



# **Campus Phone Numbers**

Academic Affairs	505.454.3311
Admission of Students - Undergraduate	505.454.3439
Admission of Students - Graduate	505.454.3266
Advisement/Testing	505.454.3327
Athletics/Intramurals	505.454.3368
Business Affairs/Student Accounts	505.454.3222
Campus Life	505.454.3590
Campus Security	505.454.3278
Career Services	505.454.3048
Catalog	505.454.3437
Course Schedule	505.454.3424
Child Care	505.454.3250
Educational Outreach Services/Distance Ed.	505.426.2058
Financial Assistance	505.454.3318
Student Housing	505.454.3544
General Inquires	505.425.7511
Institutional Effectiveness/Research	505.426.2020
Library	505.454.3401
Post Office	505.454.3358
Registration	505.454.3438
Student Affairs	505.454.3020
Student Government	505.454.3594
Scholarship/Student Employment	505.454.3318
Support Services	505.454.3483
Transcripts	505.454.3455
TTY Switchboard	505.454.3003
Web Registration Problems	505.454.3438

# New Mexico Highlands University Box 9000, Las Vegas, New Mexico 87701 505.425.7511 | www.nmhu.edu

New Mexico Highlands University is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, 30 North LaSalle St., Suite 2400, Chicago, IL 60602-2504, 312.263.0456; 800.621.7440, fax 312.263.7462; www. ncacihe.org. To review or receive a copy of the Highlands University's NCA Affiliation Status Report, please contact the Registrar's Office.

New Mexico Highlands University reserves the right to change its instructional programs at any time. The provisions of this catalog are not to be regarded as an irrevocable contract between the student and New Mexico Highlands University.

New Mexico Highlands University does not discriminate on the basis of disability, race, color, religion, national origin, age, sex, or sexual orientation in employment, admission, programs or services.

Any student who feel he or she has been discriminated against is encouraged to file an incident report form with the Office of the Dean of Student Affairs. For more information, please refer to the NMHU Student Handbook or the NMHU website at www.nmhu.edu.

All NMHU educational programs and activities will be made accessible to students with disabilities upon request.

Individuals with a disability who are in need of accommodations in order to participate in our programs may contact the university at 505 454.3252, or in writing to the Office of Accessibility Services, New Mexico Highlands University, Las Vegas, New Mexico 87701.

For the full-time degree seeking freshman who entered the university during the 2005-2006 academic year, the persistence and graduation rate may be obtained from the Office of Institutional Effectiveness.

Bulletin
Vol. 54, Issue 427 Fall 2011
This catalog is published in two versions, an undergraduate and a separate graduate publication.
Published biannually by New Mexico Highlands University, Box 9000, Las Vegas, New Mexico 87701.
Send change of address to NMHU Office of the Registrar Publication No. CAT-2011-2013

## President

James A. Fries, Ph.D.

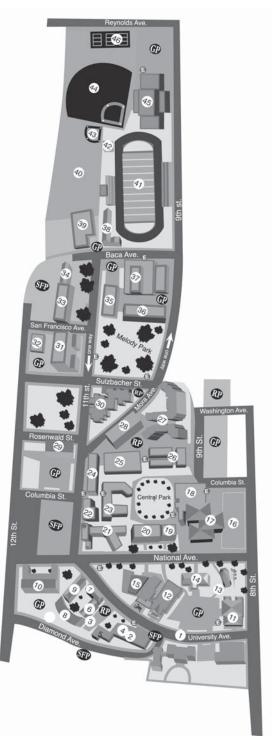
# **Board of Regents**

The Honorable Susana Martinez, Governor of New Mexico

Leveo V. Sanchez, Chair Jesus Lopez, Vice Chair Nancy R. Long, Member Frank Marchi, Member Caitlin Syner, Student Regent



# Highlands-Las Vegas Campus Map



- 1 Sala de Madrid (SM)
- 2 Douglas Hall (DH)
- 3 Media Arts East (MAE)
- 4 Media Arts West (MAW)
- 5 Purchasing Bldg. (PB)
- 6 Kennedy East (KENE)
- 7 Kennedy North (KENN)
- 8 Kennedy South (KENS)
- 9 Kennedy West (KENW)
- 10 Hewett Hall (HH)
- 11 Felix Martinez Center Bldg. (FM)
- 12 Ilfeld Auditorium (ILF)
- 13 Alumni Centennial Tower
- 14 Rodgers Administration Bldg. (RAB)
- 15 Burris Hall (BH)
- 16 Future Student Center 2012
- 17 Donnelly Library Ground Floors/ITS (LIBG)
- 18 Donnelly Library
- 19 Science Annex (SCA)
- 20 Lora M. Shields Science Bldg. (SC)
- 21 Ivan Hilton Science Tech Bldg. (HSCI)
- 22 Art Foundry (AF)
- 23 Sininger Hall (SH)
- 24 Engineering Bldg. (ENGR)
- 25 Archuleta Hall (ARCH)
- 26 Connor Hall (CH)
- 27 New Residence Hall (RH)
- 28 Arrott House (ARH)
- 29 Industrial Arts Bldg. (IA)
- 30 Melody Hall (MELH)
- 31 Victoria D. de Sanchez Teacher Education Center (STEC)
- 32 Child Development Center/Guadalupita (GUAD)
- 33 Facilities Services (FS)
- 34 Campus Police Bldg. (POL)
- 35 Champ Tyrone Music Bldg. (MU)
- 36 Gregg House (GREH)
- 37 Student Center (STU)
- 38 Field House (FLDH)
- 39 Natatorium
- 40 Football Practice Field
- 41 Perkins Stadium
- 42 Concession Stand
- 43 Soft Ball Feild
- 44 Harold K. Brandt Baseball Field
- 45 John A. Wilson Physical Education Complex (PE)
- 46 Tennis Courts
  - Emergency Station
  - @ General Parking
  - Resident Parking
  - STD Staff/Faculty Parking



#### **Vision Statement:**

New Mexico Highlands University will provide an inspiring multicultural learning environment that promotes excellence, empowerment, transformation, and global understanding.

#### Mission:

Education through teaching, research, and service.

#### **Core Values:**

- Advancement of knowledge
  - Student success
  - A diversity of ideas
  - Accessible education
    - Community
  - Individual well-being
  - Sustainable practices
    - Multiculturalism

The Undergraduate Catalog 2011-2013 is a description of New Mexico Highlands University's academic programs and courses of instruction. Although much effort has been made to ensure accuracy, errors or omissions may be present. All official corrections to this catalog are on file with the Office of the Registrar.

The administration and faculty of New Mexico Highlands University believe that the educational programs of the university are effective and valuable. However, the ultimate results of the programs offered, in terms of such matters as achievement, employment, and professional licensing, are also dependent on factors beyond the control of the university, such as individual student initiative, governmental or institutional regulations, and market conditions.

Therefore, New Mexico Highlands University makes no representation or guarantee that following a particular course or curriculum will result in specific achievement, employment, admission to other programs, or professional licensing.

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# **Academic Majors/Minors/Concentrations**

Art History (Minor) Geology (minor) Anthropology/Sociology (BA, BS) Health (BA or minor) Concentration: Anthropology Concentration: Athletic Training **American Indian Studies Health Education** Criminology **Health Promotion & Wellness** Sociology Pre-Prof Athletic Training Anthropology (minor) History (BA or minor) Bilingual Education (minor) Concentration: Social Studies Biology (BA, BS) Human Performance & Sport (BA or minor) Concentration: Teaching Concentration: Exercise Science Business Administration (BBA) **Physical Education** Concentration: Accounting (or minor) **Recreation & Sport Management General Business** Mathematics (BA, BS or minor) Finance/Managerial (or minor) Math/Computer Science for Elementary School Teachers (BA) Finance/Personal (or minor) Math/Computer Science for Secondary School Teachers (BA) International Business Media Arts (BA, BFA or minor) Management (or minor) Concentration: Communication Design Management Information Digital Filmmaking Systems (or minor) Interactivity & Multimedia Marketing (or minor) Photographic Imaging Marketing/Media Arts Music (BA, BFA or minor) Chemistry (BA, BS or minor) Concentration: Music Composition Concentration: Forensics (minor) Music Education Coaching (minor) Music Performance Cognitive Science (minor) Vocal Performance Combined Science (minor) Native American/Hispano Cutural Studies (Minor) Computer & Mathematical Modeling (BS) Nursing (BSN available to licensed RNs only) Computer Science (BA, BS or minor) Pre-Engineering Concentration: Individualized Program Philosophy (minor) Physics (minor) Information Systems (BA only) Software/Hardware System (BS only) Political Science (BA or minor) Concentration: Law Emphasis Criminal Justice Studies (BA) Early Childhood Multicultural Education (BA or minor) Liberal Arts Elementary Education (AA, BA) Psychology (BA, BS or minor) English (BA or minor) Religious Studies (minor) English as a Second Language (minor) Secondary Education (minor, licensure) Social Work (BSW) (CSWE accredited) Environmental Geology (BS) Concentration: Geology Sociology (minor) Watershed Management Software Systems Design Fine Arts (BA, BFA or minor) Spanish (BA or minor) Concentration: Interdisciplinary Special Education (BA or minor) K-12 Education Women's Studies (minor) Liberal Arts Writing (minor) Forestry (BS) University Studies (BA) Concentration: Forestry Wildland Fire General Science (minor) General Science for Seconary School Teachers (BA)

Concentration: Biology Geology Chemistry

# **Academic Departments and Schools**

College of Arts and Sciences
Department of English
Department of History, Political Science and Languages and Culture
Department of Visual and Performing Arts
Department of Biology and Chemistry
Department of Computer Science and Mathematics
Department of Exercise and Sport Sciences
Department of Natural Resource Management
Department of Nursing
Department of Social and Behavioral Sciences
School of Business Administration, ACBSP accredited

Interdepartmental

School of Social Work, CSWE accredited

School of Education

STUDY ABROAD

The International Education Center assists students in applying for study-abroad programs sponsored by Highlands University, the New Mexico Public Universities Consortium, and other cooperating institutions.

\*NMHU reserves the right to change its instructional and other programs at any time.

# **Highlands at a Glance**

First established as New Mexico Normal School, the institution became New Mexico Highlands University in 1941, as it expanded its role beyond teacher education.

Today, Highlands University in Las Vegas offers graduate and undergraduate programs in arts and sciences, business, education, and social work. Located in the heart of Las Vegas, a small, friendly town with a population of about 18,000, Highlands' main campus is close to recreational and wilderness areas, and within a few hours of major metropolitan centers.

Through distance education, Internet courses, and on-site faculty, Highlands also offers some degree-completion and graduate programs in Farmington, Rio Rancho, Española, Santa Fe and Raton.

Although students from all over the world attend Highlands, the majority of its approximately 3,700 students are from New Mexico and are Hispanic. Highlands' programs focus on its multiethnic student body, especially the Hispanic and Native American cultures distinctive of New Mexico.

The university continues the traditional role of an institution of higher learning in the liberal arts and sciences. It also offers comprehensive programs in business, teacher education, and social work. The university is committed to excellence in the transmission, discovery, preservation, and application of knowledge itself to maintain a progressive, forward-looking posture responsive to the changing social environment, as to shape the direction the institution will take with respect to anticipated demands and approaching opportunities.

As part of its mission to serve the individual student through personal attention, Highlands maintains an open enrollment, small classes, and low tuition. It is nationally known for its research activities, student and faculty achievement, and opportunities for students to combine study with real-world experience. Highlands' students and faculty alike consistently receive national and international recognition for many of their achievements and have opportunities to network with other researchers and professionals in their areas of interest.

Accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Highlands University also has specialty accreditations. The School of Business Administration is accredited by the Association of Collegiate Business Schools and Programs (ACBSP). The School of Social Work is accredited by the Council on Social Work Education (CSWE).

Highlands University is a member of the Rocky Mountain Athletic Conference, NCAA Division II and fields eleven teams: five men's and six women's. They include baseball, basketball, cross country, football, soccer, softball, women's track & field, volleyball and wrestling.

