Course Descriptions

Course Descriptions

Academic Course Offerings

Within the limits of its facilities and resources, the University of New Mexico–Valencia Campus is able to offer any University of New Mexico course up to the 299-level. Enrolling for a UNM course at the Valencia Campus is equivalent to taking the course at UNM-Albuquerque. Consequently, there is no need for petitioning to transfer academic courses to UNM-Albuquerque.

Vocational/Technical or Developmental Course Offerings

Course numbers that contain a "T" are vocational/technical courses developed by the Valencia Campus for pre-college studies purposes or for the various career programs offered at UNM-Valencia. Consequently, these courses are not generally accepted at UNM-Main or other four-year institutions as credits toward a bachelor's degree program.

UNM Core Curriculum Course Offerings

Courses marked with a "📖" after the title are part of the 37-credit hour UNM Core Curriculum. The specific Core Curriculum area (one of seven) is also indicated in italics. A detailed description of the UNM Core Curriculum is listed in the Academic Curricula and Degree requirements section.

Academics (ACAD)

ACAD 100: College Reading and Study Skills. (4) A first-semester academic studies course and skills laboratory offering a student-centered orientation to college, integrated reading, writing, and study skills, collaborative group projects, and a wide range of activities and strategies for successful learning. Required of all entering students whose placement test scores place them in English 099. Grade of A, B, CR or NC only.

ACAD 101: College Preparation. (4) Strategies for successful academic achievement and study skills laboratory, including techniques for productive time management, introduction to academic disciplines, effective note taking from lectures, strategies for improving academic reading across the curriculum, test taking and study skills, integrated academic reading, studying, and writing skills, independent and group research projects, and library use. Required of all entering students whose reading and writing placement test scores place them in English 100. Grade of A, B, CR or NC only.

American Studies (AM ST)

AM ST 185: Introduction to Race, Class & Ethnicity. 🕮 *Social & Behavioral Sciences* (3) An interdisciplinary introduction to the issues of race, class, and ethnicity in American life and society.

AM ST 186: Introduction to Southwestern Studies. 🕮 *Humanities* (3) Provides both an introduction to the complex history and culture of the Southwestern United States and a demonstration of the possibilities of the interdisciplinary study of regional American culture. It is as multi-cultural in its content as it is multi-disciplinary in its methodology.

Anthropology (ANTH)

ANTH 101: Introduction to Anthropology. 🕮 *Social & Behavioral Sciences* (3) Surveys the breadth of anthropology, introducing students to archeology, biological anthropology, ethnology, human evolutionary ecology, and linguistics.

ANTH 110: Language, Culture, and the Human Animal. 🕮 *Social & Behavioral Sciences* (3) (Also offered as LING 101) Fundamentals of anthropological linguistics. The biological, structural, psychological, and social nature of language; implications for cross-cultural theory, research, and applications.

ANTH 130: Cultures of the World. 🕮 *Social & Behavioral Sciences* (3) Basic concepts and methods of cultural anthropology. Selected cultures, ranging from pre-literate societies to aspects of urban civilization.

Art History (ART HI)

ART HI 101: Introduction to Art. 🕮 *Fine Arts* (3) A beginning course in the fundamental concepts of the visual arts; the language of form; and the mediums of artistic expression. Readings and slide lectures supplemented by discussion.

ART HI 201: History of Art I. 🕮 *Fine Arts* (3) Prehistoric, Near Eastern, Egyptian, Greek, Roman, Early Christian, Byzantine, Romanesque and Gothic Art are discussed.

ART HI 202: History of Art II. 🕮 *Fine Arts* (3) Western art from Early Renaissance to Impressionism.

Art Studio (ART ST)

ART ST 106: Drawing I. 🕮 *Fine Arts* (3) Basic drawing concepts, including the expressive use of contour, value, perspective and composition while exploring both dry and wet media. Assigned problems may include still life, landscape, portraiture, or the figure. Suggested co-requisite: ART HI 101.

ART ST 121: Two-dimensional Design. 🕮 *Fine Arts* (3) Emphasis on elements of line, form, value, color theory, painting principles, and visual vocabulary. Particular attention is placed on a disciplined approach toward design and development of perceptual skills. Suggested co-requisite: ART HI 101.

ART ST 122: Three-dimensional Design. 🕮 *Fine Arts* (3) Emphasis on materials, processes, and vocabulary. Particular attention is placed on traditional and contemporary approaches to sculpture, ceramics, and jewelry through the consideration of spatial concepts and making of three-dimensional objects. Suggested co-requisite: ART HI 101.

ART ST 123: Shop Foundations. (2) Familiarizes the art student with the safe practice and maintenance of wood and metal shop tools and machinery. Offered on a CR/NC basis only.

ART ST 168: Ceramics I. 🕮 *Fine Arts* (3) Introduction to clay forms, hand built and wheel-thrown techniques, slips, glazes, and stoneware. Suggested co-requisites: ART ST 106, ART ST 122.

ART ST 187: Photography I. 🕮 *Fine Arts* (3) Introduction to photographic vision and photographic techniques. Suggested co-requisite: ART ST 121.

ART ST 205: Drawing II. 🕮 *Fine Arts* (3) Further concentration on basic drawing concepts with a greater emphasis on descriptive and perceptual drawing skills using both dry and wet media. Assigned problems explore aspects of still life, landscape, portraiture and/or the figure. Prerequisites: ART ST 106, ART ST 121.

ART ST 207: Painting I. 🕮 *Fine Arts* (3) Painting materials and techniques, integrating basic drawing concepts with color theory and composition. Emphasis on descriptive and perceptual skills through assigned problems that explore aspects of still life, landscape, portraiture and/or the figure. Prerequisites: ART ST 106, ART ST 121; co- or prerequisite: ART ST 205.

ART ST 213: Sculpture I. 🕮 *Fine Arts* (3) A further exploration into the concepts presented in Three-Dimensional Design. Will investigate, through specific assignments, issues that are central to producing sculpture. Prerequisite: ART ST 122 and ART ST 123.

