

# Course Descriptions

## Definitions of Course Offerings

### 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.

### Career/Technical Course Offerings

UNM-Valencia offers a variety of courses developed by the Valencia Campus for various business, technology and health-related programs offered at UNM Valencia. These courses, which are not generally accepted at UNM Main or other four-year institutions as credits towards a bachelor's degree program, have the following prefixes: CNA, CAD, CT, GENS, JS, IT, MEDA, OBT, PBT, and PCA.

### Developmental Studies Course Offerings

UNM-Valencia also offers pre college studies courses aimed at preparing students for college-level studies. In English and Mathematics these courses have numbers less than 101 (i.e., 098, 099 & 100). We also offer academic studies courses in English (AENG) and mathematics (ACAM) aimed at improving reading and studies skills. These courses do not count towards a certificate or associate degree at UNM-Valencia nor are they accepted at UNM Main or other four-year institutions as credits towards a bachelor's degree program.

### UNM Core Curriculum and New Mexico Lower-Division General Education Common Core Curriculum Offerings

Courses which are part of the 37 credit hour UNM Core Curriculum or 35-credit hour New Mexico Lower-Division General Education Common Core Curriculum are noted as such in italics at the end of the course description. Detailed descriptions of the UNM Core Curriculum and the New Mexico Lower-Division General Education Common Core Curriculum are listed in the Academic Curricula and Degree Requirements section. Please note that Art Studio and Foreign Language courses are not part of the New Mexico Lower-Division General Education Common Core Curriculum and that certain Literature courses are not part of the UNM Core Curriculum.

### Glossary of Terms Used in Course Descriptions

The following describes some of the terms (underlined> used in the course descriptions:

*Also offered as...* – Indicates that a course is the equivalent of another course, both of which are offered simultaneously (e.g., ANTH 110 & LING 101). Students may receive credit for one course only.

*Clinical* – Some health occupations courses require that the student spend a prescribed amount of hours applying learned skills in a clinical (i.e., “on the job”) setting.

*Core* – Indicates whether a course is part of the UNM Core Curriculum or the New Mexico Lower-Division General Education Common Core Curriculum (please see description directly above).

*Co-requisite* – Indicates course/s in which a student must be enrolled during the same semester.

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*Credit not allowed...* – Some courses will not count for credit if the student has already taken another specified course (e.g., BIOL 110 & 123, CHEM 111L & 121L).

*Grade option* – The subset of grades which students will be given in this course (if not listed, grades are A, B, C, D, or F).

*Lecture/Lab* – Some science courses indicate the amount of time per week students will spend in the lecture portion of the class (i.e., the classroom) and in the laboratory (in practice, “3 hours” is actually 2½ hours/week or 5 hours/week for an 8-week session). Some health-related courses list total lecture & lab hours for a semester.

*May be repeated for credit...* – Indicated that a course may be repeated for credit up to a specified number of credit hours or, for topics courses, may be repeated if the topics vary.

*New Mexico Lower-Division General Education Common Core Curriculum* – Indicates the area (if any) in the New Mexico Lower-Division General Education Common Core Curriculum to which the course can be applied (NMCCN stands for “New Mexico Common Core Number”).

*Placement* – Certain freshman-level English and Mathematics courses require minimum placement scores on standardized tests (e.g., COMPASS, ACT, SAT) in place of prerequisites.

*Prerequisite* – Indicates course/s which a student must have successfully completed (generally, a grade of “C” or above) before a student is allowed to enroll in a course.

*Recitation* – The term “recitation” is similar to “lab” and refers to additional class time for tutorial or assistance with assignments purposes.

*Restriction*– Similar to “prerequisites,” this term indicates that there are certain constraints (e.g., instructor or administrative approval) in place before a student is allowed to enroll in the course.

*Suggested pre/co-requisite* – Indicates course/s which a student should (i.e., not required but highly recommended) take either prior to (pre) or concurrent with (co-) a course.

*UNM Core Curriculum* – Indicates the area (if any) in the UNM Core Curriculum to which the course can be applied.

## Courses Descriptions Academic Studies in English (AENG)

**AENG 099: College Reading and Study Skills.** (4) A first-semester academic studies course offering a student-centered orientation to college, integrated reading, writing, and study skills, collaborative group projects, a wide range of activities and strategies for successful learning and which includes a skills laboratory. *Grade option: RA, R B, RCR/RNC. Co-requisite: ENGL 099.*

**AENG 100: Academic Studies College Prep.** (2) This course integrates academic reading, writing, and critical thinking, college-level notetaking, library skills, exploratory research, group-work, oral presentations, as well as summary, application, analysis, evaluation, and synthesis of complex material and challenging and stimulating texts. Students will map out writing and speaking assignments using a variety of effective structures such as analysis, investigation, argument, classification, and cause and effect. In the process, students will learn to understand, demystify, and identify patterns in the structures, codes, expectations, and vocabulary of academia. *Grade option: RA, RB, RCR/RNC. Co-requisites: ENGL 100.*

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## Academic Studies in Mathematics (ACAM)

**ACAM 100: Academic Studies Mathematics Prep.** (2) Strategies for successful achievement in mathematics, including techniques for productive time management, effective note taking in mathematics, useful study and test taking skills for mathematics, and strategies for improving critical thinking and problem-solving ability. *Grade option: RA, RB, RCR/R NC. Co-requisite: MATH 100.*

