors	700	17.5%	30	\$21,790	\$29,180	\$44,590	5	100	
21-1022 Healthcare Social Workers	650	21.1%	30	\$38,770	\$51,730	\$58,640	5	270	HW 
29-1127 Speech-Language Pathologists	510	26.7%	30	\$47,140	\$72,540	\$94,260	5	490	TW 
29-1171 Nurse Practitioners	530	33.4%	30	\$86,030	\$105,910	\$126,760	5	790	TW 
21-1012 Educational, Guidance, School & Vocational Counselors	650	11.3%	20	\$24,550	\$50,730	\$61,790	5	170	HW 
29-1122 Occupational Therapists	390	29.0%	20	\$49,700	\$80,700	\$92,590	5	560	TW 
<b>Bachelor's Degree</b>									
 29-1141 Registered Nurses	9,640	17.7%	400	\$55,070	\$66,430	\$74,070	3-5	12,350	TW 
 11-9111 Medical & Health Services Managers	1,150	17.0%	50	\$53,830	\$88,940	\$123,660	5	1,320	TW 
25-2022 Middle School Teachers, Ex. Special & Career/Technical Education	1,730	8.0%	50	\$33,580	\$47,580	\$55,970	4	30	HW 
13-1111 Management Analysts	1,630	9.4%	40	\$45,200	\$70,380	\$89,790	5	230	TW 
29-2011 Medical & Clinical Laboratory Technologists	***	25.2%	40	\$33,420	\$46,860	\$55,380	4-5	250	HW 
25-3098 Substitute Teachers	1,150	8.1%	30	\$17,520	\$20,670	\$25,340	n/a	0	
27-2022 Coaches & Scouts	580	8.3%	30	\$17,440	\$19,980	\$38,530	4	30	
11-3011 Administrative Services Managers	780	8.9%	20	\$45,980	\$74,510	\$100,060	3	190	TW 
11-9151 Social & Community Service Managers	440	15.3%	20	\$39,250	\$65,020	\$71,710	4	90	TW 
13-2052 Personal Financial Advisors	310	28.7%	20	\$56,430	\$81,750	\$163,950	4	320	TW 
15-1121 Computer Systems Analysts	730	16.0%	20	\$46,490	\$73,630	\$88,430	4	580	TW 