## **Code of Conduct**

The Highlands University Student Handbook, which is published each year, describes student services, the Code of Student Conduct and related policies and procedures. Administered by the dean of student affairs, the code sets the standards and expected behavior of students. Procedures for hearings, appeals, grievances and complaints of discrimination/harassment are outlined in the handbook. The handbook is provided to new students; it may be downloaded at www.nmhu.edu, or a copy may be obtained from the Highlands Office of Student Affairs, Box 9000, Las Vegas, N.M. 87701.

New Mexico Highlands University prohibits the use, distribution, manufacture, or possession of controlled substances on university property or as any part of any university activity.

The Highlands Code of Student Conduct and Disciplinary Procedure is included in the NMHU Student Handbook and can be obtained from the Office of Student Affairs. For complete information on academic policies, consult the university catalog.

## Students with Disabilities/Academic Accommodations

Students with a documented disability are eligible to receive appropriate and reasonable academic accommodations or auxiliary aids in accordance with the legal requirements of the Americans with Disabilities Acts (ADA), the ADA Amendments Act of 2008, the Vocational Rehabilitation Act of 1974 (as amended), and other laws governing accessibility. Accessibility Services also adheres to the

professional code of conduct promulgated by the Association of Higher Education and Disability (AHEAD). Students who wish to receive academic accommodations must provide complete documentation to Accessibility Services before the drop/add deadline each semester. It is the responsibility of the student to disclose a disability, to provide appropriate documentation from a qualified professional identifying the disability and recommend accommodations, and to request accommodations. In order to receive academic accommodations during attendance at New Mexico Highlands University each student must supply appropriate clinical documentation of their disability. Each student must also submit a completed Highlands Accessibility Services Application packet and a copy of his or her class schedule. Copies of these forms are available from Accessibility Services.

Due to a limited supply of interpreters, deaf students must document their disability at least one month before the beginning of each semester. Highlands University is not obligated to provide accommodations to students who fail to document a disability in a timely manner. Accessibility Services is located in Room 110 of the Felix Martinez Building and may be reached at 505.454.3252 or via e-mail at disabilities@nmhu.edu.

Out-of-classroom accommodations are governed by the policy set forth in the previous paragraph. If you are an individual who needs auxiliary aids or services in order to participate in Highlands programs write to Accessibility Services, New Mexico Highlands University, Box 9000, Las Vegas, NM 87701 or e-mail disabilities@nmhu.edu.

#### Deadlines

Students wishing to receive accommodations must completely document their disability with Accessibility Services before drop/add deadline for the fall and spring semesters. This is normally two weeks after the semester begins. For summer and other sessions, students must document their disability before the first day of regular classes for that session. Students are strongly encouraged to document their disability and meet with office staff as early as possible to ensure that the appropriate accommodations are in place before classes begin. If a situation arises during the semester, accommodations will be reviewed on a case by case basis. Any accommodations will be in effect from the date of application.

#### Conduct Notice

Students with disabilities are held responsible for the same university standards of conduct as students without disabilities.

Disability-related records, including medical records, are confidential material and will be protected in accordance with FERPA regulations and in light of their purpose to assist in providing appropriate academic accommodations to the student.

Service animals are welcome on campus provided they meet all legal requirements. Service animals that present a health or safety threat to the campus community (including cleanliness issues) will be banned from campus unless significant preventive actions are taken by the owner to ensure future compliance. Students with service animals must be registered with Accessibility Services.

More information about the policy and procedures relating to services to students with disabilities is found in the Accessibility Services Handbook, incorporated herein by reference. This handbook may be requested from Accessibility Services or may be downloaded from www.nmhu.edu.

# Admission to the University

Felix Martinez Building Room 160 505 454-3434/3439/3503 E-mail: admissions@nmhu.edu

# Applying for Admission

An application packet may be obtained from the Highlands University Office of Admissions or from New Mexico high school counselors. Applications are also available on Highlands University's website at www.nmhu.edu/admissions, where students can also apply online.

With the completed application form, applicants must pay a \$15, nonrefundable, one-time application

fee, have official transcripts sent to the university and must submit American College Test (ACT) or Scholastic Aptitude Test (SAT) scores.

Applications for undergraduate admission will be considered at any time, however, to ensure timely action on the application, students are advised to submit the completed application materials during the following suggested filing periods:

- For fall semester, previous November-August
- For spring semester, previous July-December
- For summer session, previous January-June

Send the completed application to the Office of Admissions accompanied by a \$15, one-time, nonrefundable check or money order made out to New Mexico Highlands University (or NMHU). Do not send cash. Official transcripts and test scores should be sent to the same address.

Timely application for admission is essential in order to process applications for financial assistance or scholarships. Students are advised to consult the appropriate sections of this catalog for information about application procedures and deadlines concerning financial assistance at Highlands University.

Only students who have been admitted to Highlands University are allowed to register for classes.

# Admission Criteria (subject to change)

#### **New Freshmen**

New Mexico Highlands University considers admission for beginning freshmen who do the following:

- Submit a completed Highlands University undergraduate application for admission.
- Pay a \$15, one-time, nonrefundable application fee.
- Submit official transcripts indicating high school diploma from an accredited secondary school or successful completion of the national G.E.D. examination. (Admission may be given to qualified high school seniors who have not yet graduated, subject to their submitting a transcript verifying their graduation before beginning studies at the university.)
- Students are encouraged to take the American College Test (ACT) or Scholastic Aptitude Test (SAT) prior to applying for admission to Highlands University. Submission of score reports at the time of application is suggested. Students who have not taken the ACT or SAT or have not submitted their results must take the Compass Placement Examination administered by Highlands University during freshman orientation. Students will be placed in the math and English classes based on their placement test scores. If a student feels they have been wrongly assigned, he or she may take a free on-campus placement test prior to registering for his or her first semester. If the scores meet the competency criterion, the student will be reassigned to the appropriate class.

#### Admissions Status

Students are admitted into regular, probationary, or nondegree status as follows:

#### Regular Admission

- An earned high school diploma and a high school grade point average of at least 2.0 (on a 4.0 scale).
- In lieu of a high school diploma, students will qualify for regular admission with a G.E.D. average score of 450 or higher. The G.E.D. transcript should be sent from the appropriate public education department.

## **Probationary Admission**

Probationary admission is considered for students who do not meet the criteria for regular admission. Students whose grade point average is below a 2.0 may be admitted on probationary status and may be subject to special requirements for academic performance in their freshman year. Freshman students admitted on academic probation are expected to earn a satisfactory GPA in either their first or second semester at Highlands University or be subject to dismissal. The satisfactory semester GPA for all freshmen is 1.75.

The review process: The application from any student whose high school grade point average is below a 2.0 (on a 4.0 scale) is reviewed to evaluate the applicant's motivation for college work and likelihood of

success. Additional information from an applicant is welcome, such as a personal statement of educational goals, recommendations from secondary school personnel, and ACT or SAT scores. Students applying for probationary admission may be required to submit such information or to attend an advisory session with university personnel before being admitted in this status.

## Nondegree Undergraduate Admission

Nondegree admission enables students to pursue credit courses without meeting many of the requirements for admission to a degree program. Nondegree status is available for those who wish to pursue university courses for personal interest or professional development, for visiting students enrolled in a degree program at another college or university but seeking to complete some courses at Highlands University for transfer, or for other similar types of applicants.

It may also be used by students who lack a high school diploma or GED and are at least 18 years old. These students may apply for regular admission status upon completion of high school or GED. Nondegree admission may also be given in certain circumstances to enable a student to enroll while a regular admission application is pending. Students admitted in non-degree status are not eligible for financial assistance.

#### **Transfer Students**

New Mexico Highlands University considers for admission undergraduate students as transfers from other regionally accredited colleges and universities who:

- Pay a \$15, one-time, nonrefundable application fee.
- Submit a completed application for undergraduate admission.
- Send a complete, official transcript from each previously attended college or university to the Highlands University Admissions Office. Students under academic suspension or dismissal from another college or university may not be admitted until they have served the required suspension at that institution.
- Applications will not be processed until all the required items are in file with the Office of Admissions.

#### Admission Status

Transfer students are admitted into regular, probationary, or nondegree status as follows:

- Transfer students who have completed fewer than 16 semester credit hours of postsecondary schooling will be treated the same as new freshmen in the admissions process (see above). These students
  must submit their high school transcripts (or G.E.D. records), ACT or SAT scores if taken, and college/university transcripts.
- Transfer students who have completed 16 or more semester credit hours of postsecondary schooling
  will be admitted in regular status provided they have at least a C or 2.0 cumulative grade point average
  in all college or university coursework.
- Degree-seeking probationary admission will be considered for transfer students with a cumulative grade point average below C through the individual review process as defined for probationary admission.
- Transfer students are also eligible for non-degree admission status.

#### Home School or Non-Accredited Schools

Students (16 years or older) who have been home schooled or who have attended a nonaccredited school are required to submit an official school transcript, and official score reports from the ACT or SAT. All applicants will be reviewed on an individual basis for admissions.

## Transfer of Credits

New Mexico Highlands University accepts academic credits for transfer from institutions of higher education that are regionally accredited or are candidates for regional accreditation. Transfer students will receive full credit for coursework completed with an appropriate grade, provided that the classes are appropriate to a degree at the university. Transfer course grades will not be calculated as part of Highlands University grade point average, and are listed on the academic transcripts with a grade of CR. (However,

for graduation, all transfer credits graded are included in the final computations for honors). Highlands University does not accept vocational, technical or remedial courses and credits awarded for work or life experience.

Students transferring from an accredited institution of higher education may transfer under one of the following plans:

#### Course by Course

The course-by-course plan is for students who do not plan to complete an associate degree. The Course Articulation Matrix compiled by the Higher Education Department and transfer guides in place with New Mexico two-year colleges serve as a guide for this purpose.

## Degree Completion

Students transferring from a regionally accredited institution of higher education with an earned associate degree will have New Mexico Highlands University proficiency, extended core, and minor requirements waived. However, all other university requirements, including the university's state mandated 35-hour common core, program, residency, and the 51 upper-division credit requirements must be met before granting of the baccalaureate degree.

An individual transfer analysis will be given to the student by the Offices of the Admissions and Registrar's to determine courses required to complete the university's general education requirements. Major and minor program requirements will be reviewed by officials in the appropriate department. Student must complete all courses required by Highlands and meet the university's requirements for academic performance to receive the indicated degree.

# Transfer among New Mexico Higher Education Institutions

To facilitate transfer of students and course credits among New Mexico's colleges and universities, the state's public institutions of higher education are required to accept in transfer courses taken within approved modules of lower-division coursework and apply them toward degree requirements.

Several transfer guides have been developed through collaboration of New Mexico's public postsecondary institutions, consistent with requirements of state law (21-1B, NMSA 1978). Students enrolling for first-year or second-year study at a New Mexico institution and wishing to prepare for possible transfer into a degree program at another institution are advised to take these courses during their freshman and sophomore years.

#### **Student Responsibility**

New Mexico's colleges and universities have collaborated to produce guides to assist students who plan to transfer before completing a program of study. Course modules are designed to help students carefully select courses, so they can transfer with little or no loss of credit. However, planning for effective transfer with maximum efficiency is ultimately the student's responsibility. Responsible transfer planning includes early and regular consultation with the intended degree-granting institution to ensure all pre-transfer coursework will meet the requirements of the desired degree.

#### Transferring Courses to Fulfill the New Mexico General Education Common Core

During the 2005 New Mexico Legislative session, Senate Bill 161, consistent with requirements of state law (Chapter 224 of the Laws of New Mexico 1995, as amended), was signed into law to further enhance and facilitate the articulation of general education courses among New Mexico's colleges and universities. In accordance with policies established by the New Mexico Higher Education Department, designated general education core courses successfully completed at any regionally accredited public institution of higher education in New Mexico are guaranteed to transfer to any New Mexico public institution. Students who have decided on a major and/or an institution at which to complete their studies should consult with an academic adviser at that particular institution to determine the most appropriate course selections. Students enrolling for the first-year of study at a New Mexico college or university and considering possible transfer into a certificate and/or degree program at another institution are encouraged to take the courses approved for transfer during their freshman and sophomore year of study.

The core matrix of approved courses guaranteed to transfer and meet general education requirements at any New Mexico college or university can be found on the New Mexico Higher Education Department website, www.hed.state.nm.us/Transfer.aspx. Courses in the state core matrix are listed by institution under each of the five general education areas.