## Anthropology (ANTH)

**ANTH 101: Introduction to Anthropology.** (3) Surveys the breadth of anthropology, introducing students to archeology, biological anthropology, ethnology, human evolutionary ecology, and linguistics. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 4: Social & Behavioral Sciences. New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences (NMCCN 1113).*

**ANTH 110: Language, Culture, and the Human Animal.** (3) Fundamentals of anthropological linguistics. The biological, structural, psychological, and social nature of language; implications for cross-cultural theory, research, and applications. *Also offered as LING 101. Suggested prerequisite: ENGL 101. UNM Core Curriculum – 4: Social & Behavioral Sciences.*

**ANTH 121L: Archeological Methods and Theory.** (4) Introduction to archeological methods and theory. Lectures cover basic concepts and strategy. Labs provide hands-on experience with methods of analyzing archeological remains. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 3: Physical & Natural Sciences.*

**ANTH 130: Cultures of the World.** (3) Basic concepts and methods of cultural anthropology. Selected cultures, ranging from preliterate societies to aspects of urban civilization. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 4: Social & Behavioral Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences (NMCCN 2113).*

**ANTH 150: Evolution and Human Emergence.** (3) Fundamentals of biological anthropology and principles of organic evolution, in relation to the biology, ecology and behavior of primates and fossil humans. Biological anthropology concentrators are required, and others are encouraged, to enroll concurrently in 151L. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**ANTH 151L: Human Evolution Laboratory.** (1) The factual basis of human evolution, from the comparative study of living and fossil primates to interpretation of recent human fossils. Recommended, but not required, that this be taken concurrently with 150. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**ANTH 251: Forensic Anthropology.** (3) This course is designed to introduce students to the forensic investigation of death. Emphasis will be on current methods and techniques and include the role of the anthropologist as an integral member of the investigation process. *Suggested prerequisite: ENGL 101.*

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## Art History (ARTH)

**ARTH 101: Introduction to Art.** (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 museum exhibition attendance. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 7: Fine Arts; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 1013).*

**ARTH 201: History of Art I.** (3) Prehistoric, Near Eastern, Egyptian, Greek, Roman, Early Christian, Byzantine, Romanesque and Gothic Art. Suggested prerequisite: ENGL 101. *UNM Core Curriculum – 7: Fine Arts; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 2113).*

**ARTH 202: History of Art II.** (3) Western art from Early Renaissance to Impressionism. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 7: Fine Arts; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 2123).*

**ARTH 210: History of Photography.** (3) A survey tracing the historical and cultural impact of photography, including artistic, scientific, documentary, commercial, and vernacular images. *UNM Core Curriculum – 7: Fine Arts; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 2123).*

## Art Studio (ARTS)

**ARTS 106: Drawing I.** (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: ARTH 101. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 121: Two-dimensional Design.** (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: ARTH 101. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 122: Three-dimensional Design.** (3) Emphasis on materials, processes and vocabulary. Particular attention is placed on traditional and contemporary approaches to sculpture through the consideration of spatial concepts and making of three-dimensional objects. *Suggested co-requisite: ART HI 101. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 130: Introduction to Electronic Art.** (3) Introduction to the computer as a medium and fine art tool. Course will explore history, theory and contemporary art issues associated with computer-based art practice, as well as introducing students to basic tools and technologies. *UNM Core Curriculum – 7: Fine Arts.*

**ARTS 168: Introduction to Ceramics.** (3) Comprehensive introduction to the terms, concepts, historical, and technical information that support creative development. Includes hand building and throwing, basic clay bodies, slip and glaze, oxidation, reduction, and atmospheric firing. *Suggested co-requisites: ARTS 106, ARTS 122. UNM Core Curriculum – 7: Fine Arts.*

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**ARTS 187: Introduction to Photography.** (3) Hands-on course introducing students to the basic techniques of digital, black and white, and color photography. *Suggested co-requisite: ARTS 121. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 205: Drawing II.** (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: ARTS 106, ARTS 121. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 207: Painting I.** (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: ARTS 106, ARTS 121; suggested co- or prerequisite: ARTS 205. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 213: Sculpture I.** (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: ARTS 123. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 231: Video Art I.** (3) An investigation of video as a medium within a fine art context. Course will explore history, theory, and contemporary art issues associated with video art practice as well as develop student's mastery of technical skills. *Prerequisite: ARTS 130. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 268: Ceramics II.** (3 to a maximum of 6) Continuation of 168 with emphasis placed on the mastery of forming, surfacing, and firing processes, expanded critical awareness, and the development of a

personal aesthetic. Open-ended and self-selected projects. Individual and group critiques. May be repeated for credit if subject matter varies. *Prerequisites: ARTS 122 and ARTS 168. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 274: Introduction to Printmaking.** (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: ARTS 106, ARTS 121. UNM Core Curriculum – 7: Fine Arts.*

**ARTS 289: Digital Imaging Techniques.** (3) Techniques and aesthetics of digital imaging using a variety of software programs and hardware. *Prerequisite: ARTS 188. UNM Core Curriculum – 7: Fine Arts.*