ART ST 268: Ceramics II. 🕮 *Fine Arts* (3) Continuation of ART ST 168 with emphasis placed on the mastery of ceramic processes and the development of a personal aesthetic. Prerequisites: ART ST 122 and ART ST 168.

ART ST 270: Ceramics Lab. 🕮 *Fine Arts* (3) An intensive investigation of the materials and processes that inform contemporary ceramic work including a wide range of clay bodies, surface treatments, and firing processes. Prerequisites: ART ST 168.

ART ST 274: Introduction to Printmaking. 🕮 *Fine Arts* (3) Fundamental techniques, methods, and expressive potentials of the major printmaking processes, including monotype, etching, lithography, woodcut, and xerography. Instruction includes lecture, demonstrations, practice, and critique. Prerequisites: ART ST 106, ART ST 121; co-requisite: ART ST 205 or ART ST 207.

ART ST 287: Photography II. 🕮 *Fine Arts* (3) Continuation of ART ST 187, with concentration on photographic techniques and the formal aspects of photographic vision. Prerequisite: ART ST 187; pre- or co-requisite ART ST 121.

Astronomy (ASTR)

ASTR 101: Introduction to Astronomy. 🕮 *Physical & Natural Sciences* (3) Conceptual description of our fascinating universe: early astronomy, Newtonian theory, synthesis, Earth, Moon, planets, asteroids, comets, the Sun, our solar system, stars, black holes, galaxies, dark matter, dark energy, and cosmological mysteries.

ASTR 101L: Astronomy Laboratory. 🕮 *Physical & Natural Sciences* (1) Intended as an adjunct to ASTR 101, this course deals with elementary techniques in astronomical observations. Pre/Co-requisite: ASTR 101.

Biology (BIOL)

BIOL 110: Biology for Non-Majors. 🕮 *Physical & Natural Sciences* (3) Biological principles important for the nonscientist in today's world, including ecological, evolutionary, and molecular topics. 3 hrs. lecture. (Credit not allowed for BIOL 110 or BIOL 123/124L; not accepted toward Biology major) .

BIOL 112L: Biology Laboratory for Non-Majors. 🕮 *Physical & Natural Sciences* (1) An optional laboratory that may be taken concurrently with or subsequent to BIOL 110. One three-hour lab per week including plant and animal diversity, techniques, and investigation of current issues.

BIOL 123: Biology for Health-Related Sciences and Non-Majors. 🕮 *Physical & Natural Sciences* (3) Principles of cell biology, genetics, and organismic biology. (Credit not allowed for BIOL 123 and BIOL 110; not accepted toward Biology major).

BIOL 124L: Biology for Health-Related Sciences and Non-Majors Lab. 🕮 *Physical & Natural Sciences* (3) One credit optional laboratory to accompany 123. (pre- or co-requisite: BIOL 123).

BIOL 201: Molecular and Cell Biology. (4) The scientific method, the role of water in cell biology, carbon and molecular diversity, macromolecules, introduction to metabolism, tour of cell structures and functions, membrane structure and function, cellular respiration, photosynthesis, cell communication, and the cell cycle. Co-requisite: CHEM 121L.

BIOL 202: Genetics. (4) Mitosis, meiosis, Mendelian genetics, chromosomes and inheritance, molecular basis of inheritance, genes to proteins, genetic models (viruses and bacteria), eukaryotic genomes, genetic basis of development, and overview of genomes. Prerequisites: BIOL 201 and CHEM 121L. Co-requisite: CHEM 122L.

BIOL 203L: Ecology and Evolution. (4) Darwinian principles, origin of the earth, the fossil record and diversification of ancient life, evolution of populations, origin of species, phylogenetics, introduction to ecology and the biosphere, behavioral ecology, population ecology, community ecology, ecosystem ecology, and conservation biology. 3 hrs. lecture, 3 hrs. lab. Lab material includes a survey of the diversity of life. Prerequisites: BIOL 201 and 202, CHEM 121L and 122L, or CHEM 131L and 132L. Co-requisite MATH 162 or 180.

BIOL 204L: Plant and Animal Form and Function. (4) Plant structure and growth, transport in plants, plant nutrition, plant reproduction and development, control systems in plants, introduction to animal systems, animal nutrition, circulation and gas exchange, immune systems, control of the internal environment, chemical signals in animals, reproduction, development, nervous systems, and sensory and motor mechanisms. 3 hrs. lecture and 3 hrs. lab. Prerequisites: BIOL 201 and 202, CHEM 121L and 122L or CHEM 131L and 132L.

BIOL 237: Human Anatomy and Physiology I. (3) An integrated study of human structure and functions of the skeletal, muscular, nervous, and cardiovascular systems. 3 hrs. lecture. Prerequisites: BIOL 123/124L and 4 hrs. of general chemistry.

BIOL 238: Human Anatomy and Physiology II. (3) Continuation of BIOL 237. Cardiovascular, respiratory, digestive, excretory, reproductive, and endocrine systems. 3 hrs. lecture. Prerequisites: BIOL 237.

BIOL 239L: Microbiology for Health Sciences. (4) Introduction to microbiology with emphasis on principles of infection and immunity. Prerequisites: BIOL 123/124L and 4 hours of chemistry. Not accepted toward a biology major. 3 hrs. lecture; 4 hrs. Credit not allowed for both BIOL 239L and BIOL 351 and BIOL 352L.

BIOL 247L: Human Anatomy and Physiology Laboratory I. (3) Laboratory work using cadavers. Anatomy stressed with appropriate physiological work. Topics integrated with BIOL 237. Pre- or co-requisite: BIOL 237. 3 hrs. lab.

BIOL 248L: Human Anatomy and Physiology Laboratory II. (3) Continuation of BIOL 247L. Topics integrated with BIOL 238. Pre- or co-requisite: BIOL 247. 3 hrs. lab.

BIOL 299: Topics in Biology. (1 – 4) Transferable to the UNM Biology Department as an elective.