The following are the approved courses for New Mexico Highlands, with their equivalent New Mexico Common Course Number.

0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
NMHU Common Core Classes  Area I Communications (9 hours)	NM Common Course Number
Engl 111 Freshman Composition 1	Engl 1113
Engl 112 Freshman Composition 2	Engl 1123
MArt 124 Public Speaking	Comm 1113
Area II Mathematics (3 hours)	
Math 130 Math for Elem Sch 2	37.1.4440
Math 140 College Algebra	Math 1113
Math 150 Trigonometry	Math 1213
Math 211 Calculus 1	Math 1613
Area III Lab Science (8 hours)	
Biol 110 Biol Perspectives	Biol 1114
Biol 211 Gen Biology 1	Biol 1214
Biol 212 Gen Biology 2	Biol 1224
Biol 131 Human Biology	Biol 2414
Chem 100 Chem for the Non-Sci	Chem 1114
Chem 211/215L General Chem 1	Chem 1214
Chem 212/216L General Chem 2	Chem 1224
For 105 Ecosystems & Humans	
Geol 101 Survey of Earth Science	Geol 1214
Geol 105 The Planets	
Phys 105 Elementary Physics	Geol 1214
Phys 151 Algebra Physics 1	Phys 1114
Phys 152 Algebra Physics 2	Phys 1124
Phys 291 Calculus Physics 1	Phys 1214
Phys 292 Calculus Physics 2	Phys 1224
Area IV Social and Behavioral Sciences (6	(-9 hours)
Anth 102 Intro to Sociocultural Anth	Anth 2113
Anth 103 Intro to Phys Anth & Arch	Anth 1113
Econ 216 Prin of Macroeconomics	Econ 2113
Econ 217 Prin of Microeconomics	Econ 2123
PolS 151 American National Gov't	PolS 1123
Psy 101 Psychology & Society	Psyc 1113
Soc 152 Introductory Sociology	Soci 1113
Area V Humanities/Fine Arts (6-9 hours)	
Hist 100 The Western World	Hist 1053
Hist 201 US History to 1865	Hist 1113
Hist 202 US History from 1865	Hist 1123
Phil 100 Introduction to Philosophy	Phil 1113
Art 100 Introduction to Art	Art 1013
Mus 100 Introduction to Music	Mus 1013
Mus 101 Rudiments of Music	Mus 1213
Thea 100 Introduction to Theater	Thtr 1013

#### New Mexico Common Core Numbers

The course prefix and number that appear on the right hand side next to the Highlands University course number is the New Mexico Common Course Number. This is a four alpha/four numeric set of uniform course designations that serve as a single reference point for courses taught throughout the state that share substantially equivalent content. Courses bearing this designation are part of a statewide equivalency table that cross-references the institutional course and number with a universal common course number creating an easy one-to-one match.

Students may find the New Mexico Common Course Number listed in degree outlines, transfer guides, and in course descriptions in college catalogs and websites. Simply put, the common course number connects equivalent courses at multiple institutions ensuring students that the course will transfer to the receiving institution and meet degree requirements as if it were taken on that campus.

#### Lower-Division 64-hour Transfer Modules

Students who have selected a field of study but have not yet selected the college or university where they wish to earn their baccalaureate degree are advised to take courses during their freshman and sophomore years outlined in one of the lower-division 64-hour transfer modules. For students enrolled at any public institution in New Mexico, these courses are guaranteed to transfer to any New Mexico university and apply toward bachelor's degree program requirements. Students should consult advisers at their current institutions regarding which specific classes fit these categories. Lower-division transfer modules presently exist for business, teacher education, and early childhood education. Modules for additional areas of study are being developed.

#### Inter-Institutional Transfer Guides and Catalogs

Students who have selected a field of study and/or the institution where they wish to graduate are advised to consult the transfer guide or catalog for that institution for more current and detailed advice to guide their course selection. Formal published transfer guides between most New Mexico community colleges and Highlands University are available through the Highlands Admissions Office.

## **Complaint Procedure for Transfer Students**

All New Mexico public postsecondary institutions are required to establish policies and practices for receiving and resolving complaints from students or other complainants regarding the transfer of coursework from other public institutions in the state. A copy of New Mexico Highlands University's complaint policy may be obtained from the Admissions Office or from the New Mexico Higher Education Department at 1068 Cerrillos Road, Santa Fe, NM 87501-4295, (505) 827-7383 or hed.state.nm.us.

# Military Credit

The university grants credit for military education or service schools on the recommendation of the American Council on Education's Publication Guide to Evaluation of Educational Experience in the Armed Services. Air Force veterans should provide an academic transcript from the Community College of the Air Force.

# **Training Credit**

Credit for noncollegiate training programs is granted based on the recommendation of the American Council of Education's National Guide to Educational Credit for Training Programs and institutional policies. Official records must be provided to the university.

# **Early Admission Program**

Students who are still in high school may be admitted under one of the following plans:

Regular Admission – High school students who have demonstrated maturity and academic success may enroll at Highlands University after their high school junior year rather than completing high school. To qualify for this special program, students must have:

- A strong motivation to enter the university, as well as social, emotional, and intellectual maturity.
- A high school grade point average of at least B.
- An ACT score in at least the 70th percentile (nationwide norms), or a comparable SAT score.

- Recommendation letters from at least two high school officials and the permission of the high school administration.
- A letter of permission from a parent or legal guardian.

## **Dual Credit/Concurrent Enrollment**

High school students may begin college work at Highlands University by taking some college courses while completing their final high school credits for graduation. To qualify for this special program, students must meet the following requirements:

- · A high school junior or senior status.
- Seniors in their final semester must have a grade point average of at least 2.0. Juniors must have a 3.0 grade point average.
- Have an admissions application, an official academic transcript and have parent/school signatures
  on the Dual Credit/Concurrent form.
- Must take the compass exam or provide ACT scores.
- Special approval is needed to take more than two courses.

Students who are interested in exploring these early admission programs should contact the Office of Admissions for assistance. Students who have previously attended need only to provide parent permission and school permission by obtaining signatures on the appropriate form.

#### **International Students**

A statement of the detailed procedures for admission of international students can be obtained from the International Education Center by e-mailing international\_ed@nmhu.edu. International students must be formally admitted to the university before the verifications required for the F-1 student visa can be issued. International students may not apply through the website. They must submit a paper application. The following is required for international students who seek admission to Highlands University:

Applicants are expected to give evidence of an adequate command of the English language by earning a satisfactory score on any of the following English tests:

## TOEFL (Test of English as a Foreign Language) Composite score =

500 paper based

173 computer based

61 Internet based

## IELTS (International English Language Testing System) = Band 5.5

Step Eiken (Test in Practical English Proficiency) = Pre-1

#### For students applying to the School of Business:

TOEFL Scores = 540 Paper based

207 computer based

76 Internet based

IELTS Band 6.0 Step Eiken Pre -1

## Information regarding testing may be obtained from:

## **TOEFL Services**

**Educational Testing Service** 

P.O. Box 6151

Princeton, NJ 08541-6151, USA

609.771.7100 or 877.863.3546 (Monday – Friday, 8 a.m. – 7:45 p.m. Eastern Time (New York), except for U.S. holidays)

609.771-7714 – TTY (24 hours a day, 7 days a week for test takers who are deaf or hearing impaired) www.toeflgoanywhere.org

#### **IELTS**

www.ielts.org/contact\_us.aspx

#### Step Eiken

www.eiken.or.jp/

www.stepeiken.org/forms/contact-form

All international students who seek graduate admission to Highlands University must submit a completed and signed application along with all required documents, nonrefundable \$15 USD application fee. Some programs may require additional documentation for consideration.

Applicants must submit the completed Financial Certificate form and official bank statements along with the application to New Mexico Highlands University before immigration documents can be issued to the admitted applicant.

All international student applications must be received from the country or the current residence of the applicant, no exceptions.

 Applicants from other countries in which English is an official language, but not the language of the majority or of instruction will be subject to these requirements.

Exceptions for providing evidence of adequate command of the English language are:

- Persons holding citizenship in English-speaking countries.
- Applicants holding citizenship in a country where the English language is an official language, and the means of instruction.
- Must possess the equivalent of a United States high school diploma (for admission as new freshmen) or be transfer students from approved universities or colleges outside the United States. Transcripts and other valid records of previous schools attended should come from national examination councils (where applicable), approved colleges or universities, or other official state or federal agencies for education. These records will be evaluated for compliance with the admissions criteria of the university.
- Must pay a \$15 USD one-time, nonrefundable application fee.
- Must submit the completed financial certificate for international admission to issue the I-20 form.

New freshmen students are required to submit score on the American College Test (ACT) before entering the university, if possible, and in all cases before the student's first semester at the university. Scholastic Aptitude Test (SAT) may be submitted in lieu of ACT scores. Proficiency courses may be assigned if the ACT scores indicate the need for developmental work.

For detailed information, contact the International Education Center, International\_ed@nmhu.edu

To write or call:

International Education Center New Mexico Highlands University Box 9000 Las Vegas, NM 87701 U.S.A. Telephone: 505.454.3372

Fax: 505.454.3511

## Advanced Credit Programs

Highlands University offers a number of advanced credit options to earn course credit prior to becoming a freshman.

# College Board Advanced Placement Examinations

Highlands University recognizes student academic accomplishment on the advanced placement examination. Highlands follows the current guidelines of the American Council on Education regarding the granting of credit for Advanced Placement (AP). Highlands University grants credit for AP scores of 3 or higher on any AP examination. Three semester hours will be granted for the following half-year

AP courses: Computer Science; Economics – Macro and Micro; Forestry; Government and Politics – Comparative and U.S.; Physics – Mechanics; Psychology; and Statistics. Six semester hours will be granted for full-year courses other than mathematics, sciences, and foreign languages which earn eight semester hours.

## **CLEP Examinations**

CLEP General Examination scores of 450 or higher will earn credit, with a maximum of four semester credits in each of the five examinations, for a maximum total of 20 credits. These credits may apply both to general education and elective credit, but their use in degree programs is subject to faculty approval.

Credit will be granted in CLEP Subject Examinations to both newly admitted and regularly enrolled students who earn grades of 45 or higher, as approved by appropriate academic schools.

## ACT/SAT Test Score Placement

Students are encouraged to take the American College Test (ACT) or Scholastic Aptitude Test (SAT) prior to applying for admission to Highlands University. Submission of score reports at the time of application is suggested. Students who have not taken the ACT or SAT or have not submitted their results must take the Compass Placement Examination administered at Highlands University during freshman orientation.

Exceptional scores on the American College Assessment Test (ACT) will earn advanced credit according to the following table.

ACT topic	Score	Credits
English	31-36	6
	29-30	3
Mathematics	31-36	6
	29-30	3

These credits automatically apply toward elective credit for graduation. Whether they may be applied toward general education requirements or in degree programs is subject to limitations established by the appropriate disciplines.

## **TUITION AND FEES**

Tuition is a charge that helps to defray the costs of the education offered at the university. Fees are added to the basic tuition rate to enable the university to offer student-related services such as the student center, student government, and certain other student activities. Special fees are charged for certain one-time events in a student's career at the university to help meet the special costs associated with those events. Graduate and undergraduate tuition rates are determined by academic classification. Highlands University accepts MasterCard, Discover and Visa.

# Residency

#### Summary of Regulations for New Mexico Residency for Tuition Purposes

A student who enters and remains in this state principally to obtain an education is presumed to continue to reside outside this state and such presumption continues in effect until rebutted by clear and convincing evidence of *bona fide* residence. A student determined to be financially dependent on a parent or guardian also assumes the residency of that parent or guardian. The burden of proof is on the student. The student must secure and file the petition with the appropriate documents of evidence in the manner described herein. All documents submitted for this purpose will be kept confidential.

To become a legal resident of New Mexico, four requirements must be met by the student. Each person must meet the requirements individually.

- The 12-month consecutive presence requirement.
- The financial independence requirement.
- The written declaration of intent requirement.
- The overt acts requirement.

The person, his or her spouse, and dependent children of a person who has moved to New Mexico and has obtained permanent full-time employment (sufficient documentation is required) shall not be required to complete the 12-month duration requirement.

A person, his or her spouse, and dependents who move to New Mexico for retirement purposes and who provide appropriate evidence of formal retirement shall not be required to complete the 12-month duration requirement.