## Astronomy (ASTR)

**ASTR 101: Introduction to Astronomy.** (3) Conceptual description of our fascinating universe: early astronomy, Newtonian, synthesis, Earth, Moon, planets, asteroids, comets, the Sun, our solar system, stars, black holes, galaxies, dark matter, dark energy and cosmological mysteries. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**ASTR 101L: Astronomy Laboratory.** (1) Intended as an adjunct to ASTR 101, this course deals with elementary techniques in astronomical observations. *Pre or co-requisite: ASTR 101. UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

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## Biology (BIOL)

**BIOL 110: Biology for Non-Majors.** (3) Biological principles important for the non-scientist in today's world. Ecological, evolutionary and molecular topics. Credit not allowed for both BIOL 110 and BIOL 123/124L; not accepted toward Biology major. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**BIOL 112L: Biology Laboratory for Non-Majors.** (1) An optional laboratory that may be taken concurrently with or subsequent to BIOL 110. Lab: One three-hour lab per week including plant and animal diversity, techniques and investigation of current issues. Pre or co-requisite: BIOL 110. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**BIOL 123: Biology for Health-Related Sciences and Non-Majors.** (3) Principles of cell biology, genetics, and organismic biology. Credit not allowed for both BIOL 123 and BIOL 110; not accepted toward Biology major. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science.*

**BIOL 124L: Biology for Health-Related Sciences and Non-Majors Lab.** (3) One credit optional laboratory to accompany 123. Pre or co-requisite: BIOL 123. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science.*

**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. *Credit not allowed for both BIOL 201 and BIOL 219. Pre or co-requisite: CHEM 121 and CHEM 123L.*

**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, CHEM 121 and CHEM 123L. Pre or co-requisite: CHEM 122 and CHEM 124L.*

**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. Lecture: 3 hours; lab: 3 hours. Lab material includes a survey of the diversity of life. *Prerequisites: BIOL 202, CHEM 122 and CHEM 124L. Pre or co-requisite: MATH 162 or MATH 180.*

**BIOL 204L: Plant and Animal Form and Function.** (4) Introduction to plant systems including: structure, growth, transport, nutrition, reproduction, development, and control systems. Introduction to animal systems including: nutrition, circulation, reproduction, development; and immune, control and nervous systems. Lecture: 3 hours; lab: 3 hours. *Prerequisites: BIOL 202, CHEM 122 and CHEM 124L. Pre or co-requisite: BIOL 203L and MATH 162 or MATH 180.*

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**BIOL 237: Human Anatomy and Physiology I.** (3) An integrated study of human structure and function to include histology, skeletal, muscular, and nervous systems. Lecture: 3 hours. *Prerequisites:* BIOL 123/124L or BIOL 201 and CHEM 111L or CHEM 121 and CHEM 123L.

**BIOL 238: Human Anatomy and Physiology II.** (3) A continuation of BIOL 237 to include cardiovascular, respiratory, digestive, excretory, reproductive, and endocrine systems. Lecture: 3 hours. *Prerequisites:* BIOL 237.

**BIOL 239L: Microbiology for Health Sciences.** (4) Introduction to microbiology with emphasis on principles of infection and immunity. Not accepted toward a biology major. *Prerequisites:* BIOL 123/124L or BIOL 201 and CHEM 111L or CHEM 121 and CHEM 123L. Lecture: 3 hours; lab: 3 hours *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. *Lab: 3 hours.*

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

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

## **Business Management (MGMT)**

**MGMT 101: Fundamentals of Accounting I.** (3) The development of the accounting cycle, special journals, and financial statements. *Suggested co-requisite:* MGMT 101L.

**MGMT 101L: Fundamentals of Accounting I Lab.** (1) To provide additional problem solving necessary for the students to master accounting basics. *Suggested co-requisite:* MGMT 101.

**MGMT 102: Fundamentals of Accounting II.** (3) Continuation of MGMT 101, including corporation and manufacturing accounting and decision-making. *Prerequisite:* MGMT 101. *Suggested co-requisite:* MGMT 102L.

**MGMT 102L: Fundamentals of Accounting II Lab.** (1) To provide additional problem solving necessary for students to master accounting basics. *Suggested co-requisite:* MGMT 102.

**MGMT 113: Management: An Introduction.** (3) Modern concepts of organizations and their management. An overview of functional activities within business and other organizations. *Suggested prerequisite:* MATH 120.

**MGMT 116: 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.

**Note for CMA and CNA programs:** CPR certification is required to participate in clinical rotation for the following courses: MEDA 191L, CNA 101L and PBT 101L/102L. 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

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to lift 50 lbs. in order to go into clinical rotation. Make your doctor appointments early if you are signing up for this course.

## Certified Medication Aide (MEDA)

**MEDA 101L: Certified Medication Aide.** (6) This course provides specialized training in medication administration for patients in long-term care facilities or those with developmental disabilities consistent with NM Board of Nursing guidelines and under the supervision of a healthcare professional (RN). Students must be a Certified Nursing Assistant (CNA) to take this course which prepares them for the NM Board of Nursing CMA Certification exam. Lecture/Skills Lab: 76 hours; Clinical: 32 hours. *Prerequisites:* Satisfactory score on placement tests for writing, reading, and mathematics or completion of ENGL 100 and MATH 099 with a grade of “CR”.