Business Management (BSM, MGT)

MGT 101: Fundamentals of Accounting I. (3) The development of the accounting cycle, special journals, and financial statements.

BSM 103T: Fundamentals of Accounting I Lab. (1) Lab course to accompany MGT 101. Co-requisite: MGT 101.

MGT 102: Fundamentals of Accounting II. (3) Continuation of MGT 101, including corporate and manufacturing accounting and decision-making. Prerequisite: MGT 101.

BSM 104T: Fundamentals of Accounting II Lab. (1) Lab course to accompany MGT 102. Co-requisite: MGT 102.

MGT 113: Management: An Introduction. (3) Modern concepts of organizations and their management. An overview of functional activities within business and other organizations. (It is recommended that the student take MATH 120 prior to taking MGT 113.)

BSM 116T: Human Relations in Business. (3) Designed to acquaint the student with human relations in business and the psychological implications of modern business practices as they apply to individual employees and supervisors.

MGT 290: Introduction to Business Statistics. (3) (Also offered as MATH 245.) An overview of the use of statistics in business: descriptive statistics and numerical characteristics of data, introduction to probability, statistical inference including t-tests and regression, and confidence intervals; application to business problems will be emphasized. Prerequisite: MATH 180 or equivalent.

Chemistry (CHEM)

CHEM 111L: Elements of General Chemistry. 🕮 *Physical & Natural Sciences* (4) One-semester course in general chemistry, especially for non-science majors in the health sciences except pre-medicine and medical technology. 3 hrs. lecture, 2 hrs. lab. (Credit not allowed for both CHEM 111L and CHEM 121L.) (It is recommended that the student take MATH 120 prior to taking CHEM 111.)

CHEM 121L: General Chemistry. 🕮 *Physical & Natural Sciences* (4) Introduction to the chemical and physical behavior of matter. 3 hrs. lecture, 3 hrs. lab. Prerequisite: completion of MATH 121 or MATH 150 with a grade of C or higher or a math placement score that qualifies the student for MATH 162 or MATH 180. (Credit not allowed for both CHEM 111L and CHEM 121L.) (It is recommended that the student take CHEM 111L prior to taking CHEM 121L.)

CHEM 122L: General Chemistry. 🕮 *Physical & Natural Sciences* (4) Continuation of CHEM 121L**.** 3 hrs. lecture, 3 hrs. lab Prerequisite: CHEM 121L or CHEM 131L with a grade of C or higher.

CHEM 212: Integrated Organic Chemistry and Biochemistry. (4) Survey interrelating the major principles of organic chemistry and biochemistry with special emphasis toward interests of students in the health sciences. Prerequisites: CHEM 111L or CHEM 121L.

Certified Nursing Assistant (CNA)

CNA 101L: Certified 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. It also prepares students for the CNA accreditation examination. 96 hours classroom/skills lab; 32 hours clinical. Prerequisites: Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 100, ACAD 101, and MATH 099 with a grade of "CR;" CPR training and TB test.

Communication & Journalism (C&J)

C & J 110: Introduction to Mass Communication. (3) (Also offered as M A 110) 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.

C & J 130: Public Speaking. 🕮 *Writing & Speaking* (3) A performance course that deals with the analysis, preparation, and presentation of speeches.

C & J 171: Writing for Mass Media I. (3) Practical introduction to journalism, emphasizing journalistic conventions and the gathering and writing of news for the print and broadcast media. Language and typing skills required. Prerequisite: ENGL 102 (or permission of the instructor).

C & J 220: Communication for Teachers. (3) Concepts and practices of interpersonal, small group, and public communication pertinent to classroom teachers at the elementary, middle, and secondary levels of education.

C & J 221: Interpersonal Communication. (3) Analysis of a variety of interpersonal communication concepts with special emphasis on the application of communication skills in different situations.

C & J 225: Small Group Communication. (3) Basic characteristics and patterns of communication in small groups. Includes attention to role theory, conflict resolution, and creative decision-making methods.

Computer-Aided Drafting (CAD)

CAD 180T: 3D Studio I. (4) Introductory course in 3D modeling, rendering, and animation. $1^{1}/_{2}$ hrs. lecture, 2 hrs. lab. Prerequisite: CS 150 or permission of instructor.

CAD 185T: Architectural Drafting. (4) An introductory architectural drafting course covering basic drafting skills and conventions.

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

CAD 250T: Introduction to Computer Aided Drafting. (4) This course is designed for students interested in developing computer-aided drafting skills. It consists of both lecture and system operation assignments. 3 hrs. lecture, 2 hrs. lab. Prerequisite: Approval of the instructor.

CAD 255T: Introduction to Architectural Modeling. (4) Students will use design software to create 3D 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. Prerequisite: IT 101T or equivalent computer literacy.

CAD 260T: Intermediate Computer-Aided Drafting. (4) This course covers discipline, specific environment, and data input/export. 3 hrs. lecture, 2 hrs. lab. Prerequisite: CAD 250T.

CAD 270T: Advanced Computer-Aided Drafting. (4) Course in advanced CAD techniques, including macro programming and production drafting. Prerequisites: CAD 250T and CAD 260T.

CAD 293T: Topics in CAD. (1-4)

CAD 295T: 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's degree or certificate program.

Computer Science (CS)

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 World Wide Web and other topics of current importance to business students. Course cannot apply to major or minor in computer science. Prerequisite: MATH 120 or minimal proficiency working with algebraic formulas.

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. Prerequisite: MATH 121 or MATH 150. 3 hrs. lecture, 1 hr. recitation.

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. Prerequisite: MATH 121 or MATH 150. 3 hrs. lecture, 1 hr. recitation.

Construction Technology (CT)

CT 293T: Topics in Construction Technology. (1-3) Various topics in the broad area of construction technology (e.g., carpentry, concrete finishing, electrical, electronic systems, glazing, HVAC, industrial maintenance, instrumentation, insulation, masonry, painting, pipefitting, plumbing, roofing, sheet metal, and industrial welding.). May be repeated for credit.