Other relevant factors may be considered along with those listed above.

A reciprocity agreement between Colorado and New Mexico allows Highlands University to grant a waiver of the nonresident portion of tuition charges to a limited number of students from Colorado. Each student requesting such a waiver must complete the proper application and return it to the Registrar's Office as early as possible. The application must be submitted no later than the first day of classes for the fall or spring semester.

All enrolled out-of-state members of an American Indian nation, tribe and pueblo shall be eligible for in-state tuition rates. For specific information, please contact the admissions or Registrar's Office.

A brochure explaining all requirements for establishing New Mexico residency and residency petitions is available from the Registrar's Office. Residency petitions will be accepted until the first day of each semester in the Registrar's Office. For more information, call 505.454.3233.

## Semester and Summer Sessions

Tuition and fees are subject to change, the specific amounts charged for tuition and fees are listed each semester or summer session in the published schedule of classes. Students are advised to check the most current schedule. The schedule of classes is also available at www.nmhu.edu. The following rates are the 2010-2011 tuition rates. Rates may increase upon approval. These figures are provided to help students plan.

Summer session tuition rate: Main campus students pay a tuition-plus-fees amount for between one and five credits, a lump sum amount for between six and nine credits (based on the six-credit total), and an additional tuition amount for above nine credits. Summer tuition rates may reflect approved tuition and fee increases from those of the school year before. Off-campus tuition follows the fall-spring tuition schedule.

# Tuition Rates — all rates are subject to change.

Las Vegas Campus (Rates are subject to change)

Resident: Undergraduate

1–11 \$ 136.00 per credit hour 12–18 \$ 1,632.00 total

18 + \$ 105.30 each additional hour

Non-resident: Undergraduate

1–11 \$ 222.00 per credit hour

12–18 \$ 2,664.00 total\*

18+ \$ 191.30 each additional hour

#### Distance Education and Internet

Resident

\$136.00 per credit hour for undergraduate (will follow main campus tuition rates)

\$146.00 per credit hour for graduate (will follow main campus tuition rates)

Nonresidents follow main campus nonresident rates.

#### Off-Campus Centers (Rates are subject to change)

Resident:

1–11 \$ 136.00 per credit hour

12+ \$ 1,632.00

18+ \$ 105.30 each additional credit hour

#### Nonresident:

1–11 \$ 222.00 per credit hour

12+ \$ 2,664.00

18+ \$ 191.30 each additional hour

Audit rates are the same as credit hour rates. International rates are available. Please see the schedule of classes for current rates.

Senior citizen rate is \$5 per credit hour. To qualify as a senior citizen, the student must reach the age of 65 years by the third Friday of classes, and formally apply through appropriate form at the Registrar's Office.

## Nonrefundable Special Fees (Rates are subject to change)

Application fee, (one-time): \$ 15 Matriculation fee (one-time): \$5

Graduation application fee (each degree): \$30

Dishonored check fee: \$25 Laboratory fees: Variable

Special exam (test-out) fee, per credit: \$40

Career placement fee, per year (renewal only; first year free): \$15

Housing application fee: (total fee is \$250)

Teacher preparation fees/student teaching: \$50

Internship fee: \$50

Golf: \$25

Downhill skiing: \$195 Techniques of golf: \$25 Transcript fee: \$2

Transcript – Fax charge: \$5

# Special Policies Regarding Tuition and Fees

#### **Payments and Accounts**

Account balances must be paid according to the plans listed in the schedule of classes. Students with financial assistance should verify their award prior to the payment deadline.

Account balances that are not paid within the semester will be sent to a collection agency. Holds will be placed on the student's account, restricting transcripts and registration for upcoming semesters. Statements will be mailed to the permanent address prior to the beginning of the semester, thereafter, all e-bill notifications are sent to your Highlands University e-mail address.

The Business Office accepts cash, checks, money orders, credit cards (Master Card, Visa and Discover), wire transfers, financial aid awards, and written authorizations to bill external agencies to cover balances. Payments can also be made via the Highlands University website, www.nmhu.edu.

# Disenrollment Policy

Highlands University students who fail to pay their full required tuition and fee charges or make adequate financial arrangements with the Business Office on or before their first day of classes will have their registration cancelled and be disenrolled from all classes. While disenrolled, students may not attend classes and are not eligible to participate in athletic programs. Students with a cancelled registration who wish to be enrolled at Highlands University must reregister. The student will be required to make full payment, or must complete financial arrangements for all university charges incurred, and pay a nonrefundable reregistration/late registration fee of \$25 and a billing fee of \$25.

# Payment Plan/Procedure

New Mexico Highlands University Business Office offers students the following payment options:

- 1. Students must pay their account in full or make adequate financial arrangements.
- 2. Adequate financial arrangement option:

#### Full-term semester courses:

- 1/3 payment prior to or on the first day of class attendance
- 1/3 payment 30 days thereafter
- 1/3 payment 30 days following second payment
- Summer or 8-week courses:
- 1/2 payment prior to or on the first day of class attendance
- 1/2 payment 30 days thereafter

A \$25 billing fee will be assessed to the student's account if the account is not paid in full by the Monday before the first day of classes.

For more information on payment options, contact the Business Office at 505.454.3222, 505.454.3444 or 505.454.3008. You can also e-mail SAR@nmhu.edu or write to:

Business Office - New Mexico Highlands University

Rodgers Administration Building

Box 9000, Las Vegas, NM 87701

## Withdrawal Policies

Students who officially withdraw completely from the university may be entitled to a tuition refund according to specific dates announced in the schedule of classes for the term. Upon completion of the formal withdrawal process, a check will be mailed to the student within one month following the complete withdraw from school, if a refund is appropriate.

Students who wish to petition for an exception to the refund policy must do so in writing to the Administrative Council Subcommittee.

# Complete School Withdrawal Tuition Refund Schedule

First day of class 100% refund 10% point in semester 90% refund 25% point in semester 50% refund 50% point in semester 25% refund Thereafter No refund

For more information on withdrawal policies, contact the Business Office.

## FINANCIAL AID AND SCHOLARSHIPS

Office of Financial Aid

Felix Martinez Building, Suite 240, 505.454.3318 or toll free 800.379.4038

E-mail: financialaid@nmhu.edu

As part of its basic mission, New Mexico Highlands University is committed to ensuring that no student will be denied the opportunity for a postsecondary education because of limited resources. To meet this goal, the New Mexico Highlands University Office of Financial Aid offers a broad spectrum of academic merit scholarships, grants, jobs, and loans to supplement the resources of the students who attend Highlands University.

Financial aid at Highlands University is divided into three categories:

- Grant aid (applicable toward first degree only)
- Self-help aid (employment and loans)
- Scholarships (merit and need based)

# The Financial Aid Package

The Office of Financial Aid awards financial aid according to individual need and eligibility criteria. If a student is a dependent, parents are expected to contribute toward educational costs according to their financial ability. In addition, students are expected to contribute from their own assets and earn-

ings, including borrowing against future income. Financial need is the difference between the cost of attendance at Highlands University (including living expenses) and the expected family contribution (EFC). The aid package cannot exceed financial need.

To apply for need-based financial aid:

- Complete all sections of the Free Application for Federal Student Aid (FAFSA) online at www. fafsa.ed.gov.
- 2 For priority consideration, applications should be received by March 1. The Highlands University school code is 002653.

All supporting documentation must be received by April 15.

If transferring into Highlands University during the current academic year, the applicant will also need
to access the FAFSA on-line at www.fafsa.ed.gov and add NMHU (002653) to the list of schools.

It is the applicant's responsibility to ensure that the financial aid file is complete.

The Office of Financial Aid cannot make a financial aid award if a file is incomplete or you are not admitted into a degree seeking program.

The Office of Financial Aid will determine if and how much financial aid an applicant is eligible for, once the processed FAFSA is received. The aid awarded is based on the cost of attending Highlands University, which includes tuition and fees, room and board, books and supplies, transportation, and personal expenses. Dependent care expenses may be considered if the applicant provides the appropriate documentation. Students may request budget adjustments for the purchase of a personal computer.

To qualify for need-based financial aid at Highlands University, an applicant must:

- 1. Demonstrate financial need as determined through a processed FAFSA.
- 2. Be a U.S. citizen or an eligible noncitizen.
- 3. Maintain satisfactory academic progress (see standards below).
- 4. Be enrolled in a regular degree program at Highlands University.
- 5. Be enrolled at least half time (6 credit hours) for all aid programs (with the exception of federal Pell Grant, in certain situations).
- 6. Not be in default on a federal student loan or owe a repayment on a federal grant. Students may use their financial aid awards to defer tuition at Highlands' Business Office/Student Accounts after classes are charged to their accounts and before the awards are received.

A student's award is subject to change if the student becomes ineligible as a result of overaward or failure to maintain academic progress. Students are required to notify the financial aid office if they are receiving aid from ANY other source.

# **Verification Policy**

A student might be required to verify the accuracy of the FAFSA. All students who are selected by the Department of Education's Central Processing Servicer for verification must submit the appropriate documents requested by the Office of Financial Aid before the application for aid can be processed. (All required documentation must be received by April 15 for priority consideration or no later than three weeks before the end of the semester for which financial aid is requested.)

# Satisfactory Academic Progress

Federal Title IV program regulations require participating institutions to develop procedures to monitor a student's progress toward completion of his or her program of study. The following is a summary of the criteria used by the Office of Financial Aid to monitor progress:

# **GPA Requirement**

If a minimum GPA as stated below is not met, the result is financial aid ineligibility (suspension).

1 – 32 attempted hours = 1.75 Cumulative GPA

Above 32 attempted hours = 2.0 Cumulative GPA

## Completion Rate

To determine the completion rate, divide the hours completed by the hours attempted. Less than the percentage indicated below results in financial aid ineligibility (suspension).

1 - 32 attempted hours = 65%

33 - 63 attempted hours = 70%

64 - 95 attempted hours 75%

96 or more attempted hours = 80%

Note: Hours attempted includes W, I, NG,NP, and R.

## **Maximum Time Frame**

Once the maximum hours have been reached, the result is financial aid ineligibility (suspension). Students who have reached 125 percent of their degree requirement will be placed on a "warning" status. Students must appeal this status and provide the Office of Financial Aid with a current degree check.

5-year program = 160 hours x 150% = 240 hours

4-year program = 128 hours x 150% = 192 hours

Associate degree = 64 hours x 150% = 96 hours

# **Notification and Appeal Process**

Those students whose GPA and/or credit hours fall below the minimum standard indicated above will be notified at the end of the semester. When notified of financial aid suspension, the student may file a written appeal with the Office of Financial Aid. Appeal forms are available on Highlands' website at www.nmhu.edu. The student may be given a probationary semester with financial aid to make up deficiencies in GPA and/or credit hours and meet the minimum standards. If at the end of the probationary semester the student still does not meet the minimum requirements, the student will lose his or her financial aid and must make up the deficiencies to regain financial aid eligibility. Effective July 1, 2011, by federal regulation, a student CAN NOT be on suspension two consecutive semesters. A student will be required to attend on his or her own (with no assistance from federal aid programs) and meet the minimum standards as established in the Satisfactory Academic Progress Standards.

The Office of Financial Aid will provide Highlands University students with the timely delivery of financial assistance while maintaining accountability and proper stewardship of the public, institutional, and private funds with which it is entrusted. It is committed to providing courteous service to support the academic mission and goals of the university and its students.

# **Enrollment Requirements for Financial Aid**

Undergraduate students must be enrolled for a minimum of 12 credits each semester to be eligible for full financial aid. Nine to 11 hours is considered three-quarter time and six to eight hours is considered half time. Summer course load requirements for financial aid are a minimum six credit hours. Audit courses are not eligible for financial aid. To avoid loss of financial aid, contact the Office of Financial Aid at 505.454.3318 before dropping classes.

## Financial Aid Return of Title IV Funds for Official/Unofficial Withdrawals

The Federal Title IV return policy will be used to calculate the portion of federal financial aid a student is ineligible for and must repay/return to the Department of Education should the student officially or unofficially withdraw from school. This applies to students receiving FFEL or Direct Stafford Unsubsidized Loan; FFEL or Direct Stafford Subsidized Loan; Federal Perkins Loan; Graduate PLUS loan; FFEL PLUS Loan; Federal Pell Grant; Federals SEOG; Federal TEACH Grant and/or other Title IV program assistance. For more information, contact the Financial Aid Office at 505.454.3318 or 800.379.4038.