# ALBUQUERQUE MSA | CENTRAL WORKFORCE REGION

## IN-DEMAND OCCUPATIONS 2016

### CRITERIA

17 or more projected average annual job openings

8.8% or higher projected employment growth

Occupation Code & Title	Jobs as of 2014	Pct. Growth	Annual Job Openings 14–24	2015 Wage			Job Zone	Job Postings 2015	Wage & Star Categories		
				Entry	Median	Experi-enced					
Bachelor's Degree -- Continued											
15-1132 Software Developers, Applications	760	12.2%	20	\$47,300	\$80,080	\$99,590	4	350	TW	4★	
21-1021 Child, Family & School Social Workers	660	10.6%	20	\$26,870	\$39,870	\$49,310	4	60	HW	★	
25-1191 Graduate Teaching Assistants	***	8.6%	20	***	***	***	5	<5			
Associate's Degree											
HD 25-2011 Preschool Teachers, Ex. Special Education	740	29.0%	40	\$18,260	\$23,600	\$33,140	3	320			
29-1126 Respiratory Therapists	380	22.8%	20	\$48,290	\$56,110	\$60,330	3	110	TW	4★	
29-2012 Medical & Clinical Laboratory Technicians	460	19.8%	20	\$29,250	\$37,270	\$44,270	3	290	HW	★	
29-2034 Radiologic Technologists	710	8.1%	20	\$49,520	\$60,090	\$66,470	3	120	TW	4★	
Postsecondary Nondegree Award or Some College, No Degree											
HD 31-1014 Nursing Assistants	3,530	12.0%	120	\$21,590	\$27,850	\$31,310	2	1,140			
25-9041 Teacher Assistants (Some College, No Degree)	3,350	9.8%	110	\$17,370	\$19,560	\$24,130	3	230			
HD 31-9092 Medical Assistants	2,800	16.2%	100	\$24,530	\$28,610	\$31,790	3	820			
HD 31-9091 Dental Assistants	1,190	13.9%	50	\$25,050	\$31,930	\$34,990	3	310			
15-1151 Computer User Support Specialists (Some College, No Degree)	1,750	8.5%	40	\$30,260	\$43,150	\$51,520	3	770	TW	4★	
27-2011 Actors (Some College, No Degree)	***	15.4%	20	***	***	***	2	90			
29-2041 Emergency Medical Technicians & Paramedics	620	19.7%	20	\$21,930	\$30,700	\$39,680	3	400			
29-2071 Medical Records & Health Information Technicians	690	12.5%	20	\$22,990	\$31,450	\$41,230	3	410			
31-9011 Massage Therapists	710	20.0%	20	\$17,460	\$19,500	\$30,050	3	90			
High School Diploma or Equivalent											
HD 35-1012 First-Line Supervisors of Food Preparation & Serving Workers	2,750	19.0%	130	\$20,840	\$24,940	\$32,170	2	850			
HD 39-9011 Childcare Workers	2,010	23.2%	110	\$17,450	\$19,130	\$21,450	2-3	120			
HD 43-4081 Hotel, Motel & Resort Desk Clerks	910	16.5%	60	\$17,440	\$19,700	\$22,910	2	220			
HD 43-6013 Medical Secretaries	1,750	15.8%	50	\$26,680	\$32,490	\$36,220	3	310			
HD 47-2111 Electricians	1,650	12.6%	50	\$30,460	\$43,170	\$51,130	3	310	TW	★	
29-2052 Pharmacy Technicians	1,480	13.8%	40	\$24,930	\$30,950	\$34,720	3	390			
HD 39-1021 First-Line Supervisors of Personal Service Workers	1,120	15.8%	40	\$24,070	\$30,560	\$38,970	3	80			
HD 41-3021 Insurance Sales Agents	1,020	14.0%	40	\$31,860	\$41,830	\$59,770	4	700	TW	★	
21-1093 Social & Human Service Assistants	1,060	11.5%	30	\$21,610	\$32,190	\$35,030	4	140			
39-9031 Fitness Trainers & Aerobics Instructors	900	9.7%	30	\$25,570	\$39,530	\$45,130	3	80	TW	4★	
25-3021 Self-Enrichment Education Teachers	490	18.5%	20	\$21,380	\$30,890	\$48,510	3	40			
43-3021 Billing & Posting Clerks	770	11.0%	20	\$24,220	\$33,720	\$39,870	2	250	HW	★	
43-9041 Insurance Claims & Policy Processing Clerks	510	10.8%	20	\$27,690	\$31,330	\$39,010	2-3	30			
49-9041 Industrial Machinery Mechanics	390	18.9%	20	\$32,290	\$38,520	\$46,510	3	30	TW	4★	