Construction Technology Core (JS)

JS 101LT: Construction Technology Core. (6). This course of study provides a basic introduction to construction skills for all crafts. Basic safety information like safe performance of construction tasks, the use of protective safety equipment, and what to do if an accident occurs is included. There is an introduction to construction mathematics, preparing trainees to perform the calculations they will need on the job site. An introduction to the safe and effective use of hand and power tools is also included. This course includes an introduction to blueprints, describing various types of plans and how they represent a finished building. The course also includes basic rigging, describing the safe use of slings, hardware, hoists, and hitches used in rigging operations.

Early Childhood Multi-cultural 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 family's 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 and Implementation I. (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.

ECME 117L: Curriculum Development and Implementation Practicum I. (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.

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 addresses developing writing, reading, and oral language in the home and school contexts will be covered. 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 and Implementation II. (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 eight, including children with special needs. Various curriculum models and teaching and learning strategies will be included. Co-requisite: ECME 217L.

ECME 217L: Curriculum Development and Implementation Practicum II. (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

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 & Planetary Science (E & PS)

E & PS 101: How the Earth Works—An Introduction to Geology. 🕮 *Physical & Natural Sciences* (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 concurrently in E & PS 105L. Credit not awarded for both E & PS 101 and ENV SC 101.

E & PS 105L: Physical Geology Laboratory. 🕮 *Physical & Natural Sciences* (1) Minerals, rocks, topographic and geologic maps, and field trips are part of the curriculum. 2 hrs. lab. Pre- or co-requisite: E & PS 101.

E & PS 115: Geological Disasters. (3) Topics include causes and effects of disastrous geological events, including earthquakes, volcanic eruptions, tsunamis, landslides, and floods.

E & PS 201L: Earth History. 🕮 *Physical & Natural Sciences* (4) This course focuses on the 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: E & PS 101 or ENV SC 101; pre/co-requisite E & PS 105L or ENV SC 102L.

E & PS 250: Geology of New Mexico. (3) Description of geologic features including structures, landforms, and mineral resources of New Mexico are topics in this course. For earth science teachers at high schools and junior high schools. Prerequisite: E & PS 101 or ENV SC 101.

Economics (ECON)

ECON 105: Introductory Macroeconomics. 🕮 *Social & Behavioral Sciences* (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. (It is recommended that the student take MATH 120 prior to taking ECON 105. It is also recommended that the student take ECON 105 prior to taking ECON 106.)

ECON 106: Introductory Microeconomics. 🕮 *Social & Behavioral Sciences* (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. (It is recommended that the student take MATH 120 and ECON 105 prior to taking ECON 106.)

Education (ART ED, CIMTE, EDUC, ETSCS, MUSIC ED, & SPEC ED)

ART ED 214: Art in Elementary and Special Classrooms I. (3) Understanding the art process as it relates to the growth and development of children. Experiences, methods, and curriculum for art education in the elementary school.

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. The course is of special interest to students considering a teaching career. Projects in schools and/or community sites are part of requirements.

EDUC 220: Exploring Schools in New Mexico. (2) This course is open to all university students interested in exploring schools, teaching, contemporary education issues, and teaching as a profession.

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

ETSCS 193: Topics in Educational Thought & Sociocultural Studies. (1-3) May be repeated for credit, no limit.

ETSCS 290: Foundations of Education. (3) An introduction to the philosophical, social, historical, and comparative foundations of education.

SPC ED 201: Education of the Exceptional Person. (3) A survey of the characteristics and educational needs of exceptional children. Includes definition, etiology, characteristics, and various educational alternatives for each of the exceptionalities. Co-requisite: SPC ED 204.

SPC ED 204: Introduction to Special Education. (2) Field experience and seminar in special education settings. Required of all undergraduate majors. Co-requisite: SPC ED 201.

SPC ED 293: Topics. (1-3) Designed to offer specialized content to paraprofessionals working with handicapped learners. May be repeated for credit, no limit.

Emergency Medical Services (EMS)

EMS 101: EMT-Basic. (6) Fulfills U.S.D.O.T. requirements for medical, rescue, and ambulance personnel. Prepares providers to recognize medical and traumatic emergencies and to intervene and stabilize patients while in transport to an advanced care facility. Upon successful completion of this course the student is eligible to apply for the New Mexico state EMS licensing examination. Required prior to EMT-I and EMT-P training.

EMS 102: EMT-Basic Refresher. (1) A required 24-hour course for emergency medical technicians to maintain state licensure that reviews current trends and treatment techniques of emergency care and updates the student in any changes in the New Mexico Scope of Practice for EMT- Basics. Prerequisite: EMS 101.

EMS 110T: First Responder. (3) A 48-hour course consisting of 20 hours of didactic instruction that includes the minimum standard Department of Transportation curriculum to prepare the student for pre-hospital field techniques and 20 hours of lab instruction that includes individual instruction in airway management and patient assessment skills.

EMS 112T: First Responder-Refresher. (1) A required 16-hour course for EMS First Responders to maintain state licensure that reviews current treatment techniques for first responder emergency care and updates the student in any changes to the New Mexico Scope of Practice for EMS First Responders. Prerequisite: EMS 110T.

EMS 201: EMT-I. (5) This course utilizes the standard U.S.D.O.T. curriculum, and involves 108 hours of didactic and laboratory sessions. Emphasis is placed upon pre-hospital emergency patient assessment and care, with advanced airway management, medication administration and intravenous therapy included. Prerequisite: EMS 101, Instructor approval required. Upon successful completion of this course the student is eligible to apply for the New Mexico state EMS licensing examination.

EMS 202: EMT-Intermediate Refresher. (1) A required 24-hour course for EMT-Intermediates to maintain state licensure that reviews current treatment in pre-hospital emergency patient care with advanced airway management and intravenous fluid therapy, and updates the student in any changes to the New Mexico Scope of Practice for EMT-Intermediates. Prerequisite: EMS 201 and instructor approval.