# New Mexico Highlands University Undergraduate Scholarship Programs

The Highlands University scholarship program was established to recognize and reward outstanding

achievements by entering freshmen, transfer and continuing undergraduate and graduate students. A grade point average of at least 3.0 on a 4.0 scale is required to compete for a number of our academic based scholarships.

The value of our scholarships range from \$100 per semester to \$5,500 per year. Some scholarships are renewable from one to four years depending upon the academic level at which the student enters Highlands University.

To apply, contact the Office of Financial Aid at 505.454.3318, toll free at 800.379.4038 or log on to www.nmhu.edu to obtain information and the scholarship application.

If the applicant is transferring from another college to attend Highlands University and is a New Mexico

Lottery recipient, a New Mexico Scholarship Transfer Transcript form from all former college(s) should be sent to the Highlands Office of Financial Aid.

The university also awards performing arts scholarships through the Department of Visual and Performing Arts. To apply, contact the Department of Visual and Performing Arts.

To receive consideration for Highlands scholarships, the student must be admitted by the following priority deadline dates:

Freshman scholarships with the March 1st priority deadline are:

Legislative Gold

Legislative Silver

Ken and Sue Crimmin (scholarship application required)

Leveo Sanchez

Victoria D. De Sanchez

NM Scholars

NMHU Zia

Road to Success

# Continuing and Transfer Scholarships

Transfer and continuing students must submit a scholarship application found on the Highlands website by the May 1 priority deadline date. Transfer students must be admitted in degree status by the priority deadline and have a minimum 3.0 cumulative grade point average.

Presidential Scholarship

Phi Theta Kappa Scholarship

General Motors Scholarship

Legislative Endowment Scholarship

(funds are limited)

#### Summer Sessions

Scholarship awards are for the regular academic year fall/spring only and may not be used for the summer session.

# Scholarship Cancellation and Reinstatement

The time period for which a scholarship is in effect is fixed. If the scholarship is cancelled due to academic ineligibility, the original specified time period is not extended. Students who are placed on suspension may appeal for consideration for renewal of the scholarship, with the exception of the qualifying semester for the New Mexico Legislative Lottery Scholarship. A written request must be submitted to the Office of Financial Aid within 15 days after receiving the suspension letter or e-mail.

New Mexico Highlands University scholarship restriction: If a student inadvertently receives the offer of a second tuition scholarship, the student may only accept one. The student must notify the Office of

Financial Aid indicating which scholarship he or she wishes to receive (for student receiving the New Mexico Legislative Lottery Scholarship, this will always be the default unless otherwise specified). If notification is not received, the Office of Financial Aid will determine which scholarship is beneficial to the student and cancel the second scholarship. Scholarship recipients who receive a dependent tuition waiver are ineligible for the tuition portion of any scholarship award.

# Other Assistance Programs and Benefits

## Bureau of Indian Affairs (BIA)

Each year, the BIA provides grants to assist eligible Native American students in meeting their education costs. The amounts of the grants vary according to the student's financial need. The funds are available through the student's BIA area office or tribal scholarship office. Check with the tribal agency to ascertain program requirements and deadlines.

#### **Enrollment Certifications for Loan Deferments**

Students are usually required to process an enrollment certification to defer payments on an outstanding student loan. The Registrar's Office certifies enrollment verification forms after classes begin. For more information, contact the Registrar's Office, 505.454.3233.

## Competitive Out-of-State Scholarships

Out-of-state scholarships are available to qualifying incoming freshmen and transfer students who meet scholarship requirements. For specific information, contact the Financial Aid Office at 505.454.3318 or visit our website at www.nmhu.edu.

#### International Students

The competitive out-of-state scholarship is available also to international students who meet the requirements. For specific information, contact the International Education Center at 505.454.3058.

## American Indian Residency

All enrolled out-of-state members of an American Indian nation, tribe and pueblo shall be eligible for in-state tuition rates. For specific information, please contact the Admissions Office or Registrar's Office.

## Nonresident Tuition Waiver for Colorado Students

A reciprocity agreement between Colorado and New Mexico allows Highlands to grant a waiver of the nonresident portion of tuition charges to a limited number of students from Colorado. Each student requesting such a waiver must complete an application each semester. The application must be submitted no later than the first day of the semester and can be obtained from the Registrar's Office.

#### Nonresident Tuition Waiver for Student Athletes

Senate Bill 81 authorizes resident tuition status for athletic scholarship recipients. To be eligible, the student must be a recruited athlete. He or she must also receive an athletic scholarship through the Department of Athletics and complete an athletic waiver form. For more information, contact the Highlands Department of Athletics, 505.454.3368.

#### Veterans Administration Educational Benefits

Several programs are available for veterans pursuing a postsecondary education. Academic programs are approved by the state approving agency and are approved for educational benefits by the Department of Veteran Affairs. Contact the Registrar's Office for details, 505.454.3424.

## Vocational Rehabilitation

Through the New Mexico Division of Vocational Rehabilitation, the state and federal governments offer tuition assistance to students with disabilities. Other assistance also may be given to those students with disabilities who are financially unable to provide services themselves. Students wishing to apply for this assistance should contact the New Mexico Vocational Rehabilitation Office, 505.425.9365.

## Western Undergraduate Exchange Program (WUE)

Highlands University participates in the Western Undergraduate Exchange (WUE) program, which allows students from participating states to attend Highlands at 150 percent of in-state tuition. The application for the WUE program must be submitted no later than the first day of the semester to the university registrar. For additional information, contact the Registrar's Office, 505.454.3233.

#### Workforce Investment Act

Through the New Mexico Department of Labor, (NM Workforce Connection), the state and federal governments offer assistance with tuition, books, supplies, transportation, and child care for those who qualify. For more information and application process, contact the New Mexico Department of Labor, 505.425.6451.

## **ACADEMIC POLICIES AND PROCEDURES**

# **Grades and Grading Policies**

This section states policies regarding grades given at the university, computation of grade averages, academic warnings, and honors for academic excellence.

Student may appeal a final grade by completing and processing Grade Appeal Form, which is available through the Office of Academic Affairs.

The following grades are given at the university. As appropriate, they appear on midterm reports, semester or summer term grade reports, and transcripts.

A – Excellent

B - Above Average

C - Average

D - Passing

F - Failure

W - Withdrawal from the class. Regulations for the W grade are stated in this catalog.

AU – Audit. No credit is given for the course, but attendance is required in at least 70 percent of the scheduled class sessions.

S – Satisfactory. Used for proficiency courses and some developmental courses, some practicum courses, institutes, workshops, field project, and the completed thesis. Indicates satisfactory completion of course requirements.

R – Repeat. Used exclusively for developmental and proficiency courses. Indicates that course requirements have not been satisfied and that the course must be repeated to satisfy the proficiency requirement.

PR – Progress. Used only for thesis, field project, senior readings, and some practicum courses (and as a midterm grade for graduate seminar courses). Indicates that acceptable progress has been made. To receive a permanent grade of S, the student reregisters for the course until the course requirements are completed.

NP – No Progress. Used for thesis, field project, senior readings, some practicum courses, and as a midterm grade for graduate seminar courses to indicate that acceptable progress has not been made.

I – Incomplete. Given at the discretion of the course instructor only when circumstances beyond the student's control prevent completion of course requirements within the established time. The student requests an I in lieu of a final course grade from the instructor, whose approval is required. The instructor reports the I and files a form with the Registrar's Office documenting the work requiring completion and other conditions. An "incomplete" not completed within one calendar year automatically becomes an F for both undergraduate and graduate students. (The instructor has the option of setting a terminal date of less than one year.) Students should not reregister for a course in which they have an I; if they do so, the I will become an F at the time when a grade is awarded in the reregistered course.

CR – Credit. Used only for transfer credits.

# Grade Point Average

Following are the allowable grades and associated grade points:

A = 4.00 B = 3.00 C = 2.00 D = 1.00 F = 0.0

The sum of the earned honor points is divided by the number of credits to calculate the grade point average (GPA). The following is a sample calculation:

A student earns the following grades in five classes during a certain semester:

4 hrs. A = 16.0 pts.

6 hrs. B = 18.0 pts.

3 hrs. C = 6.0 pts.

2 hrs. D = 2.0 pts.

15 hrs. = 42.0 pts.

 $42.0 \div 15 = 2.80$  grade point average.

GPA requirements are stated in subsequent sections.

# Repetition of a Course

A student may repeat any course, but will receive credit only once unless otherwise noted in this catalog. The most recent grade received will be used in the calculation of the cumulative grade point average.

Course Repeat Forms are available in the Registrar's Office and must be completed by student who is repeating a course. The student's transcript will be coded to reflect that the course was repeated, and the cumulative grade point average will be adjusted.

#### Midterm Grades

The faculty submits midterm grades for each student in each class to the Registrar's Office in the fall and spring semesters according to the schedule announced in the schedule of classes. (No midterm grades are submitted for short-term courses.) These grades are displayed for viewing by the student on the Highlands secured website, www.nmhu.edu. These reports serve to inform students and advisers of a student's progress, so that any problems in class performance can be addressed. If discrepancies occur at this time in the student's schedule of classes, the student should proceed immediately to the Registrar's Office to correct the schedule. Midterm grades do not appear on transcripts and are not kept as a permanent record.

## Honors List

Undergraduate students who earn a grade point average of at least 3.5 in a semester with no incomplete grades, and 12 graded hours, are recognized by the chief academic officer. Honors are awarded in summer terms for the same levels of performance, except students must complete at least six credits.

# **Satisfactory Academic Progress**

Students who maintain the minimum academic standards shown in the scale below will be considered in good academic standing and will be considered to have demonstrated satisfactory academic progress. Students must show evidence of satisfactory progress toward a college degree to avoid academic probation and dismissal, and to continue to be eligible for financial aid through most financial aid programs.

Cumulative Credit Hours Graded Required GPA

1 to 32 undergraduate credits graded 1.75 cumulative GPA 33 or more undergraduate credits graded 2.0 cumulative GPA

#### Academic Probation

Students whose academic performance in a given semester is not satisfactory, as noted below, will be placed on academic probation:

- Freshmen: Must earn at least a 1.75 GPA.
- Other undergraduates: Must earn at least a 2.0 GPA

The probationary period is for one semester. To be removed from probationary status, students must earn a satisfactory GPA as noted.

A student on academic probation at another university may be admitted to Highlands University but retains probationary status.

#### Academic Dismissal

Students whose academic progress is unsatisfactory and who are placed on probation for two consecutive semesters are subject to academic dismissal and will be notified by the Office of Academic Affairs. The dismissal period may be for one semester or one calendar year. Students may appeal their dismissal to the Office of Academic Affairs. If the appeal is approved, the dismissal may be waived or shortened.

During the period of dismissal, a student may not attend classes or live in student housing.

# Academic Dishonesty

Highlands University is an academic community and, as such, is dedicated to the principles of truth and academic honesty. When students commit academic dishonesty, they undermine the integrity of the university and its reputation.

Academic dishonesty occurs when a student engages in any of the following activities on any graded exercise or examination:

- Academic dishonesty: Any behavior by a student that misrepresents or falsifies the his or her knowledge, skills or ability.
- •Plagiarism: The process of copying another person's idea or written work and claiming it as original without acknowledgement of the original author or creator.
- Cheating: Student's use, or attempt to use, of unauthorized notes, texts, visuals, electronic devices, or copies of tests to misrepresent their knowledge, skills, or abilities.
- •Collusion: Secret cooperation between students in order to cheat or plagiarize.
- Facilitation: One student assists another student in cheating, plagiarism, or collusion.
- Falsification of records: A student alters academic records, without authorization, to unfairly favor themselves or another student's grades.

At Highlands, academically dishonest students are subject to a number of punitive measures by instructors or the university. These punitive measures must be supported by documentation and evidence. Students found to practice academic dishonesty are subject to expulsion from the university. Accusations of academic dishonesty may be appealed through the Office of Academic Affairs. Further guidance on academic dishonesty is available in the student and faculty handbooks.