## 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 (RN). Prepares students for the NM Nurse Aide Competency Evaluation (NACEP) exam. Lecture/skills lab: 96 hours total, clinical: 32 hours total. *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 be certified in American Heart Association Basic Life Support for Healthcare Providers CPR, have a current TB test and be able to lift a minimum of 50 lbs. Employers in the healthcare setting will require a finger print background check and drug testing prior to hiring. A UNM—Valencia

Campus Certificate of Completion is awarded upon successful completion of this course.

## Certified Phlebotomy Technician (PBT)

*Note:* Needle Stick insurance coverage is mandatory for PBT 101L/102L. 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 1st day of the semester and end the day before the 1st day of the next semester. Students will be required to obtain this insurance before any academic-related training will take place.

**PBT 101L: Certified Phlebotomy Technician.** (8) This course prepares students to become a Certified Phlebotomy Technician. Training includes anatomy, safety, blood-drawing techniques, specimen preparation, equipment maintenance, and associated clerical, customer service and basic work skills. Prior to entering clinical setting in the final weeks of class, students show proof of all standard immunizations as well as a current TB test and at least the first of the Hepatitis B series. Employers in the healthcare setting will require a finger print background check and drug testing. A UNM-Valencia Campus Certificate of Completion is awarded upon successful completion of this course. *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.

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

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## Chemistry (CHEM)

**CHEM 111L: Elements of General Chemistry.** (4) One-semester course in general chemistry, especially for non-science majors in the health sciences except pre-medicine and medical technology. Lecture: 3 hours; lab: 2 hrs. Credit not allowed for both CHEM 111L and CHEM 121L. *Prerequisite: MATH 120. UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**CHEM 121: General Chemistry I.** (3) Introduction to the chemical and physical behavior of matter. Lecture: 3 hours. Credit not allowed for both CHEM 111L and CHEM 121L. *Prerequisite: MATH 121 or MATH 123 or MATH 150 or MATH 162 or MATH 163 or MATH 180 or MATH 181 or MATH 264 or with a grade of C or higher or a math placement score that qualifies the student for. Co-requisite: CHEM 123L. Suggested prerequisite: CHEM 111L. UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1214).*

**CHEM 122: General Chemistry II.** (3) Continuation of CHEM 121L. Lecture: 3 hours. Co-requisite: CHEM 123L. *Prerequisite: CHEM 121 and CHEM 123L or CHEM 131L with a grade of C or higher. UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1224).*

**CHEM 123L: General Chemistry I Laboratory.** (1) Introduction to basic chemical laboratory principles and techniques. Lab: 3 hours. *Prerequisite: MATH 121 or MATH 123 or MATH 150 or MATH 162*

*or MATH 163 or MATH 180 or MATH 181 or MATH 264 or with a grade of C or higher or a math placement score that qualifies the student for. Co-requisite: CHEM 121. UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1224).*

**CHEM 124L: General Chemistry II Laboratory.** (1) Experiments illustrating the fundamental principles and techniques of chemistry. Lab: 3 hours. *Prerequisite: CHEM 121 and CHEM 123L. Co-requisite: CHEM 122. UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1224).*

**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. *Prerequisite: CHEM 111L or CHEM 121 and CHEM 123L.*

## Communication & Journalism (CJ)

**CJ 110: Introduction to Mass Communication.** (3) 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. *Also offered as MA 110. Suggested prerequisite: ENGL 101.*

**CJ 130: Public Speaking.** (3) A performance course that deals with the analysis, preparation, and presentation of speeches. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 1: Writing &*

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*Speaking: New Mexico Lower-Division General Education Common Core Curriculum – Area I: Communications (NMCCN 1113).*

**CJ 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. *Suggested prerequisite: ENGL 101.*

**CJ 221: Interpersonal Communication.** (3) Analysis of a variety of interpersonal communication concepts with special emphasis on the application of communication skills in different situations. *Suggested prerequisite: ENGL 101. New Mexico Lower-Division General Education Common Core Curriculum – Area I: Communications.*

**CJ 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. *Suggested prerequisite: ENGL 101.*

## Computer-Aided Drafting (CAD)

**CAD 150T: Introduction to Computer Aided Drafting.** (3) This course is designed for students interested in developing computer-aided drafting skills. It consists of both lecture and system operation assignments. *Lecture/lab. Prerequisite: Approval of the instructor.*

**CAD 160T: Introduction to AutoDesk Revit.** (4) An introductory course to building information modeling. The basic features of Autodesk's REVIT software will be covered. *Lecture/lab.*

**CAD 180T: 3D Studio I.** (4) Introductory course in 3D modeling, rendering and animation. *Lecture/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 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. *Lecture/Lab. Prerequisite: IT 101 or equivalent computer literacy.*

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

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

**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 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.*

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## **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) 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. *Also offered as MATH 151L. 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 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.*

## **Construction Technology Core (JS)**

**JS 101L: Construction Technology Core.** (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 blueprints, effective use of hand and power tools, and basic rigging.

## **Dance (DANC)**

**DANC 105: Dance Appreciation.** (3 to a maximum of 6) A lecture and discussion course introducing the study of dance as technique, spectacle and ritual for today's audience. *UNM Core Curriculum – 7: Fine Arts; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 2123).*

## **Digital Media Arts**

**DMA 100: 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 270: Special Projects: Portfolio.** (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.

