

COURSE DESCRIPTIONS

NOTE:

- Freshman courses are numbered 100-199; sophomore courses are numbered 200-299; junior courses are labeled 300-399; senior courses are numbered 400-499.
Lower-division topic courses are number 147 and 247; upper-division topic courses are numbered 399 and 499.
- Courses labeled with an "N" immediately after the course number are considered to be remedial in nature and will not be accepted to fill the requirements for any degree at Northern. Remedial courses will normally not transfer to other colleges.
- No course with a grade of less than a C or CR (as appropriate) will be accepted for graduation.
- Any course which is designated as a prerequisite to another course must be passed with at least a grade of C or CR (as appropriate) in order to proceed to the next level course.
- Immediately after the course description appears an entry inside parentheses. This number is read in two parts. For example, (3, 1T+2S) is read as: course value = 3 credits; 1 credit of theory, 2 credits of activity/shop/studio. If the course were a laboratory, it might read (1, 0T+1L). Each credit of theory (T) requires the equivalent per week of 50 minutes of instructional time; each credit of shop/activity (S) requires 100 minutes per week; and each credit of laboratory (L) requires 150 minutes per week. Therefore, an entry of 3, 1T+2S would be scheduled to meet a total of 250 minutes per week of instructional time. These calculations refer to a course offered over a full sixteen-week semester. The amount of time per week for a course offered over a shorter period of time is increased to meet the required time in a shorter period.
- Courses listed in this catalog are subject to change or deletion through normal academic channels. New courses and changes in existing course work are initiated by the responsible department chairperson, approved by the faculty curriculum committee, the faculty senate, and the Provost.

ADOBE CONSTRUCTION (ADOB)

100 ADOBE CONSTRUCTION BASICS You will cover the design and construction techniques of traditional and modern adobe dwelling and monumental structures of Northern New Mexico from foundation to roof, including passive solar design, with emphasis on the techniques which meet modern building codes. You will also study historical and worldwide techniques. (3, 3T+0S)

101 ADOBE DESIGN AND CONSTRUCTION WORLDWIDE You will cover the history of adobe buildings throughout the world, with emphasis on modern practices that meet existing building codes. You will examine design and construction techniques of homes, monumental structures, and settlements. You will also make adobes and build walls and other building components. Classes are conducted on- and off-campus, and may utilize the Internet and other distance-learning facilitators. (3, 3T+0S)

102 ADOBE WALL CONSTRUCTION You will cover exterior and interior walls and buttresses, foundations, rough bucks, lintels, bond beams; and the installation of doors and windows, including wood frame, and post and beam techniques. Classes are conducted on- and off-campus. (Fall) (4, 2T+2S)

103 ROOF DESIGN AND CONSTRUCTION You will cover traditional Southwest designs of pitched and flat roofs: materials, structure, and plans, including vigas, beams, joists, rafters, trusses, latillas, rough boards, tongue-and-groove, deck sheathing, canales, and parapets. Classes are conducted on- and off-campus. (4, 2T+2S)

104 FLOOR DESIGN AND CONSTRUCTION You will discuss and build (or mock up) traditional and modern floors and floor coverings found in the Southwest, including mud, wood, brick, stone, concrete, tile, and sheet goods. . Classes are conducted on- and off-campus. (4, 2T+2S)

105 INTERIOR FINISH PRACTICES You will deal with traditional and modern finishes found in the buildings of the Southwest: mud plaster by hand and trowel, cement and gypsum plasters, exposed adobe bricks, carved adobe, wood trim at doors and windows, baseboards, wainscot, tile work, decorative stone, tin ceilings, nichos, carved columns, corbels, lintels, sheet rock hanging and finishing, and painting and staining. Classes are conducted on- and off-campus. (4, 2T+2S)

106 EXTERIOR FINISH PRACTICES You will deal with traditional and modern finishes found on buildings of the Southwest: mud stabilized mud, cement plasters, elastomeric plasters, insulation, vapor barriers, moisture protection, lath systems, exterior sheathing, patios, portales, vigas, posts, corbels, exposed lintels, wood trim at doors and windows, brick, stone, paint, and tile decoration. Classes are conducted on- and off-campus. (4, 2T+2S)

107 PASSIVE SOLAR HEATING You will learn the passive solar heating systems that work well when integrated into the design of adobe homes, including direct gain systems, Trombe wall (indirect) systems, and greenhouse/sunspaces. You will learn the advantages and disadvantages of each system in order to choose between them for use in different parts of a house or commercial structure. You will cover calculations for appropriate sizing of systems as well as auxiliary back-up systems. (2, 2T+0S)

110 REMODEL THEORY AND PRACTICES You will learn stabilization, restoration, renovation, modernization, remodeling, and additions to existing adobe structures; surveying, estimating cost, historic building requirements, and safety considerations. Classes will be conducted both on-and-off-campus. (Spring) (2, 2T+0S)

111 HORNO DESIGN AND CONSTRUCTION You will study the history and design of hornos and mud ovens throughout the world. You will construct a traditional New

Mexico horno and do a baking demonstration. Classes will be conducted on-and-off-campus. (1, 0T+1S)