#### Class Attendance

Instructors may not permit students to attend classes without being registered for them. Students whose names do not appear on class rosters must contact the Registrar's Office to resolve the matter.

Students are expected to attend all class meetings. Those who are absent because of circumstances beyond their control may be required to make up work that was missed during the period of absence. Excessive absences can affect a student's grade adversely or even result in a failing grade. Instructors should make the policies on attendance in each class available in writing to students.

If a student's conduct in class interferes with others, is disruptive of teaching, or is contrary to the established class practices, the instructor may ask the student to leave the class.

# **Scheduled Class Meetings**

No change in the scheduled class days and hours may be made without the approval of the chief academic officer and the registrar, even though all students in the class concur in the change. Any temporary departure from the schedule is to be prearranged through the chief academic officer.

Room changes may be made by instructors only through the registrar and school/college dean. Instructors are not to change rooms without this approval. Classes are not to be transferred to private facilities. Students are not to register for classes that are scheduled to meet in overlapping times or days.

#### Final Examinations

The schedule of final examinations is listed in the schedule of classes for each term. The exam schedule is also on Highlands' website, www.nmhu.edu. The final examination period for each class is a part of

the semester's instructional time and is to be so used by the instructor of the course.

Any departures from the scheduled time or day for a final examination must be approved in advance by the chief academic officer. Faculty members are not to adjust the schedule on their own initiative, even though all of the students in the class concur in the change.

If a student would experience a great personal hardship through attendance at a regularly scheduled final examination, the instructor of the course may agree to give an incomplete or to give an individual early examination.

If a student fails to take a final examination, the instructor will decide whether the grade for the course will be an F or an incomplete. Each case should be decided on its merit. Circumstances beyond the student's control should result in the incomplete grade.

# Directed Study Classes, Independent Study, or Independent Research

Independent study and independent research courses are for individual work by a student under supervision of a faculty member on a topic agreed upon between them. The faculty member's permission is required at the time of registration for the course. A form describing each independent study course is approved by the dean of the college/school in which the course is offered and filed with the registrar at the time of registration. The university offers undergraduate independent study and research courses under the numbers 390, 392, 399, 490, 492, 499, and, in some cases, 290 and 299. These are variable-credit courses that offer students and faculty supervisors a choice in the extent of the project and the corresponding amount of time to be spent and academic credit to be earned.

The following regulations apply to undergraduate independent study and research courses:

- To be eligible to take an independent study class in a given subject, a student must have a sufficient grade point average in courses in the field and have completed basic work in the field (as determined by the college/school) to demonstrate the ability to conduct an independent investigation. Permission of the instructor is required to register for an independent study course.
- For each semester credit in the independent study course, the student should expect to spend at least four hours of work per week. Faculty supervisors must schedule at least a weekly appointment with each student doing independent study under their supervision.
- A written report of the work completed in independent study must be one requirement of the course.
- No more than four credits of undergraduate independent study may be taken in one discipline in one term, and no more than six credits may be applied toward any major or minor program.
- Independent study courses may not be used to avoid an instructor of a regular course or to substitute for a regular course because of inconvenience or careless scheduling, to extend the number of credits in a regular course, to replace payments for a work assignment, or to permit a student to add credits solely to gain financial assistance or other scholarship eligibility.
- Independent study courses may not be credited toward any core curriculum or proficiency requirement.

Directed study courses are designed for individual or small groups of students who need a particular course to complete their program of study and are under the direction of a faculty member. The faculty member's permission is required at the time of registration for the course. The Directed Study Form is to be approved by the dean and submitted to the Registrar's Office at the time of registration.

The content of the course and credits awarded may be that of a regularly offered course with the exception of core curriculum courses. Special circumstances under which these courses may be offered are:

- The student(s) needs the class to graduate before the next time the regular course is to be scheduled; and
- A course substitution is not feasible.

Directed study course are offered under the numbers 393, 493, 593, and 693. The title of the directed study must be identified on the form consistent with the course number and title for which it will

substitute such as SpEd 493 Classroom Management in Special Education. The course syllabus must be attached to the Directed Study Form.

# Practicum, Internship, and Field Project Courses

These titles are used for courses that students undertake with the joint supervision of a work-supervisor and a university faculty member, either at an on or off campus site. Often they are offered with a variable-credit option that allows students a choice in the extent of the work and thus in the amount of academic credit to be earned.

Registration in these courses requires permission of the faculty member who will serve as faculty course supervisor.

# Testing Out of Classes by Special Examination

The following regulations apply to the testing-out procedure at the university. Permission to undertake the special examination is requested on a form that is available in the Registrar's Office. The request must be approved before the special examination can be given.

Applicants for special examination must meet the conditions stated in A and B below:

- A. A student is eligible to apply for special examination to test out of a class offered at the university if the student meets one of the following conditions:
  - A course has been taken with similar content, but credit has not been received for reasons other than failure.
  - 2. There has been private tutoring, such as private instruction in music.
  - 3. The student has had successful work experience involving extensive preparation in the field.
  - The student has produced a work of recognized merit or presents other evidence of mastery in the field.
- B. A student eligible under the above must also:
  - 1. Have been a resident student at this university for at least one semester.
  - Have at least a 3.0 grade point average in the field and at least a 2.0 grade point average in all previous university work.
  - 3. Limit the total number of requests for special examination to 12 credits. (Exceptions to this limit must be approved by the chief academic officer.)
  - 4. Obtain approval of the course instructor, the dean of the college/school in which the course is offered, and the chief academic officer.
  - 5. Pay a fee of \$40 per credit hour for each special examination.

Examination questions and the completed examination paper are to be filed in the Registrar's Office.

# Student Records (Access to and Confidentiality)

Under the Family Rights and Privacy Act of 1974 (FERPA), New Mexico Highlands University students have the following rights in regards to their educational records:

- The right to inspect and review their education records within a reasonable time, not to exceed 45 days, upon making an official request and obtaining an appointment to do so.
- 2. The student may challenge inaccuracies or misleading statements contained in their educational records. Challenges must be made in writing and forwarded to the registrar.
- 3. The right to consent to disclosure of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes exceptions without consent. Exceptions are school officials with a legitimate educational interest, compliance with judicial order or lawfully issued subpoena, officials for audit or evaluation purposes, in an emergency involving the health or safety of a student or other person, and directory information.
- 4. The right to file a complaint with the U.S. Department of Education concerning alleged failures

by the university to comply with the requirements of FERPA. Complaints may be forwarded to:

Family Policy Compliance Office U.S. Department of Education 400 Maryland Ave, SW Washington, DC 20202-4605

Directory information at New Mexico Highlands is the student's name, address information, e-mail address, telephone listing, field of study, class standing, dates of attendance, honors and degrees awarded, full-time or part-time status, date and place of birth, home town, previous school attended, participation in officially recognized activities and sports, and height and weight of athletic team members. Directory information may be published or released unless the student has requested in writing that directory information be withheld. Written requests from student to have directory information withheld must be forwarded to the Registrar's Office by the last day of registration and will be maintained for the remainder of the academic year.

For specific information, please contact the Registrar's Office.

# Social Security Number

Social Security numbers are collected from prospective students for administrative coordination and record identification purposes only. The Social Security number is a confidential record and is maintained as such by the university in accordance with the Family Educational Rights and Privacy Act (FERPA).

# Change of Name

Students who need to process a change of name for their academic records must bring appropriate documentation (at least two types of identification showing the new name) to the Registrar's Office. Examples of such documentation include: marriage certificate, birth certificate, or court order for legal name change, with a copy of state-issued ID card or driver's license and/or a Social Security card with change. Name changes must accompany a written request for the change and will be processed only for currently enrolled students. For more information contact the Registrar's Office, 505.454.3455.

# **Transcripts**

The Registrar's Office issues both official and unofficial copies of student academic records. Any student may request a transcript of his or her academic record, and it will be issued in accordance with the student's wishes subject to all transcript policies. A fee is charged for all transcripts, however, an enrolled student is entitled to one free unofficial transcript per semester. The cost for each transcript is \$2 for standard mail, and \$5 for a fax. All transcript fees must be paid when the request is submitted.

To request a transcript, send a letter to Student Records, NMHU Office of the Registrar, Box 9000, Las Vegas, NM 87701, or fax a signed request to 505.454.3552. Include name (and other names that might appear on school records), Social Security number/student ID number, date of birth, approximate first semester attended, complete address where to send transcript, current address and current phone number. The student's signature is required to authorize the transcript's release. Students may also request an official transcript online through our secure website, www.nmhu.edu. For specific policies and procedures associated with requesting transcripts, contact Student Records in the Registrar's Office at 505.454.3455.

Transcripts from other institutions sent to Highlands University for purposes of university admission are not copied or returned to the student.

The Registrar's Office offers electronic transcript delivery. In partnership with SCRIP-SAFE International, New Mexico Highlands University is able to provide official electronic transcripts delivered through eSCRIP-SAFE to network and nonnetwork recipients. To request an electronic official transcript, use the Transcript Request Form, fax or mail your request to the fax number or mailing address at the top of the request, and pay your transcript fee at the time of submission. Students with holds from Business Office, library etc. can not receive or request any type of transcript until all obligations to the university have been met. For questions regarding the delivery or authenticity of an electronic

official sent from Highlands University via eSCRIP-SAFE or any of the information regarding your transcript request form, call 505.454.3455.

# **Transcript Holds**

Transcripts (official or unofficial) will not be released to the student or to any other person or institution until all the student's outstanding obligations to the university have been paid or until satisfactory arrangements have been made. These obligations include, but are not limited to, loans, such as the New Mexico Student Loan Program, tuition and fees, and other charges. All financial arrangements are handled in the Business Office, not the Student Records Office.

# Right to Petition for Hardship

Students are entitled to petition for relief of an unfair academic hardship brought about by any regulation of the university when warranted by special circumstances.

There is a two-year statute of limitation. Academic petitions received after a two-year period will be forwarded to the vice president of academic affairs for consideration.

Academic Petitions Procedures are:

- Student must submit academic petition to the Office of Academic Affairs. All petitions must be typed.
- The Office of Academic Affairs is responsible for obtaining all needed signatures, such as the department chair and dean/director signatures.
- 3. Petitions are sent via university mail by the Office of Academic Affairs to the members of the appropriate subcommittee of the Academic Affairs Committee:
  - a. All undergraduate petitions are sent to the members of the Undergraduate Subcommittee.
  - b. All graduate petitions are sent to the members of the Graduate Subcommittee.
- 4. Members of the subcommittee should respond in one week to the petition. The ballot and all materials must be sent back to the Office of Academic Affairs. The chief academic officer is responsible for tallying the votes and informing the student of the committee's decision.
- 5. If a student's appeal is denied, the student should be informed that he or she may make a personal appeal to the subcommittee. The student may bring witnesses to the hearing. No witnesses may speak, unless a member of the subcommittee asks them questions. At the hearing, the student will be asked to present evidence to support the petition.
  - a. It is the responsibility of the chair of the subcommittee to invite witnesses who may be needed to refute the academic petition. In the case of a grade appeal, the instructor, department chair, and dean may be invited to the hearing by the subcommittee.
  - b. During the hearing, witnesses are heard one at a time by the subcommittee. All witnesses should remain outside of the hearing until called.
- 6. After the presentations, the members of the subcommittee vote on accepting or denying the petition. This information must be sent to the Office of Academic Affairs. This office is responsible for informing the student of the decision by the committee. This is the last step of the petition process, as long as proper procedures have been followed.
- 7. The full committee of the Academic Affairs Committee will not hear academic petitions, unless a violation of procedures has occurred. In the case of procedural violations, the petitions should be brought to the full committee for consideration.

# Academic Amnesty

Academic amnesty will benefit undergraduate students who once attended New Mexico Highlands University but did not continue due to poor grades, which may have resulted in academic probation or dismissal. A student may return to Highlands University, and, once granted amnesty, his or her earlier academic record will not be used for computation of the grade point average. Academic amnesty will make it possible for a student to attain an acceptable GPA for graduation from college. Academic am-

nesty will not be available to students who are expelled from Highlands University because of violation of the Student Code of Conduct, university regulations, or federal, state, or local laws.