# ALBUQUERQUE MSA | CENTRAL WORKFORCE REGION

## IN-DEMAND OCCUPATIONS 2016

### CRITERIA

17 or more projected average annual job openings

8.8% or higher projected employment growth

Occupation Code & Title	Jobs as of 2014	Pct. Growth	Annual Job Openings 14–24	2015 Wage			Job Zone	Job Postings 2015	Wage & Star Categories
				Entry	Median	Experienced			
No Formal Educational Credential									
 35-3021 Combined Food Preparation & Serving Workers, Incl. Fast Food	9,910	21.0%	530	\$17,330	\$18,010	\$18,180	1	510	EW 
35-3031 Waiters & Waitresses	7,650	11.7%	460	\$17,260	\$18,780	\$23,010	1	590	
 39-9021 Personal Care Aides	7,880	41.3%	390	\$17,310	\$19,560	\$21,660	2	840	
 31-1011 Home Health Aides	3,020	39.3%	190	\$18,210	\$23,800	\$29,300	2	200	
 35-2014 Cooks, Restaurant	2,890	23.9%	150	\$17,640	\$21,970	\$24,880	2	590	
 35-9031 Hosts & Hostesses, Restaurant, Lounge & Coffee Shop	***	14.2%	110	\$17,350	\$18,420	\$19,370	1	220	
 35-9011 Dining Room & Cafeteria Attendants & Bartender Helpers	1,370	14.2%	90	\$17,340	\$18,090	\$19,220	1	170	
35-3022 Counter Attendants, Cafeteria, Food Concession & Coffee Shop	1,090	9.9%	80	\$17,330	\$18,350	\$19,370	1	140	
 35-2021 Food Preparation Workers	1,650	13.9%	70	\$17,370	\$20,350	\$22,900	1	240	
 35-3011 Bartenders	1,320	16.9%	70	\$17,330	\$18,770	\$24,750	2	270	
35-2012 Cooks, Institution & Cafeteria	960	10.8%	40	\$17,520	\$21,550	\$25,540	2	180	
 39-3091 Amusement & Recreation Attendants	760	12.6%	40	\$17,480	\$18,950	\$22,160	1	50	
53-3041 Taxi Drivers & Chauffeurs	890	12.6%	30	\$17,550	\$21,630	\$27,220	1	110	
53-7063 Machine Feeders & Offbearers	***	38.5%	30	\$36,230	\$43,480	\$45,030	2	<5	TW 
35-3041 Food Servers, Nonrestaurant	600	11.7%	20	\$17,340	\$18,810	\$20,350	1	160	



# ALBUQUERQUE MSA | CENTRAL WORKFORCE REGION

## IN-DEMAND OCCUPATIONS 2016

### CRITERIA

17 or more projected average annual job openings

8.8% or higher projected employment growth

All occupations shown are considered to be in demand, with those identified as in high demand marked.

*Note: All data but percentage growth have been rounded. Job Zones represent the level of preparation needed to enter the occupation. Online job postings are subject to error and should always be used in conjunction with other data. For more information on the in-demand occupational listing and corresponding classifications, go to [www.dws.state.nm.us/LMI](http://www.dws.state.nm.us/LMI).*

**HD High Demand:** More projected openings than 90 percent of all occupations and greater percentage growth than 75 percent of all occupations.

**EW** The median wage is greater than median across all occupations that require the same minimum education.

**HW** The median wage is greater than the median across all occupations but not greater than the median across all occupations requiring the same minimum education.

**TW** The median wage is greater than the median across all occupations and greater than the median across all occupations requiring the same minimum education.

\*\*\* Data are suppressed. Percentage growth and annual openings are shown if the occupation's 2014 job estimate is within the top 30 percent of all estimates (46 jobs).

**★ 5-Star:** High demand and a median wage above that of all occupations and those requiring the same minimum education

**★ 4-Star:** High demand and a median wage above that of all occupations OR in demand and a wage above that of all occupations and those requiring the same minimum education

**★ 3-Star:** High demand and a median wage above that of all occupations requiring the same minimum education OR in demand and a wage above that of all occupations

**Job Zones:** Go to [www.onetonline.org](http://www.onetonline.org) for more information on preparation levels.

Little or no preparation: May require a high school diploma or GED and usually requires little or no previous work-related skill/knowledge/experience. Workers usually need a few days to a few months of on-the-job training.

Some preparation: Typically requires a high school diploma or equivalent and some previous work-related skills/knowledge/experience. Workers need a few months to one year of working with experienced employees on the job.

Medium preparation: Typically requires training in vocational schools, related on-the-job experience, and/or an associate's degree. Workers typically need previous work-related skills/knowledge/experience and one or two years of experience and informal training with experienced workers on the job.

Considerable preparation: Usually requires a four-year bachelor's degree and a considerable amount of work-related skill/knowledge/experience. Workers usually need several years of experience and vocational or on-the-job training.

Extensive preparation: Usually requires a graduate degree and extensive work-related skill/knowledge/experience (often 5+ years). Workers sometimes need on-the-job training, but it is typically assumed he/she already has what is needed to perform the job.