English (ENGL)

Writing Courses:

ENGL 098: Basic English. (4) A pre-college language and sentence skills course and skills laboratory intended for students whose placement test scores indicate a need for intensive study of language fundamentals. Credit does not count toward degree. Grade of A, B, CR or NC only.

ENGL 099: Developmental English. (4) A pre-college grammar, language skills, and writing course and writing/skills laboratory. Emphasis is placed on writing and revising paragraphs, as well as on reviewing basic parts of speech, punctuation, capitalization, usage, sentence structure, and paragraph development. The course is intended for students whose placement test scores indicate a need for intensive study of language fundamentals. Credit does not count toward degree. Grade of A, B, CR , or NC only.

ENGL 100: Writing Standard English. (4) Developmental writing course and writing /skills laboratory providing concentrated practice writing and revising basic essays, as well as intensive study of grammar, punctuation, and usage. For students who score 18 or below on the ACT or whose placement test scores indicate a need for additional study of writing and language fundamentals. Credit does not count toward degree. Grade of A, B, CR or NC only. Co-requisite: ACAD 101.

ENGL 101: Composition I: Exposition. 🕮 *Writing & Speaking* (3) Expository writing and reading. Concentrates on organizing and supporting ideas in writing. Prerequisite: Satisfactory completion of ENGL 100 or verbal ACT of 19 or verbal SAT of 450.

ENGL 102: Composition II: Analysis and Argument. 🕮 *Writing & Speaking* (3) Practice writing analytic and argumentative essays based on expository and literary readings. Some research required. Prerequisite: "C" or higher in ENGL 101 or verbal ACT of 29 or above verbal SAT of 650.

ENGL 119: Introduction to Technical and Professional Writing. (3) An introductory course in the planning and execution of professional and technical communications. Emphasizes the preparing of memorandums, letters, flyers, visual graphics, technical graphics, technical instructions, brief reports, and oral presentations. Does not satisfy Arts and Sciences group requirements at UNM–Albuquerque Campus. May be accepted for elective credits only. Prerequisite: ENGL 101.

ENGL 219: Technical Writing. 🕮 *Writing & Speaking* (3) Practice in writing and editing of workplace documents, including correspondence, reports, and proposals. Prerequisite: ENGL 102 or its equivalent. Co-requisite: OBT 261T.

OBT 261T: ENGL 219 Technical Writing Lab. (1) A required lab that must be taken concurrently with ENGL 219: Technical Writing. Includes the class journal, technical style clinic, research report design, and PowerPoint presentation topics. Prerequisite: Adequate keyboarding skills. Co-requisite: ENGL 219.

ENGL 220: Expository Writing. 🕮 *Writing & Speaking* (3 to a maximum of 6) An intermediate course with emphasis on rhetorical types, structure, and style. Prerequisite: ENGL 102 or its equivalent.

ENGL 221: Introduction to Creative Writing –-Fiction. [Creative Writing: Prose Fiction] (3) A beginning course in fiction, emphasizing process over product. Introduces issues of craft, workshop vocabulary, strategies for revision, and the habit of reading as a writer. Prerequisite: ENGL 101 or its equivalent.

ENGL 222: Introduction to Creative Writing—Poetry. [Creative Writing: Poetry] (3) A beginning course in poetry, emphasizing process over product. Introduces issues of craft, workshop vocabulary, strategies for revision, and the habit of reading as a writer. Prerequisite: ENGL 101 or its equivalent.

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. (ENGL 100T recommended.)

Literature Courses:

ENGL 150: The Study of Literature. 🕮 *Humanities* (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, and discussion of important themes.

ENGL 206: Topics in Popular Literature. (3 to a maximum of 6) Reading and analysis of popular literary forms such as the spy novel, the detective novel, science fiction, best-sellers, and fantasy. (ENGL 101 strongly recommended).

ENGL 211: Topics in Literature. (3 to a maximum of 6) Surveys a specific type or area in literature, such as 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 (or permission of the instructor).

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 102 or its equivalent (or permission of the instructor).

ENGL 296: Earlier American Literature. (3) A general survey of American literature to mid-nineteenth century. (ENGL 101 strongly recommended).

ENGL 297: Later American Literature. (3) A general survey of American literature from mid-nineteenth century to the present. (ENGL 150 or 102 strongly recommended).

General Studies (GEN ST)

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

Health Education (H ED)

H ED 164L: First Aid. (1-3 to a maximum of 3) Preparation in knowledge and skills to accommodate situations where basic first aid care is required. Students eligible for Standard First Aid Certification and CPR Certificate upon successful completion of the course.

H ED 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.

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

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

H ED 247: Consumer Health. (1) Preparation in knowledge and skills related to consumers of health products and services. Prerequisite: H ED 171.

H ED 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. Prerequisite: H ED 171.

H ED 292: Workshop. (1-6)

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

History (HIST)

HIST 101: Western Civilization. 🕮 *Humanities* (3) Ancient times to 1648. (ENGL 101 recommended.)

HIST 102: Western Civilization. 🕮 *Humanities* (3) 1648 to present. (ENGL 101 recommended.)

HIST 161L: History of the United States to 1877. 🕮 *Humanities* (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. (ENGL 101 recommended.)

HIST 162L: History of the United States Since 1877. 🕮 *Humanities* (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. (ENGL 101 recommended.)

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 nonspecialist. For content of particular courses, see the schedule of classes and/or contact the department. Course may be repeated without limit provided the topics vary. (ENGL 101 recommended.)

HIST 260: History of New Mexico. (3) Introduction to New Mexico history from earliest human settlement to present day. (ENGL 101 recommended.)

Information Technology (IT)

IT 101T: Computer FUNdamentals. (1) 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 sub-directories, 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 105T.

IT 110T: Introduction to 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 101T or prior experience with computers.

IT 121T: Electronic Spreadsheets. (3) Introduction to concepts and applications of electronic spreadsheets. Prerequisite: CS 150.

IT 122T: 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. Prerequisite: CS 150.