## **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.

# Course Descriptions

**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 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 knowledge-

# Course Descriptions

able about literacy development in young children. An integrated language arts perspective and an interdisciplinary approach as it addresss 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 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 8, 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 comprehen-

sive 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 (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. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**EPS 105L: Physical Geology Laboratory.** (1) Minerals, rocks, and topographic and geologic maps; field trips. 2 hrs. lab. Pre or co-requisite: EPS 101. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

# Course Descriptions

**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 ENV 101; pre or co requisite: EPS 105L or ENV 102L. UNM Core Curriculum – 3: Physical & Natural Sciences.*

**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. UNM Core Curriculum – 4: Social & Behavioral Sciences. New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences (NMCCN 2113).*

**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. UNM Core Curriculum – 4: Social & Behavioral Sciences. New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences (NMCCN 2123).*

## Education (ARTE, EDUC, ETSS, & SPCD)

**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 and Teaching.** (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.

## Emergency Medical Services (EMS)

**EMS 110: First Responder.** (4) A 72-hour course consisting of 40 hours of didactic instruction which includes the minimum standard Department of Transportation curriculum to prepare the student for pre-hospital field techniques and 32 hours of lab instruction

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which includes individual instruction in airway management and patient assessment skills. Students must obtain current certification in American Heart Association Basic Life Support for Healthcare Providers CPR before the first class session.

**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) Meets the 1998 EMT-Basic National Standard Curriculum requirements and incorporates New Mexico EMT-B scope of practice. Provides lecture instruction to prepare the student to sit for New Mexico and National Registry testing. *Corequisite: 142. Restriction: program permission.*

**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 1998 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.*

**EMS 143: EMT- Intermediate Lab.** (1) Meets New Mexico requirements for EMT-Intermediate skills training, including intravenous fluid administration and pharmacology. *Prerequisite EMS 113 & EMS*

*142. Co-requisite: EMS 180, EMS 151 Restriction: program permission.*

**EMS 151: EMT-Intermediate Clinical & Field Experience.** (2) Meets New Mexico requirements for EMT-Intermediate field and clinical training, including emergency department and pre-hospital experience. *Prerequisite: EMS 113 & EMS 142. Co-requisite: EMS 180 & EMS 143 Restriction: program permission.*

**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. Students must obtain current certification in American Heart Association Basic Life Support for Healthcare Providers CPR before the first class session. *Restriction: program permission.*

## Engineering (ENG)

**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.

## English (ENGL)

### *Developmental Writing Courses:*

**ENGL 099: Developmental English II.** (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: Success-*

# Course Descriptions

ful completion of ENGL 098 (RA, RB, or RCR) or minimum writing COMPASS score of 34, or verbal ACT score of 14. Co-requisite: AENG 099.

**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 COMPASS score of 57, or verbal ACT score of 17. Co-requisite: AENG 100.

## **Expository and Professional Writing Courses:**

**ENGL 101: Composition I: Exposition.** (3) Expository writing and reading. Concentrates on organizing and supporting ideas in writing. Prerequisites/placement: Successful completion of ENGL 100 (A, B, or CR), or minimum writing COMPASS score of 74, or verbal ACT score of 19, or verbal SAT score of 450. *UNM Core Curriculum – I: Writing & Speaking; New Mexico Lower-Division General Education Common Core Curriculum – Area I: Communications (NMCCN 1113).*

**ENGL 102: Composition II: Analysis and Argument.** (3) Practice writing analytic and argumentative essays based on expository and literary readings. Some research required. Prerequisites: Successful completion of ENGL 101 (C or higher), or minimum verbal ACT score of 26-28, or verbal SAT score of 610. *UNM Core Curriculum – I: Writing & Speaking; New Mexico Lower-Division General Education Common Core Curriculum – Area I: Communications (NMCCN 1123).*

**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 101.

**ENGL 219: Technical and Professional Writing.** (3) Practice in writing and editing of workplace documents, including correspondence, reports, and proposals. Prerequisite: ENGL 101 (B or higher), ENGL 102 (C or higher), or verbal ACT score  $\geq 26$ , or verbal SAT score  $\geq 610$ . *UNM Core Curriculum – I: Writing & Speaking; New Mexico Lower-Division General Education Common Core Curriculum – 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 101 (B or higher), ENGL 102 (C or higher), or verbal ACT score  $\geq 26$ , or verbal SAT score  $\geq 610$ . *UNM Core Curriculum – I: Writing & Speaking.*

**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 101.

**ENGL 290: Introduction to Professional Writing.** (3) A beginning course in the professional writing concentration. Study of technical

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writing, public information and public relations writing and freelance nonfiction writing. *Prerequisite: ENGL 102.*

**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. All texts will be in English.

**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. *UNM Core Curriculum – 5: Humanities; New Mexico Lower-Division General Education Common Core Curriculum – 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 102.*

**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.** (Black Books I.) (3) (Also offered as AFST 251.) 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 a Maximum of 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 16th Century.** (3) Survey of key texts in world literature from the ancient world through the 16th century.

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## **ENGL 293: World Literatures: 17th Century through the Present.**

(3) Survey of key texts in world literature from the 17th century through the present.