S0901

## CHILDREN CHARACTERISTICS

2012-2016 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

**Tell us what you think.** Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	Valencia County, New Mexico					
	Total		In married-couple family household		In male householder, no wife present, family household	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Children under 18 years in households	18,680	+/-41	11,214	+/-852	1,424	+/-437
AGE						
Under 6 years	29.4%	+/-1.1	29.8%	+/-2.3	42.6%	+/-7.1
6 to 11 years	36.0%	+/-2.0	35.1%	+/-2.2	29.5%	+/-5.4
12 to 17 years	34.6%	+/-2.0	35.1%	+/-2.5	27.9%	+/-7.9
RACE AND HISPANIC OR LATINO ORIGIN						
One race	95.7%	+/-1.4	96.8%	+/-1.1	93.5%	+/-6.5
White	72.8%	+/-3.6	74.5%	+/-4.7	69.4%	+/-14.0
Black or African American	0.9%	+/-0.3	0.7%	+/-0.5	1.7%	+/-2.4
American Indian and Alaska Native	5.8%	+/-1.0	4.7%	+/-1.9	9.4%	+/-6.4
Asian	0.4%	+/-0.3	0.7%	+/-0.5	0.0%	+/-2.1
Native Hawaiian and Other Pacific Islander	0.0%	+/-0.2	0.0%	+/-0.3	0.0%	+/-2.1
Some other race	15.7%	+/-3.6	16.2%	+/-4.5	13.0%	+/-8.2
Two or more races	4.3%	+/-1.4	3.2%	+/-1.1	6.5%	+/-6.5
Hispanic or Latino origin (of any race)	70.9%	+/-0.1	69.4%	+/-2.9	69.8%	+/-13.4

Subject	Valencia County, New Mexico					
	Total		In married-couple family household		In male householder, no wife present, family household	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
White alone, not Hispanic or Latino	22.4%	+/-0.3	24.7%	+/-2.5	21.5%	+/-10.6
<b>RELATIONSHIP TO HOUSEHOLDER</b>						
Own child (biological, step or adopted)	84.5%	+/-2.4	88.5%	+/-2.5	82.9%	+/-8.4
Grandchild	10.8%	+/-2.1	9.4%	+/-2.2	3.1%	+/-2.4
Other relatives	1.5%	+/-0.8	1.2%	+/-1.0	5.1%	+/-4.9
Foster child or other unrelated child	3.2%	+/-1.8	0.9%	+/-1.2	8.9%	+/-10.6
<b>NATIVITY</b>						
Native	98.6%	+/-0.8	97.9%	+/-1.4	100.0%	+/-2.1
Foreign born	1.4%	+/-0.8	2.1%	+/-1.4	0.0%	+/-2.1
<b>PRESENCE OF OTHER ADULTS</b>						
Unmarried partner of householder present	8.4%	+/-3.1	(X)	(X)	51.9%	+/-19.7
<b>DISABILITY STATUS</b>						
Civilian children under 18 years in households	18,680	+/-41	11,214	+/-852	1,424	+/-437
With any disability	5.2%	+/-1.3	4.0%	+/-1.3	1.6%	+/-1.5
<b>SCHOOL ENROLLMENT</b>						
Children 3 to 17 years in households	16,222	+/-235	9,810	+/-779	1,161	+/-387
Enrolled in school	14,527	+/-284	8,628	+/-721	1,065	+/-391
Public	92.4%	+/-1.9	89.8%	+/-2.6	94.6%	+/-5.6
Private	7.6%	+/-1.9	10.2%	+/-2.6	5.4%	+/-5.6
Not enrolled in school	1,695	+/-268	1,182	+/-203	96	+/-58
<b>MEDIAN FAMILY INCOME IN THE PAST 12 MONTHS (IN 2016 INFLATION-ADJUSTED DOLLARS) FOR FAMILIES WITH OWN CHILDREN</b>						
Median income (dollars)	39,137	+/-4,573	58,456	+/-6,113	26,026	+/-9,710
Children under 18 years in households	18,680	+/-41	11,214	+/-852	1,424	+/-437
<b>PUBLIC ASSISTANCE IN THE PAST 12 MONTHS</b>						
Children living in households with Supplemental Security Income (SSI), cash public assistance income, or Food Stamp/SNAP benefits	44.9%	+/-4.8	36.6%	+/-5.5	56.1%	+/-17.1
<b>POVERTY STATUS IN THE PAST 12 MONTHS</b>						
Children in households for whom poverty status is determined	18,089	+/-333	11,117	+/-827	1,297	+/-326
Income in the past 12 months below poverty level	32.8%	+/-4.0	19.3%	+/-4.4	44.3%	+/-17.0
Income in the past 12 months at or above poverty level	67.2%	+/-4.0	80.7%	+/-4.4	55.7%	+/-17.0
<b>HOUSING TENURE</b>						
Children under 18 years in occupied housing units	18,680	+/-41	11,214	+/-852	1,424	+/-437
In owner-occupied housing units	67.3%	+/-4.0	78.8%	+/-4.7	47.5%	+/-20.2