112 ARCHES, DOMES, AND VAULTS You will learn systems to create openings and roofs in adobe structures using masonry materials in situations where wood and steel are not available or not desired. You will discuss and use traditional New Mexican and world-wide techniques. Classes will be conducted on-and-off-campus. (2, 1T+1S)

114 ADOBE CONSTRUCTION BASICS In this course, you will cover the adobe construction process from foundation to roof in a manner that meets adobe construction codes: walls, floors, windows, doors, and plaster, as well as the process of making adobe bricks. Brief mention is given to the best practices for incorporating electrical, plumbing, heating, and communications systems in adobe structures. Discussion will cover passive solar heating opportunities. (2, 2T+0L)

115 RAMMED EARTH CONSTRUCTION This course covers the fundamentals of rammed earth construction. (2, 2T+0S)

116 WEBSITES FOR TRADES AND CRAFTS This course takes you through the process of building your own basic website to promote your craft or trade using a user-friendly content management system. (1, 1T+0S)

201 ADVANCED TOPICS IN ADOBE CONSTRUCTION This course is designed for you if you have completed the core adobe curriculum or who have construction industry experience and wish to gain skills beyond the entry level. Topics will range across the full curriculum, plus introduce new industry techniques and materials. Individualized learning objectives will be accommodated and research topics may be included. Topics may include computerized heat loss and gain analysis, super-adobe, cast-earth, rammed earth, straw-bale, straw/clay, and pumicecrete construction. If you wish to build skills to establish a business, you might pursue topics such as bidding with architects and designers; establishing credit with banks, suppliers, and subcontractors; and getting paid. May be repeated once for credit. Corequisite: ADOB 202. (4, 4T+0S)

202 ADVANCED TOPICS PRACTICUM Hands-on experience for ADOB 201 topics, such as actual construction and finishing of full-scale. Field experience could be on-campus or off-campus with a local contractor or with Habitat for Humanity. You might choose to build a home for yourself or actually establish a contracting business. May be repeated once for credit. Corequisite: ADOB 201. (9, 0T+9S)

206 EARTH IN CONTEMPORARY ARCHITECTURE This course will discuss the use of earth as a structural and conceptual material in contemporary architecture. (1, 1T+0S)

ANTHROPOLOGY (ANTH)

Note: Each course in this department bears a Pre-requisite of ENG 109N or an adequate score on the Course Placement Evaluation.

101 PHYSICAL ANTHROPOLOGY You will cover the principles of human biology applicable to paleoanthropology and organic evolution of primates. Corequisite: ANTH 101L. (3, 3T+0S)

101L PHYSICAL ANTHROPOLOGY LAB You will apply and demonstrate the principles of primate and human evolution. Corequisite: ANTH 101. (1, 0T+1L)

102 INTRODUCTION TO SOCIAL AND CULTURAL ANTHROPOLOGY You will survey the disciplines of social and cultural anthropology, including culture, language, enculturation, subsistence patterns, economics, marriage, kinship, social groups, political systems, religion, art, and culture change. (Fall only) (3, 3T+0S)

110 INDIAN CULTURE OF THE SOUTHWEST You will study the culture of the indigenous peoples of the Southwest, including cultural patterns relative to agriculture, religion, arts, tribal governance, economics, etc., including both pre- and post-Columbian periods. (3, 3T+0S)

111 LANGUAGE AND CULTURE You will study the historical and descriptive linguistics, with emphasis on linguistic theory and on the interrelationship between language and culture. Prerequisite: ENG 109N. (3, 3T+0S)

207 CULTURES OF NEW MEXICO (ANTH 2313) You will study of the contemporary cultural and ethnic groups of New Mexico, including Native American, Hispanic, Anglo, and others. Prerequisite: ENG 109N. (3, 3T+0S)

210 SOUTHWESTERN FOLKLORE You will survey the expressive culture systems such as art, music, architecture, religion; space/time orientation of the predominant Southwestern cultures. (3, 3T+0S)

ART (ART)

All studio courses may be repeated without penalty; however, no course may be counted more than once toward graduation requirements.

100 INTRODUCTION TO BASIC WOODCARVING You will learn the basic techniques of woodcarving and safety through carving one small project. (1-2, .5-1T+.5-1S)

101 INTERMEDIATE WOODCARVING Using more advanced techniques than learned in ART 100, such as hand-tool usage, carving techniques and safety, you will produce two small projects. (1-2, .5-1T+.5-1S)

105 INTRODUCTION TO ART You will study basic problems in the understanding and criticism of painting, sculpture, and architecture in Western and non-Western cultures from pre-historic to present time; introduction to basic terminology of the arts and to the language of stylistic criticism; relationships of the arts to each other and their historical background. Includes museum/gallery visits when relevant. Prerequisite: ENG 109N. (3, 3T+0S)

107 HISTORY OF ART I You will study the development of Western art from pre-historic times to the Renaissance through slides, videos, lectures, readings, discussions, and analysis. Prerequisite: ENG 109N. (3, 3T+0S)

110 DRAWING I You will study the basic materials and mechanics of drawing, with an emphasis on the development of descriptive and perceptual skills. You will also study line, value, mass, texture, and shape as applied to still life, landscape, and the human figure. (3, 1T+2S)