**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-19th century.

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

## **Fine Arts (FA)**

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

## **Game Project (GAME)**

**GAME 100: Introduction to Game Project.** (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 150: Game Project I.** (3) Create computer games utilizing game development tools that require no programming including 2D graphics, 3D modeling, music and sound effects. Tasks include: game

setup, development studio, manipulating graphic images, creating sounds/music, pictures and animation. *Prerequisite: GAME 100.*

## **General Studies (GENS)**

**GENS 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.

*Note: HCHS 125 is restricted to students in the Associate Degree in Nursing (ADN) program. Only students enrolled in the ADN program will be allowed to enroll in this course.*

**HCHS125: Pharmacy in Nursing & Health Profession.** (3) This course will present the basic therapeutic actions of various types of commonly used drugs. Emphasis will be placed on the classification of medications, therapeutic action, adverse reactions, routes of administration and calculation of drug dosages and solutions.

## **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 in-

# Course Descriptions

clude 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, psychosocial, 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. Suggested prerequisite: ENGL 101. *UNM Core Curriculum – 5: Humanities; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 1053).*

**HIST 102: Western Civilization Post 1648.** (3) 1648 to present. Suggested prerequisite: ENGL 101. *UNM Core Curriculum – 5:*

*Humanities; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 1063).*

**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. Suggested prerequisite: ENGL 101. *UNM Core Curriculum – 5: Humanities; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 1113).*

**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. Suggested prerequisite: ENGL 101. *UNM Core Curriculum – 5: Humanities; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 1123).*

**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, see Schedule of Classes and contact Department. May be repeated for credit without limit provided the topics vary. Suggested prerequisite: ENGL 101. *HIST 260: History of New Mexico. (3) Introduction to New Mexico history from earliest human settlement to present day. Suggested prerequisite: ENGL 101.*

# Course Descriptions

## 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 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 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

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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 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.

## Job Skills (JS)

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

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

*Note:* See also *Construction Technology Core* for specific JS 101L courses. This course of study provides a basic introduction to various job skills. These courses, when combined with basic writing, reading, computing, mathematics and communications, may be applied completion of the Job Skills Certificate (see page X for details).

## Linguistics (LING)

**LING 101: Introduction to the Study of Language.** (3) 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. *Also offered as ANTH 110. LING 101 and ANTH 110 may not both be counted for credit.*  
*UNM Core Curriculum – 4: Social & Behavioral Sciences.*

# Course Descriptions

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

### Developmental Mathematics Course:

**MATH 098: Developing Numeracy.** (3) This course is designed to prepare students for MATH 099. Students will review adding, subtracting, multiplying and dividing whole numbers, decimals and fractions in a problem solving context. Grade option: RA, RB, RC, RCR/RNC. *Prerequisites:* None.

**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. Grade option: RA, RB, RC, RCR/RNC. *Prerequisites/placement:* Successful completion of MATH 098 (RA, RB, RC, RCR) or minimum pre-algebra COMPASS score of 24, 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. Grade option: RA, RB, RC, RCR/RNC. *Prerequisites/placement:* Successful completion of MATH 099 (RA, RB, RC, RCR) or minimum pre-algebra COMPASS score of 36, or math ACT score of 16.

### Study Session Courses:

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

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

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

### College-Level Mathematics Courses:

**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 100 (C or higher) or 120 or 121 or 123 or 150 or 162 or 180 or STAT 145 or ACT  $\geq 19$  or SAT  $\geq 450$  or pre-algebra COMPASS  $> 56$  or algebra COMPASS  $> 33$ .

**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 (C or higher).

**MATH 118: Algebra Stretch I.** (4) This course covers approximately the first half of Math 120. Topics covered include properties of real numbers, linear equations and inequalities; properties of exponents; solving systems of linear equations and polynomials. Students must pass Math 118\* before continuing with Math 119\*. *Prerequisite:* Math

# Course Descriptions

100 (C or better) or minimum pre-algebra COMPASS score of 57 or algebra COMPASS score of 34, or math ACT  $\geq 19$ , or math SAT  $\geq 450$ .

**MATH 119: Algebra Stretch II.** (4) This course covers approximately the last half of Math 120. Topics covered include rational expressions, rational exponents and roots, quadratic expressions and equations, functions and logarithms. *Prerequisite: Math 118\** Both MATH 118 and MATH 119 must be completed to count as the equivalent of MATH 120.

**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. Acceptable as credit toward graduation in some programs but not acceptable to satisfy the UNM Core Curriculum or New Mexico Lower-Division General Education Common Core Curriculum requirement in Mathematics. *Grade option: A, B, C, D, CR/NC. Prerequisites/placement: Successful completion of MATH 100 (C or CR) or minimum pre-algebra COMPASS score of 57 or algebra COMPASS score of 34, or math ACT  $\geq 19$ , or math SAT  $\geq 450$ .*

**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 120 (C, CR or higher) or minimum algebra COMPASS score of 55 or COMPASS College Algebra score  $> 33$ , or math ACT  $\geq 22$ , or math SAT  $\geq 510$ .*

UNM Core Curriculum – 2: Mathematics; New Mexico Lower-Division General Education Common Core Curriculum – Area II: Mathematics (NMCCN 1113).