IT 125T: Microcomputer Operating Systems. (3) Introductory concepts in microcomputer operating systems, to include operations in MS-DOS, Windows, and other systems and utilities. Prerequisite: CS 150.

IT 131T: Computer Maintenance and Repair. (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 preventive 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: IT125T.

IT 140T: 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. Prerequisite: IT 182, IT 230, IT 205.

IT 182T: Intermediate Database Management Systems. (3) This course is a continuation of IT 122T. Students will write more complex generic and reusable DBMS programs to build finished, turnkey applications. Prerequisite: IT 122T.

IT 205T: 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. Prerequisite: IT 155T or permission of the instructor.

IT 230T: 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 125T and IT 131T.

IT 270T: 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. Students also are given the opportunity to transfer computer-generated images and animations to VHS video tape for presentation on standard home video equipment.

IT 290T: Applications of Information Technology. (1) On-campus practicum. The students model computer systems analysis, development, and implementation for the business office environment and in various areas under the supervision of an instructor. Prerequisite: approval of the instructor; enrolled in the last or next to last semester of the associate's degree.

IT 295T: 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.

Job Skills (JS)

JS 101TL: Topics/Introduction to Job Skills. (1-6).

JS 201TL: Topics/Introduction to Job Skills. (1-6).

Note: See also Construction Technology Core for specific JS 101LT courses.

Linguistics (LING)

LING 101: Introduction to the Study of Language. 🕮 *Social & Behavioral Sciences* (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. LING 101 and ANTH 110 may not both be counted for credit.

Mathematics & Statistics (MATH, STAT)

Please note the following guidelines in regards pre- and co-requisites:

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.

A co-requisite course must be taken either before or with the course requiring it.

MATH 099: Developmental Mathematics. (4) A pre-college mathematics course and skills laboratory. Emphasis is placed on basic operations, fractions, decimals, percents, ratios, and introductory algebra. The course is intended for students whose placement test scores indicated a need for intensive study of pre-algebra fundamentals. Credit does not count toward degree. Grade of A, B, C, CR or NC only.

MATH 100: Introductory Algebra. (4) A beginning algebra course and skills laboratory for students who are not prepared to begin at the intermediate algebra level. Prerequisite: adequate score on math placement test, or C or higher or CR in MATH 099. Credit does not count toward degree. Grade of A, B, C, CR or NC only.

MATH 106: Problems in Intermediate Algebra. (1) A study session for MATH 120 students with an emphasis on problem solving. Co-requisite: MATH 120. Grade of CR/NC only.

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

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

MATH 111: Mathematics for Elementary and Middle School Teachers I. (3) The intuitive and logical background of arithmetic; properties of sets; algorithms of arithmetic in base ten and other bases; properties of the integers, mathematical terminology; elements of number theory; and problem solving. Prerequisite: satisfactory score on math placement test or grade of C or higher or CR in MATH 100.

MATH 112: Mathematics for Elementary and Middle School Teachers II. (3) The properties of the rational number system, extension to the irrationals, decimal and fractional representation of real numbers, and intuitive geometry and measurement. Prerequisite: C or higher in MATH 111.

MATH 116: Topics in Precalculus Mathematics. (3) Selected topics from algebra, geometry, and trigonometry. Prerequisite: Permission of the department. Offered on a CR/NC basis only.

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, and areas of simple geometric shapes. Emphasis on problem solving skills. Prerequisites: Fulfillment of department placement requirements or a CR in MATH 100. Not open to students with credit for mathematics courses numbered 121 or above. Acceptable as credit toward graduation but not acceptable to satisfy the Arts and Sciences mathematics group requirement. Grade of A, B, CR or NC only.

MATH 121: College Algebra.🕮 *Mathematics* (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. Prerequisite: fulfillment of depart-

ment placement requirements or a grade of CR or higher in MATH 120 or C (not C-) for equivalent course from a transfer institution.

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, and vectors in 2 dimensions. Prerequisite: C (not C-) or higher in MATH 121.

MATH 129: Mathematics, A Survey. 🕮 *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. Prerequisite: fulfillment of department placement requirements or a grade of CR or higher in MATH 120 or C (not (C-) for equivalent course from a transfer institution.

STAT 145: An Introduction to Statistics. 🕮 *Mathematics* (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, and illustrated by examples from a variety of fields. Prerequisite: fulfillment of department placement requirements or a grade of "CR" in MATH 120.

MATH 150: Pre-Calculus Mathematics. 🕮 *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. Prerequisite: C (not C-) or higher in MATH 121. Co-requisite: MATH 123.

MATH 162L: Calculus I. 🕮 *Mathematics* (4) Derivative as rate of change; intuitive, numerical, and theoretical concepts; applications to graphing, trigonometric, and exponential functions; integral as a sum, relation between integral and derivative, applications, and mean value theorem. Prerequisites: adequate score on math placement test or C or higher in MATH 123 and MATH 150.

MATH 163L: Calculus II. 🕮 *Mathematics* (4) Transcendental functions, techniques of integration, numerical integration, improper integrals, sequences and series with applications, complex variables, and parametrization of curves. Prerequisite: C (not C-) or higher in MATH 162 or permission of department chairperson.

MATH 180: Elements of Calculus I. 🕮 *Mathematics* (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; and exponential and logarithmic functions with applications. Prerequisite: adequate score on math placement test, or grade of C or higher in MATH 121 or MATH 150.

MATH 181: Elements of Calculus II. 🕮 *Mathematics* (3) Includes the definite integral, multivariate calculus, simple differential equations, and basic review of trigonometry and its relation to calculus. Prerequisites: C or higher in MATH 180 and some knowledge of trigonometry or MATH 123 (MATH 123 can be taken simultaneously with MATH 181).

MATH 193: Topics in Mathematics. (1) Various topics in mathematics including, but not limited to, tools and techniques designed to improve attitudes and performance in math class, and calculator usage. Prerequisite/co-requisite/grading: Determined by instructor.