A student must meet all of the following conditions to be granted academic amnesty:

- Took courses from Highlands University and then stopped matriculation for five years or more because of poor grades (GPA less than 2.0), academic probation or dismissal.
- Applies for academic amnesty through the Registrar's Office. A student can apply for academic amnesty only once. A student is readmitted to Highlands University on academic probation after application for amnesty is approved.
- Completes the first 24 credit hours at Highlands University with a GPA of 2.0 or better.

Once the first 24 credit hours are successfully completed, the academic amnesty is granted, and:

- All course taken during the earlier matriculation at Highlands, even courses with a C or better grade, will be excluded from GPA calculation.
- Courses with a grade of C or better from the initial matriculation period can be carried forward as earned credit and used to meet degree requirements.
- Courses from the earlier matriculation period remain on the student's Highlands University transcript, but the transcript will bear the statement "Academic Amnesty Granted."

A student will be academically dismissed from Highlands University for failure to attain a GPA of 2.0 in the first 24 credit hours after application for academic amnesty.

## **GENERAL DEGREE POLICIES**

# Associate Degree Requirements

- Fulfillment of the general requirements for graduation.
- Total credits required: at least 64 degree credit hours.
- Minimum cumulative grade point average: 2.0.
- Fulfillment of the discipline requirements for graduation.
- Specific requirements for admission, proficiency, and courses are stated in subsequent sections of
  this catalog, listed under the school and discipline that offers the specific associate's degree sought.
- C or better grades are required in all courses listed as major requirements for the degree.

## Bachelor's Degree Requirements

- Fulfillment of common degree requirements (both curricula).
- Completion of the university's general education requirement (includes proficiency-course requirements, if any, and core-curriculum course requirements). See the core curriculum.
- A total of at least 51 credits in courses numbered 300 or higher.
- A cumulative grade point average of at least 2.0. No credits below C may be counted toward a major or minor.
- C or better grades may be required for support courses in some majors and minors.
- At least 128 total degree credit hours required for graduation.

# Requirements for the specific listing

Degree requirements for the bachelor of arts curriculum:

- One major of at least 30 credits.
- One minor of at least 20 credits, or a second major, or a two-year degree.

Degree requirements for the bachelor of science curriculum:

 One major of at least 30 credits selected from the list of approved bachelor of science degree major programs.

- One minor of at least 20 credits in one of the fields of science other than the field of the major, or a
  combined science minor, or a second major in a bachelor of science degree field other than the field
  of the first major, or a two-year degree in a science field.
- At least eight credits in mathematics, including Math 155, Applied Calculus I or Math 211, Calculus I.

# Requirements for a Second Bachelor's Degree

A student who has completed an undergraduate degree and seeks a second bachelor's degree must meet all requirements for that degree. Some of the work completed for the first degree will meet requirements for the second degree, with the following exceptions:

- The student must complete a minimum of 32 additional semester hours of credit in residence at Highlands University following the completion of the first degree.
- The student must meet all requirements of the major for the second degree.
- Students who earned their first degree at Highlands University may be required to meet any general education requirements different from those in effect at the time of their earlier enrollment.
- Students who earned their first degree at another institution will be required to complete any additional requirements to meet Highlands University's general education requirements.

# **Pre-Professional Programs**

Students can attend Highlands to prepare for further studies at medical, dental, engineering, law, and other professional schools. The university offers pre-professional training in accordance with standards and requirements established by national professional associations for entrance into each profession.

The competition for entrance into professional schools is intense. Students are accepted who show promise of success in the profession (as indicated by aptitude and standard admission tests), who have demonstrated high achievement in academic performance, and who have completed the appropriate pre-professional work in colleges or universities.

Many pre-professional opportunities are offered at New Mexico Highlands University. Programs such as the pre-law program entail the satisfactory completion of an undergraduate degree, because the professional schools in these fields require a four-year degree as one condition for admission. For other programs such as pharmacy, students often begin professional studies after only one or two years of undergraduate pre-professional studies. Professional schools, including medical and dental, will admit students with exceptional qualifications before completion of a bachelor's degree. They are likely to consider an applicant who has already earned a four-year degree.

In developing the appropriate pre-professional course of study, it is advisable for students to become familiar with the specific entrance requirements of the professional school or schools in which they are interested in applying.

Pre-professional advisers at Highlands University are available to assist students in developing their professional plans. Interested students may contact the appropriate pre-professional adviser as soon as possible.

Students interested in pre-professional opportunities may consult the information available in other sections of this catalog. The pre-law option is described in the political science discipline in the history and political science department.

Pre-professional options in health and science professions are described among the program descriptions of the Department of Biology in the College of Arts and Sciences.

All of the degree programs offered at Highlands University prepare students to enter their chosen fields or to pursue studies toward an advanced degree and are designed to meet professional standards for their fields.

In addition, a number of degree programs are aimed specifically at preparing students for entrance into professions that require candidates to obtain a license or certificate after completing their required university studies, such as in education. The program descriptions in other sections of the catalog give more detailed information about these options.

New Mexico Highlands University reserves the right to change its instructional programs at any time. The provisions of this catalog are not to be regarded as an irrevocable contract between the student and New Mexico Highlands University.

#### GENERAL GRADUATION POLICIES

#### **Baccalaureate Graduation Honors**

Graduation honors for undergraduate students are based on the quality of a student's work during the entire period of studies for the degree. All coursework from any accredited university previously attended will be computed for graduation honors.

To be eligible for graduation honors, a student must have been enrolled at this university for at least 32 semester hours. The grade point average determines the honors award for summa cum laude, a GPA of 3.86 or above, magna cum laude, a GPA of 3.70 through 3.85, and cum laude, a GPA of 3.50 through 3.69.

Appropriate recognition is given at the commencement exercises and on the transcript and diploma.

# Catalog of Record

Students may graduate under the catalog requirements for the year in which they were enrolled for the first time in a degree-seeking program, provided they complete the graduation requirements within a six-year period. The student is responsible for knowing the rules and regulations concerning graduation requirements and for registering in the courses necessary to meet them. For specific requirements, see appropriate discipline programs.

#### Graduation

Students need to apply for graduation on a form available in the Registrar's Office. A one-time, nonrefundable graduation fee is charged for each degree. Graduation is subject to completion of all requirements, and students are reminded of the importance of the final degree check. For more information, contact the Registrar's Office, 505 454-3410.

#### Commencement

To participate in the commencement ceremony, a student must be eligible to complete all degree requirements at the end of the spring semester or summer term.

# Posting of the Degree

The degree earned will be recorded on the student's transcript at the end of the semester when all degree requirements have been completed.

# **Graduation Residency Requirement**

To be eligible for graduation under any curriculum or with any degree, students must be in residence on campus for one full academic year (at least 32 semester credits), including the final semester (at least 16 credits).

#### REGISTRATION

Felix Martinez Building, Room 120 Las Vegas, NM 87701 505.454.3233 FAX: 505.454.3552 E-mail: registrar@nmhu.edu

www.nmhu.edu or toll free 1.877.850.9064

# **Registration Periods**

Registration periods are announced for the fall and spring semesters and the summer session each year. The specific dates, locations, and procedures are stated in the schedule of classes for each semester or session. The schedule of classes may be obtained from the Registrar's Office or the website, www.nmhu. edu. Students should receive academic advising before signing up for classes.

Early registration begins on the date noted in schedule of classes and continues through the Friday before late registration. Online registration is available through the website at www.nmhu.edu. For additional information or assistance, call 505.454.3438.

Late registration extends from the first day of classes through Monday of the second week of classes in the fall or spring semester and the first week of classes in summer sessions. During late registration, the selection of classes may be limited, because many classes will already be closed. For specific semester dates, refer to the appropriate schedule of classes.

# Approved Schedules

Each student's selection of courses is subject to approval by the assigned academic adviser. (See Undergraduate Degree Requirements regarding academic advising at Highlands.) Requests for any exceptions to university academic regulations are then reviewed by the Academic Affairs Office for compliance with general university requirements. Students' course selections are subject to review, and a student may be withdrawn from a class if enrollment in the class violates an academic regulation of the university (such as those regulating course levels and maximum loads).

# Auditing a Class or Classes

Audited classes do not count toward any graduation requirements of the university and are recorded with an AU on the student's transcript, subject to attendance at a minimum of 70 percent of the scheduled class sessions.

Students who wish to audit must request this status at the time of registering for the class or through an official change to the approved schedule of classes. Changes from audit to credit or credit to audit may only be made during the first eight weeks of a semester or the first four weeks of a summer session, with instructor approval. Any changes after the deadline will require approval from the chief academic officer. The exact deadline for changing the credit/audit status of courses is stated in the schedule of classes for each term.

# Changes to the Approved Schedule of Classes

Changes to a student's approved schedule of classes may be made through the Registrar's Office between 8 a.m. and 5 p.m. on weekdays. See the schedule of classes for additional information.

# Adding and Dropping Classes

The first six days of a semester and the first week of a summer session constitute the late registration period. During this period, students may add courses to their schedule, either in substitution for a class or classes being dropped or as an increase in the number of classes. The total number of credits allowed is subject to limits stated elsewhere in this section.

During the first two weeks of the semester, students may drop classes. Tuition charges will be adjusted, and the course will not appear on the student's transcript.

After the drop period, students may withdraw from classes but may no longer add new classes or substitute different classes. Withdrawal from classes is allowed through the tenth week of the semester. For the last day to withdraw from summer term, refer to the schedule of classes. The course(s) will remain on the student's transcript, recorded with a grade of W. In addition, students will be required to pay tuition charges and fees on any classes in which they are enrolled after the end of the late registration period, even though they subsequently withdraw from them. (The late registration period is defined above.)

Any courses added to original schedule of classes throughout the semester may result in overload tuition charges.

Instructors do not drop or withdraw students from classes. It is the student's responsibility to do so. Students who wish to drop or withdraw from all their classes must complete the procedure for withdrawing from school. Students who remain enrolled in a class after the deadline to withdraw will receive a grade (other than a W) in the class.

# Withdrawing from School

If a student wishes to withdraw from school, the student must do so officially through the Registrar's Office. Students who find themselves unable to appear personally must contact the registrar by phone, letter, e-mail, or fax to request assistance in completing the process of withdrawing. The last day to

withdraw from classes is subject to change and is reflected in yearly academic calendars as well as published in the schedule of classes.

A schedule of deadlines for full or partial refund of tuition is published in each semester or summer term schedule of classes. The refund policy is stated under Special Policies.

# Regarding Tuition and Fees

If withdrawal from school occurs within the drop period, no courses will appear on the transcript for that term. If withdrawal occurs after the drop period, W grades are entered for the classes. Students who leave school without completing an official withdrawal from school will receive grades of F for that term. The last day to withdraw from school may coincide with the last day to withdraw from class. For specific information, contact the Registrar's Office at 505.454.3438.

# Undergraduate Student Loads During a Semester

An average of 16 semester credits must be completed each semester if a student is to graduate in four years. Some students take more than the minimum credits required for graduation, either for personal interest or because the major or minor programs of choice are lengthy. Students should plan their load carefully, considering desired speed of progress and minimum loads required for continuation of financial assistance and scholarships.

The regular maximum load for undergraduate students is 18 semester credits. The dean may approve a student's schedule for an overload of more than 18 credits, provided the adviser recommends the overload, the student has a grade point average above 2.5 for the preceding semester, the student is neither engaged in formal extracurricular activities nor employed more than 20 hours per week, and the student is not on probation. No undergraduate student may take more than 22 semester credits hours.

# Undergraduate Student Loads During a Summer Session

The regular maximum load for undergraduate students in a summer session is nine credits. The deans approve a schedule for more than nine credits subject to the conditions stated above for overloads in a regular semester. No undergraduate student may take more than 12 credits in a summer session.

# Full-Time Loads (Undergraduate)

For financial assistance purposes, a full-time undergraduate student is defined as one who is taking at least 12 semester credits in a regular semester and six semester credits in a summer session. Requirements for full-time status vary for scholarship recipients, but frequently exceed the 12-credit minimum.

# Classification of Undergraduate Students

Classification of students is based on completion of semester credits and other criteria, as follows:

#### Lower Division:

Freshman Fewer than 33 credits Sophomore 33 through 63 credits

#### Upper Division:

Junior 64 through 95 credits Senior 96 credits and above

Reclassification of students occurs automatically upon completion of the prescribed number of credits. However, the chief academic officer may invoke the following additional regulations in assessing a student's preparation to take 300- or 400-level classes:

Sophomore students must have completed English 111.