**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. Meets New Mexico Lower-Division General Education Common Core Curriculum Area II: Mathematics (NMCCN1113). *Prerequisites/placement: Successful completion of MATH 121 (C or higher) or minimum college algebra COMPASS score of 55, or math ACT score of 25, or math SAT score of 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 120 (C, CR or higher) or higher math course, or minimum algebra COMPASS score of 55, or math ACT score of 22, or math SAT score of 510. UNM Core Curriculum – 2: Mathematics; New Mexico Lower-Division General Education Common Core Curriculum – Area II: Mathematics.*

**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 120 (C, CR or higher) or higher math course, or*

# Course Descriptions

minimum algebra COMPASS score of 55, or math ACT score of 22, or math SAT score of 510. *UNM Core Curriculum – 2: Mathematics.*

**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 (C or higher) or minimum college algebra COMPASS score of 55, or math ACT score of 25, or math SAT score of 570. UNM Core Curriculum – 2: Mathematics; New Mexico Lower-Division General Education Common Core Curriculum – Area II: Mathematics.*

**MATH 162: Calculus I.** (4) Derivative as rate of change; intuitive, numerical, and theoretical concepts; applications to graphing, linearization and optimization. Integral as a sum, relation between integral and derivative and applications of definite integral. *Prerequisites/placement (ACT = 28-31 or SAT = 640-700 or MATH 150 or COMPASS College Algebra > 66) and (MATH 123 or COMPASS Trigonometry > 59) or (ACT ≥ 32 or SAT ≥ 700). UNM Core Curriculum – 2: Mathematics; New Mexico Lower-Division General Education Common Core Curriculum – Area II: Mathematics (NMCCN 1614).*

**MATH 163: Calculus II.** (4) Transcendental functions, techniques of integration, numerical integration, improper integrals, sequences and series with applications, complex variables and parametrization of curves. *Prerequisite: Successful completion of MATH 162 (C or higher). Credit not allowed for both MATH 163 and MATH 181. UNM Core Curriculum – 2: 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. *Prerequisites/placement: Successful completion of MATH 121 or MATH 150 (C or higher) or minimum college algebra COMPASS score of 67, or math ACT score of 26, or math SAT score of 600. Credit not allowed for both MATH 162 and MATH 180. UNM Core Curriculum – 2: Mathematics; New Mexico Lower-Division General Education Common Core Curriculum – Area II: Mathematics (NMCCN 1613).*

**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. *Prerequisite: Successful completion of MATH 180 (C or higher). Credit not allowed for both MATH 163 and MATH 181. UNM Core Curriculum – 2: Mathematics.*

**MATH 193: Topics in Mathematics.** (1-3) Various topics in mathematics including, but not limited to, tools and techniques designed to improve attitudes and performance in math class, and calculator usage.

**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 112 (C or higher). UNM Core Curriculum – 2: Mathematics.*

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**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 Greens theorem. *Prerequisite: Successful completion of MATH 163 (C or higher).*

## Media Arts (MA)

**MA 110: Introduction to Mass Communication.** (3) 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. *Also offered as CJ 110.*

**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.

## 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.

*UNM Core Curriculum – 7: Fine Arts; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 1113).*

**MUS 143: University Chorus.** (1) Large mixed chorus. Open to all university students; no audition required. May be repeated for credit for a maximum of 8 hours credit toward degrees in the BUS or 4 hours credit in the College of Fine Arts or in the College of Education or in other colleges.

## 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. *UNM Core Curriculum – 3: Physical & 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. *UNM Core Curriculum – 3: Physical & 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

# Course Descriptions

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. *UNM Core Curriculum – 3: Physical & Natural Sciences.*

## Nursing (NURS)

**Note:** NURS 115, 130, 131, 230, 232 and 235 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 1st day of the semester and end the day before the 1st day of the next semester. Students will be required to obtain this insurance before any academic-related training will take place.

*NURS 115: Nursing Fundamentals.* (8) Introduces concepts and skills foundational to Associate Degree nursing. Emphasis is placed on use of best practice and nursing process to provide care for individual older adults with chronic health needs in long term care.

**NURS 110: Professional Development.** (1) Introduces the nursing student to broad concepts of critical self-examination, self-evaluation and self-management as a precursor to personal accountability and responsibility necessary for effective nursing leadership and management. Emphasis on entry into the role of professional. Corequisite: NURS 115. Restriction: admitted to ADN program.

**NURS 115: Nursing Fundamentals.** (8) Introduces concepts and skills foundational to Associate Degree in Nursing. Emphasis is placed on use of best practice and nursing process to provide care for individual older adults with chronic health needs in long term care.

**NURS 130: Medical-Surgical Nursing I.** (5) Introduction to medical-surgical nursing. Students will apply the nursing process in the care of an acute and/or chronically ill adult client in the acute care setting. Clinical application will take place in a variety of healthcare environments.

**NURS 131: Mental Health Nursing.** (4) Focuses on application of the nursing process to care for individuals experiencing normal and abnormal psychological responses to life stressors. Students will care for one client in acute and community settings.

**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.

# Course Descriptions

**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..

**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.

**NURS 238: Pharmacology in Nursing and the Health Professions.** (3) Introduction to pharmacologic principles, application of these principles to major classes of drugs, common drugs and their use in the clinical setting. Pre or co-requisite: NURS 239 or NURS 240.