MATH 215: Mathematics for Elementary and Middle School Teachers III. 🕮 *Mathematics* (3) Topics from probability and statistics, coordinate geometry, and algebra; some applications of mathematics; elements of logic; enrichment topics for the classroom. Introduction to programming. Prerequisites: C or higher in MATH 111 and MATH 112.

STAT 245: Introduction to Business Statistics. (3) (Also offered as MGT 290.) An overview of the use of statistics in business: descriptive statistics and numerical characteristics of data, introduction to probability, statistical inference including t-tests and regression, confidence intervals; and application to business problems are emphasized. Prerequisite: MATH 180 or equivalent and CS 150L.

MATH 264L: 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 Greens theorem. Prerequisite: C (not C-) or higher in 163 or permission of department chairperson.

Music (MUSIC)

MUSIC 139: Music Appreciation. 🕮 *Fine Arts* (3) A nontechnical course designed to expand the student's ability to listen actively. Repertoire includes compositions from chamber music and symphonic literature.

MUSIC 140: Music Appreciation. 🕮 *Fine Arts* (3) A nontechnical course designed to expand the student's ability to listen actively. Repertoire includes compositions from symphonic, chamber music, and vocal literature and is entirely different from that presented in MUSIC 139.

MUSIC 143: University Chorus. (1) Large mixed chorus. Open to all university students; no audition required.

Natural Science (NAT SC)

NAT SC 261L: Physical Science. 🕮 *Physical & Natural Sciences* (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.

NAT SC 262L: Life Science. 🕮 *Physical & Natural Sciences* (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. Prerequisite: NAT SC 261L and MATH 112 or permission of instructor.

NAT SC 263L: Environmental Science. 🕮 *Physical & Natural Sciences* (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. Prerequisite: NAT SC 261L and NAT SC 262L or permission of instructor.

Nutrition (NUTR)

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 123/124L or CHEM 111L or CHEM 121L, or the equivalent.

Office and Business Technology (OBT)

OBT 101T: Introduction to Accounting. (3) This is a beginning course in secretarial accounting. Students are taught the basics of accounting and how to complete a worksheet. Also covered are assets, liabilities, and owner's equity.

OBT 105T: 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 110T: Business Language Skills. (3) Focuses on basic business language skills—spelling, capitalization, business terminology, dictionary usage, hyphenation, sentence punctuation, and applications to business writing.

OBT 111T: 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, and editing and formatting the following types of documents: business letters, memorandums, and manuscripts.

OBT 112T: 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 wpm minimum. Prerequisite: OBT 111T or equivalent.

OBT 205T: Business Math/Electronic Calculators. (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 or equivalent.

OBT 219T: 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 112T or equivalent (minimum typing speed of 45 wpm); ENGL 100 or equivalent; MGT 237 or equivalent.

OBT 221T: 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 112T or equivalent (minimum typing speed of 45 wpm); ENGL 100 or equivalent; and OBT 220T.

OBT 235T: 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 257T: 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 112T or equivalent.

OBT 260T: 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 112T or approval of the instructor.

OBT 263T: 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) that will help them prepare for Microsoft Word Certification. Prerequisite: OBT 112T or equivalent. ***Note****: Certification testing is not provided; students wishing to take the examination will need to do so on their own.*

OBT 265T: 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. Prerequisite: OBT 110T.

OBT 293T: Topics in OBT. (3) Focuses on topics of special interest in office and business technology. May be repeated for a maximum of nine (9) credit hours.

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

Philosophy (PHIL)

PHIL 101: Introduction to Philosophical Problems. 🕮 *Humanities* (3) Philosophical issues and methodology illustrated through selected problems concerning values, knowledge, and reality; social, political, and religious philosophy are also discussed. (ENGL 101 is recommended.)

PHIL 102: Current Moral Problems. (3) Ethical issues arising in contemporary society; sexual morality, preferential treatment, racism, punishment, war, and world food distribution. (ENGL 101 is recommended.)

PHIL 156: Reasoning and Critical Thinking. 🕮 *Writing & Speaking* (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

PHIL 241: Philosophic Problems. (3 to a maximum of 12) Topic to vary. An elementary treatment of a major philosophic issue. (ENGL 101 is recommended.)

PHIL 245: Professional Ethics. (3) Examination of social and ethical problems associated with the business, engineering, medical, and legal professions. (ENGL 101 is recommended.)

Physical Education (P E-NP, P E-P)

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

P E-NP 125: Intermediate Ballroom Dance. (1) Instruction dependent upon experience of students in basic movements of all segments of ballroom dance.

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

P E-NP 129: Intermediate Country Western Dance. (1) Instruction dependent upon experience of students in basic movements of all segments of Country Western dance.

P E-NP 130: Advanced Country Western Dance. (1) Instruction in developing creative combinations of Country Western dance steps.

P E-NP 136: Personal Defense. (1) Instruction in the basic skills needed to defend one's self against assault.

P E-NP 138: Karate. (1) Instruction in the basic skills, blocks, strikes, and kicks of Japanese-style karate.

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

P E-NP 141: Intermediate Golf. (1) Instruction emphasizes actual play.

P E-NP 143: Beginning Tennis. (1) Instruction in basic skills and rules of tennis.

P E-NP 148: Archery. (1) Instruction in the basic skills and knowledge of range archery.

P E-NP 158: Aerobic Dance I. (1) Instruction in continuous movement using basic dance steps for improved cardiorespiratory endurance.

P E-NP 159: Aerobic Dance II. (1) Instruction in a longer aerobic workout using more advanced dance steps for improved cardiorespiratory endurance.

P E-NP 160: Weight Training and Physical Conditioning. (1) Individual training programs for development of general strength, tone, endurance, and weight control.

P E-NP 161: Developmental Physical Education-Weight Control. (1) Combined weight training and running for overall development.

P E-NP 162: Jogging Fitness. (1) Individualized running programs for improved cardiorespiratory endurance.

P E-NP 163: Intermediate Weight Training. (1) Instruction in advanced weight-lifting principles and techniques as well as fitness related topics.