Subject	Valencia County, New Mexico					
	Total		In married-couple family household		In male householder, no wife present, family household	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
	32.7%	+/-4.0	21.2%	+/-4.7	52.5%	+/-20.2
In renter-occupied housing units						



Subject	Valencia County, New Mexico	
	In female householder, no husband present, family household	
	Estimate	Margin of Error
Children under 18 years in households	5,930	+/-800
<b>AGE</b>		
Under 6 years	25.6%	+/-4.6
6 to 11 years	38.6%	+/-4.6
12 to 17 years	35.8%	+/-5.2
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>		
One race	94.0%	+/-3.7
White	70.2%	+/-8.1
Black or African American	1.3%	+/-1.2
American Indian and Alaska Native	7.3%	+/-3.0
Asian	0.0%	+/-0.5
Native Hawaiian and Other Pacific Islander	0.0%	+/-0.5
Some other race	15.3%	+/-7.4
Two or more races	6.0%	+/-3.7
Hispanic or Latino origin (of any race)	73.8%	+/-5.3
White alone, not Hispanic or Latino	18.6%	+/-4.5
<b>RELATIONSHIP TO HOUSEHOLDER</b>		
Own child (biological, step or adopted)	79.1%	+/-6.0
Grandchild	15.5%	+/-5.8
Other relatives	1.1%	+/-0.8
Foster child or other unrelated child	4.3%	+/-4.2
<b>NATIVITY</b>		
Native	99.7%	+/-0.4
Foreign born	0.3%	+/-0.4
<b>PRESENCE OF OTHER ADULTS</b>		
Unmarried partner of householder present	12.4%	+/-4.9
<b>DISABILITY STATUS</b>		
Civilian children under 18 years in households	5,930	+/-800
With any disability	8.0%	+/-3.2
<b>SCHOOL ENROLLMENT</b>		
Children 3 to 17 years in households	5,162	+/-707
Enrolled in school	4,751	+/-655
Public	96.6%	+/-2.2
Private	3.4%	+/-2.2
Not enrolled in school	411	+/-165

Subject	Valencia County, New Mexico	
	In female householder, no husband present, family household	
	Estimate	Margin of Error
MEDIAN FAMILY INCOME IN THE PAST 12 MONTHS (IN 2016 INFLATION-ADJUSTED DOLLARS) FOR FAMILIES WITH OWN CHILDREN		
Median income (dollars)	17,173	+/-3,994
Children under 18 years in households	5,930	+/-800
PUBLIC ASSISTANCE IN THE PAST 12 MONTHS		
Children living in households with Supplemental Security Income (SSI), cash public assistance income, or Food Stamp/SNAP benefits	57.0%	+/-8.8
POVERTY STATUS IN THE PAST 12 MONTHS		
Children in households for whom poverty status is determined	5,675	+/-813
Income in the past 12 months below poverty level	56.6%	+/-7.5
Income in the past 12 months at or above poverty level	43.4%	+/-7.5
HOUSING TENURE		
Children under 18 years in occupied housing units	5,930	+/-800
In owner-occupied housing units	50.2%	+/-7.9
In renter-occupied housing units	49.8%	+/-7.9

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Foreign born excludes people born outside the United States to a parent who is a U.S. citizen.

Excludes householders, spouses, and unmarried partners.

The Census Bureau introduced a new set of disability questions in the 2008 ACS questionnaire. Accordingly, comparisons of disability data from 2008 or later with data from prior years are not recommended. For more information on these questions and their evaluation in the 2006 ACS Content Test, see the Evaluation Report Covering Disability.

Public assistance includes receipt of Supplemental Security Income (SSI), cash public assistance income, or Food Stamps.

While the 2012-2016 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.