**NURS 239: Pathophysiology I.** (3) An introduction to human pathophysiology. The course focuses on forming a basic understanding of pathophysiology for nursing students. *Prerequisites: BIOL 237 and 247L and BIOL 239L.*

**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. *Prerequisites: BIOL 123 and CHEM 111L NURS 239. BIOL 238 and BIOL 248L*

## **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, 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 110: 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 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 wpm minimum. *Prerequisite: OBT 111.*

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**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 wpm) 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 wpm) 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. *Prerequisite: OBT 110.*

**OBT 293: Topics in OBT.** (3) 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. Students must also be certified

# Course Descriptions

in American Heart Association Heartsaver CPR and 1st Aid, have a current TB test, and be able to lift a minimum of 50 lbs. prior to entering clinical setting in the final week of class. Employers in the healthcare setting will require a finger print background check and drug testing prior to hiring. A UNM-Valencia Campus Certificate of Completion is awarded upon successful completion of this course. Skills Lab: 64 hours; Clinical/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."

## 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. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 5: Humanities; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 1113).*

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

**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. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 1: Writing & Speaking; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts.*

## Physical Education (PENP, PEP)

**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.

**PENP120: 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.

**PENP121: Beginning Belly Dance.** (1) Instruction in the basic moving steps and rhythms of the oriental dance

**PENP122: 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, rumba, 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.

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**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) 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.

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

# Course Descriptions

## Physics (PHYC)

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

**PHYC 151: General Physics.** (3) Mechanics, sound, heat. Prerequisite: Successful completion of MATH 150 or MATH 180 (C or higher). *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**PHYC 151L: General Physics Laboratory.** (1) Mechanics, sound, heat. Lab: 3 hours. Pre or co-requisite: PHYS 151. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1114).*

**PHYC 152: General Physics.** (3) Electricity, magnetism, optics. Prerequisite: PHYS 151. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1124).*

**PHYC 152L: General Physics Laboratory.** (1) Electricity, magnetism, optics. Lab: 3 hours. Pre or co-requisite: PHYS 152. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1124).*

**PHYC 160: General Physics.** (3) Mechanics, sound. Pre or co-requisite: MATH 162. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1124).*

**PHYC 160L: General Physics Laboratory.** (1) Mechanics, sound. Pre or co-requisite: PHYC 160. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1124).*

**PHYC 161: General Physics.** (3) Heat, electricity, magnetism. Prerequisite: PHYC 160. Pre or co-requisite: MATH 163. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1124).*

**PHYC 161L: General Physics Laboratory.** (1) Electricity and magnetism. Pre or co-requisite: PHYC 161. *UNM Core Curriculum – 3: Physical & Natural Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area III: Laboratory Science (NMCCN 1124).*

## 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. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 4: Social & Behavioral Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences (NMCCN 1113).*

**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 institu-

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tions, and contemporary issues. Suggested prerequisite: ENGL 101. *UNM Core Curriculum – 4: Social & Behavioral Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences (NMCCN 1123).*

**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. *Suggested prerequisite: ENGL 101.*

## 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. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 4: Social & Behavioral Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences.*

**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. Suggested prerequisite: ENGL 101.*

**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. Suggested prerequisite: ENGL 101.*

**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 101.*

## 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 101. UNM Core Curriculum – 5: Humanities*

## Science (SCI)

**SCI 099L: Science Problem-Solving Lab.** (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.*

## 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; the study of fingerspelling. *UNM Core Curriculum – 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. *Suggested prerequisite: ENGL 101. UNM Core Curriculum – 4: Social & Behavioral Sciences; New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences (NMCCN 1113).*

**SOC 205: Crime, Public Policy and the Criminal Justice System.** (3) The study of crime, the criminal justice system and crime-related

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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. Suggested prerequisite: ENGL 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. Suggested prerequisite: ENGL 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. Suggested prerequisite: ENGL 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. Suggested prerequisite: ENGL 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. *New Mexico Lower-Division General Education Common Core Curriculum – Area IV: Social/Behavioral Sciences (NMCCN 1113).*

**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. Suggested prerequisite: ENGL 101.*

## Spanish (SPAN)

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

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

# Course Descriptions

## Statistics (see Mathematics & 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 250: Home Energy Audits.** (3) Students will learn to perform residential energy audits using the Home Energy Rater System (HERS). The HERS codifies home energy audits for existing residential buildings.

### Theatre Arts (THEA)

**THEA 120: Acting Foundations I.** (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. *UNM Core Curriculum – 7: Fine Arts.*

**THEA 122: Theatre Appreciation.** (3) For non-majors. Issues of performance, spectatorship and criticism vis-à-vis theatre and other forms of performance including (but not limited to) dance, ritual, sports and the performance of everyday life. Attendance at various performances required. *UNM Core Curriculum – 7: Fine Arts; New Mexico Lower-Division General Education Common Core Curriculum – Area V: Humanities and Fine Arts (NMCCN 1113).*

### University Studies (UNIV)

**UNIV 101: Freshman Interest Group Seminar.** (1-3 to a maximum of 3) Designed to accelerate successful transition to university life.