P E-NP 165: Yoga. (1) Introduction to five areas of yoga that are particularly significant to the Western World.

P E-NP 166: Intermediate Yoga. (1) Instruction in more advanced techniques of Yoga, emphasizing the physical aspects of Hatha Yoga.

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

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

Physics (PHYSCS)

Note: The sequence 151, 151L, 152, 152L, is required of premedical, pre-dental, and pre-optometry students. Only 151 and 152 are required of pharmacy students.

PHYSCS 151: General Physics. 🕮 *Physical & Natural Sciences* (3) Topics covered include mechanics, sound, and heat. Prerequisite: a working knowledge of algebra at the level of MATH 150 and of trigonometry.

PHYSCS 151L: General Physics Laboratory. 🕮 *Physical & Natural Sciences* (1) Topics covered include mechanics, sound, and heat. 3 hrs. lab. Co- or prerequisite: PHYSCS 151.

PHYSCS 152: General Physics. 🕮 *Physical & Natural Sciences* (3) Topics include electricity, magnetism, and optics. Prerequisite: PHYSCS 151.

PHYSCS 152L: General Physics Laboratory. 🕮 *Physical & Natural Sciences* (1) Topics include electricity, magnetism, and optics. 3 hrs. lab. Co- or prerequisite: PHYSCS 152.

Political Science (POL SC)

POL SC 110: The Political World. 🕮 *Social & Behavioral Sciences* (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 POL SC 110 toward a major at UNM–Albuquerque Campus.) (ENGL 100 recommended.)

POL SC 200: American Politics. 🕮 *Social & Behavioral Sciences* (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. (ENGL 101 recommended.)

POL SC 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. (ENGL 101 recommended.)

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

Psychology (PSYCH)

PSYCH 105: General Psychology. 🕮 *Social & Behavioral Sciences* (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.

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

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

PSYCH 271: Social Psychology. (3) Study of social influence: perception of oneself and others, attitudes, conformity, attraction, altruism, aggression, and groups. Prerequisite: PSYCH 105.

Religious Studies (RELIG)

RELIG 107: Living World Religions. 🕮 *Humanities* (3) Introduction to major living world religions, such as Buddhism, Christianity, Hinduism, Islam, and Judaism. ENGL 101 is highly recommended.

Science (SCI)

SCI 099L: Science Problem-Solving Lab for CHEM 121, 122. (1) One-to-one and small group problem solving activities designed to assist the student in the completion of homework assignments, laboratory reports, and test preparation. Co-requisite: enrollment in the corresponding lecture course, CHEM 121 or 122.

Sign (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; and the study of finger spelling.

SIGN 210: American Sign Language. (3) Study of American Sign Language, including basic concepts and sign lexicon. Grammatical features of American Sign Language will be stressed, along with structure and syntax. The student will be expected to demonstrate to the instructor his or her proficiency at the end of the semester. Prerequisite: SIGN 201, or permission of instructor.

SIGN 211: American Sign Language. (3) A study of American Sign Language (ASL) including sign language colloquialism used in conversational signing. Provides a summary of information currently available dealing with the understanding of ASL grammatical structure and its sociolinguistic usage. Prerequisite: SIGN 210, or permission of instructor.

Sociology (SOC)

SOC 101: Introduction to Sociology. 🕮 *Social & Behavioral Sciences* (3) Basic concepts, topics, and theories of contemporary sociology. Prerequisite for more advanced courses in sociology.

SOC 205: Crime, Public Policy and the Criminal Justice System [Crime and Society] (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 [Deviant Behavior]. (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 Prejudice. (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 280: Introduction to Research Methods. (3) A survey of the major methods of social research: foundations of social research, research design, sampling and measurement, quantitative and qualitative research methods, and data analysis. Prerequisite: SOC 101.

Spanish (SPAN)

SPAN 101: Elementary Spanish. 🕮 *Second Language* (3) Beginning Spanish for students with no previous exposure to Spanish. Development of all four language skills, with emphasis on listening and speaking. Co-requisite: SPAN 103.

SPAN 102: Elementary Spanish. 🕮 *Second Language* (3) Beginning Spanish for students who have completed SPAN 101 or equivalent. Continued development of four skills with emphasis on listening and speaking. Co-requisite: SPAN 104.

NOTE: Special sections of SPAN 101 and 102 for bilingual students are offered. Students who understand the language may be required to enroll in these special sections. The Spanish placement test is strongly recommended to ensure a comfortable learning environment for all students.

SPAN 103-104: Elementary Spanish Conversation. (1) Supplementary course to SPAN 101-102 for students interested in additional practice in speaking. Offered on a CR/NC grading basis only.

SPAN 201: Intermediate Spanish. 🕮 *Second Language* (3) Intermediate Spanish for students who have completed SPAN 102 or equivalent. Review of grammar and further development of all four skills.

SPAN 202: Intermediate Spanish. 🕮 *Second Language* (3) Spanish for students who have completed SPAN 201 or equivalent. Continued development of all four skills with emphasis upon reading.

Statistics (see Mathematics & Statistics)

Theatre Arts (THEA)

THEA 120: Acting Foundations I. 🕮 *Fine Arts* (3) Beginning acting. The basic fundamentals of acting including analytical and physical skills of the actor, personal work habits, and taking responsibility for the actor's craft.

THEA 121: Acting Foundations II. 🕮 *Fine Arts* (3) Continuation of THEA 120 with emphasis on textual material. Prerequisite: THEA 120.

THEA 122: Theatre Appreciation. 🕮 *Fine Arts* (3) A broad-based, experiential course for non-majors to enhance their enjoyment of theatre-going. Course work includes attending performances, reading of plays and supporting texts, lectures, guests speakers, and discussion.

THEA 200: Rehearsal and Performance. 🕮 *Fine Arts* (1-3 to a maximum of 12)**.** Participation in university theatre dance season in either performance or production capacity. May not duplicate other course assignments. Offered on a CR/NC basis only.