Junior and senior students must have completed English 111 and 112, satisfied the mathematics proficiency requirements, and filed approved major and minor forms.

# **Course Numbers and Levels**

Proficiency: Courses numbered below 100 are proficiency courses. These credits do not count toward

graduation, but do count in a student's course load. Also Math 100 and Engl 100, and any course numbered 135N do not count toward the 128 credits required for a degree.

Lower Division: Courses numbered from 100 through 199 are freshman courses. Courses numbered from 200 through 299 are sophomore courses.

Upper Division: Courses numbered from 300 through 399 are junior courses. Courses numbered from 400 through 499 are senior courses.

Graduate Division: Courses numbered from 500 through 599 are for graduate students; undergraduate students may be enrolled in the same course under a 400 number. In this case, the graduate students in 500-level courses will be required to demonstrate graduate level proficiency in the work. Courses numbered 600 or above are only for graduate students.

The following regulations apply to allowable course levels:

- Freshman students may not enroll in 300- or 400-level courses.
- Sophomore students may enroll in 300-level courses but not in 400-level courses.
- Junior and senior students may take 400-level courses.
- Only graduate students and undergraduates with advanced standing may enroll in 500- or 600-level courses. No exceptions will be made to this rule.

# UNDERGRADUATE DEGREE REOUIREMENTS

#### Overview of Academic Decisions to be Made

All students who are seeking to earn a degree must decide upon a degree objective and one or more academic specializations. At Highlands University, the academic specializations are called academic majors and minors.

Major/Minor: All degree-seeking students declare their specific academic field(s) through an official form, the major or minor form, which is to be filed at the Registrar's Office after all required signatures are obtained. For the bachelor's degree, this procedure should be completed by the time students enter upper-division status. For the associate degree, this procedure should be completed before students register for their second term of studies. Students should know that timely filing of the required major and minor forms may be made a condition of registering for classes or receiving scholarships or financial assistance.

Degree Check: Required at one or two points during each student's time at Highlands University. Bachelor's degree candidates are required to have a degree check at the beginning of their third year of studies. In addition, all degree candidates should have a final degree check prior to the start of the semester in which they plan to graduate. The degree check is an official procedure that is carried out by appointment in the Registrar's Office. Degree checks are used to identify remaining requirements for graduation and are an essential step in responsible academic planning. Students who neglect the degree-check process too often learn of unexpected requirements near the end of their studies, resulting in a delay in completing their degrees.

# Overview of Course and Program Requirements

This section conveys specific requirements for completing an academic program and qualifying for graduation. Students are responsible for knowing and following the correct procedures and for meeting the conditions established for their academic programs and progress at the university. The following summary is intended to supply a convenient overview.

For the associate degree, all course and program requirements are stated in the Academic Programs and Courses section of this catalog.

Bachelor's degree students must look in a number of different places to know the requirements for graduation. The requirements include the following:

Proficiency Requirements: Many students will discover that they have one or more proficiency course

requirements. Students and their advisers will plan how they may best meet these needs, which should be taken care of as soon as possible. Proficiency requirements are stated along with the core curriculum requirements.

Core Curriculum Requirements: During the first two years, bachelor's degree candidates typically concentrate on completing many of the courses for the university's core curriculum. The core consists of courses that give a breadth of exposure to the many important academic subjects essential to a university's education. These requirements are listed later in this section.

Academic Major and Minor Requirements: Bachelor's degree candidates typically concentrate on their major and minor fields between the sophomore and senior years at the university. Each bachelor's degree candidate selects an academic major and a minor or, in place of a minor, a second major. Some professional programs do not require a minor. Courses used in satisfaction of core curriculum requirements may be used also toward an academic major or minor if so approved.

General Graduation Requirements: Bachelor's degree candidates must complete at least 128 credits with a GPA of at least 2.00 or better to earn their degrees. In addition, the university requires that at least 51 of these credits must be at the 300- or 400-level (upper-division courses). Students and their advisers should carefully monitor these requirements to avoid unintended delays in graduating.

**Progress and Performance Requirements:** Students must carefully monitor their grades and overall academic planning. Standards for academic performance and progress must be met for continuation of financial assistance and athletic or academic scholarships. (These requirements are given to each student along with the financial assistance or scholarship award and are summarized elsewhere in this catalog.) The student also must be aware of academic requirements for minimum grade averages and the declaring of major and minor fields.

# Academic Advising at Highlands

Every student seeking to complete a degree at the university is assigned to an appropriate adviser. Specifically, the adviser helps with the selection of courses that each student proposes each semester and also works on the student's plans for an academic specialization.

When students decide upon or change their academic fields of study, they may be reassigned to a new adviser. Once students have declared their major, their advisers will be faculty members in the field of the major. The dean's office of the college/school supervises the assignment of advisers. Students needing help in identifying an appropriate advisor should go to the office of the appropriate college/school dean.

# The Core Curriculum and Proficiency Course Requirements

(For New Mexico Common Core information please refer to Page 14.)

English proficiency is demonstrated by:

- A minimum English ACT score of 17 OR
- Successful completion of the Compass Placement Exam OR
- Engl 100 Reading & Writing for College (3)

Language proficiency is demonstrated by:

• Proficiency assessment or two semesters of a language other than English.

Computer proficiency is demonstrated by:

- Proficiency Assessment OR one of the following:
- CS 101 Living with Computers (3)
- CS 144 Intro to Computer Sci (3) (CS, Math and Sci majors)
- CS 145 Object-Oriented Prog (3) (CS, Math and Sci majors)

Mathematics proficiency is demonstrated by:

- Math 100 Introduction to Algebra (3) OR minimum ACT score of 17.
- Math 120 Intermediate Algebra (3) OR minimum ACT score of 23.

A student with an ACT score of 29 in English or mathematics will be awarded three credits respectively.

#### Area I: Communications (9 hours):

Engl 111 Freshman Comp 1 (3)

OR ACT of 29

Engl 112 Freshman Comp 2 (3)

MArt 124 Beginning Speech (3)

#### Area II: Mathematics (3 hours):

Math 130 Math for Elem Tchrs 2 (3) (Only if approved by department)

Math 145 Intro to Statistics (3)

Math 140 College Algebra (3)

OR ACT of 29

Math 155 Applied Calculus 1 (3)

Math 160 Precalculus (5)

Math 211 Calculus 1 (4)

#### Area III: Lab Science (8 hours):

Choose two 100-level lab science courses selecting not more than one from each discipline.

Biol 110 Biol Perspectives (4)

Biol 131 Human Biology (4)

Biol 211 General Biol 1 (4)

Biol 212 General Biol 2 (4)

Chem 100 Chem for the Non-Sci (4)

Chem 211/215 General Chem 1/Lab (5)

Chem 212/216General Chem 2/Lab (5)

For 105 Ecosystems & Humans (4)

Geol 101 Survey of Earth Sci (4)

Geol 105 The Planets (4)

Phys 105 Elementary Physics (4)

Phys 110 Survey & Astronomy (4)

Phys 151 Algebra Physics 1 (4)

Phys 152 Algebra Physics 2 (4)

Phys 291 Calculus Physics 1 (5)

Phys 292 Calculus Physics 2 (5)

#### Area IV: Social/Behavioral Sciences (6 - 9 hours):\*

Choose two to three (2 to 3) courses selecting not more than one from each discipline.

Anth 102 Intro to Sociocultural Anthropology (3)

Anth 103 Intro to Phys Anth & Archaeology (3)

Econ 216 Prin of Macro (3)

Econ 217 Prin of Micro (3)

PolS 151 American Natl Govt (3)

Psy 101 Psychology & Society (3)

Soc 152 Intro to Sociology (3)

#### Area V: Humanities and Fine Arts (6-9 hours):\*

Select three to six (3 to 6) hours from humanities.

Hist 100 The Western World (3)

Hist 201 U.S. History to 1865 (3)

Hist 202 U.S. History from 1865 (3)

Phil 100 Intro to Philosophy (3)

Select three to six hours from fine arts.

Art 100 Intro to Art (3)

AH 310 Art History 1 (3)

AH 311 Art History 2 (3)

AH 340 Modern Art (3)

AH 380 Art of the Americas (3)

MArt 261 Hist of Motion Pict (3)

Mus 100 Intro to Music (3)

Mus 101 Rudiments of Music (3)

Thea 100 Intro to Theater (3)

# Other university requirements (5 hours):

PE 100 Fit for Life (2)

OR Physical Education (2)

Literature - Choose three (3) credits in Literature offered by English or Languages.

# **ACADEMIC PROGRAMS AND COURSES**

# **Academic Programs and Courses**

The academic program at Highlands University is administered through the one college and three schools. Students and any others who need assistance or information about academic programs should contact the office of the dean of the appropriate academic unit. In this section of the catalog, the academic program is presented by discipline within each college/school. Program descriptions and instructional requirements are given for each discipline and courses are listed alphabetically by discipline unit.

# Symbols and Abbreviations in Course Listings

Courses are listed by course number followed by course title. Courses offered concurrently at more than one level are listed with a split number (e.g., 234-334).

The number in parentheses following the title indicates the number of credits for that course. When a range of credits is offered, the specific number of credits within that range is determined either when the course is scheduled or, for variable-credit courses (identified as VC), when each student selects an individually approved number of credits.

When there are numerals following the number of credits, it indicates a number of contact hours per week different from the number of credit hours. For example, 484. Hematology (4); 2, 4

The first number indicates lecture contact hours, and the second number indicates lab or studio contact hours. Their sum equals the total contact time. When no numerals follow the number of credits, the course's contact hours per week match the number of course credit hours (with one hour comprising 50 minutes of meeting time).

Course listings with "Sp" or "Fa" following the title indicate the spring or fall semester in which the course is offered. "Alt" signifies that the course is offered every other academic year.

Any specific prerequisites or corequisites are stated at the end of the course description. These are enforced by academic program advisers and by the faculty member teaching the course in question. In cases where specific course prerequisites are not stated, assumption of ability to perform at the appropriate level in that discipline is still made.

<sup>\*</sup> Areas IV and V: The total number of credits must be a minimum of 15 credits.

# **UG Majors, Minors, Concentration, Certificates**

# Major in English (B.A.) Traditional, English Education, and Pre-Professional Tracks

To earn a B.A. in English, students are required to complete at least 12 three-credit courses in English beyond the composition sequence (Engl 100, 111, 112) for a total of 36 credit hours. Students must also satisfy the following general distribution requirements:

- One American Literature Survey Engl 294 or Engl 295 (two courses are recommended)
- British Literature Survey Engl 290
- British Literature Survey Engl 291
- English 302: Literary Theory (To be taken in the junior year. Students in the pre-professional track
  may substitute any course in rhetoric, linguistics, or writing)
- At least one course in grammar, linguistics, or rhetoric.
- At least one course in Shakespeare, Chaucer, or Milton.
- Engl 411: Major American Writers
- Engl 412: Major British Writers

Electives (15 hours):

Students majoring in English and minoring in secondary education must take:

• Engl 317: Introduction to Modern Grammar

AND

• Engl 350: Methods of Teaching Reading and Writing

The remaining courses (for a total of 36 credit hours) are program electives.

There are other university requirements that must be satisfied before the degree can be conferred. For a student to graduate, at least 51 credits at the 300 level or above (from any discipline) must be accumulated. While many of these upper-level credits may be accumulated through coursework in the minor, it is highly recommended that students also take additional English elective courses to satisfy this requirement. Please note: These courses have certain prerequisites. See specific course descriptions for details. Students are advised to check with the registrar far in advance of the anticipated graduation date to determine if all graduation requirements have been or will be satisfied.

All English majors must consult with their English adviser each term prior to registration. During the first meeting, the adviser and student will develop a long-term plan for completing the program.

# **English Education Track**

Students preparing for careers as high school English teachers must major in English (in the English education track), minor in secondary education, and complete coursework required for state licensure. They must consult with two faculty advisers: one in the English department and one from the School of Education. Furthermore, students in this track must take the New Mexico Teacher Assessment Exam between their sophomore and junior year and must plan to have all coursework in English completed before the start of their final semester, which will be devoted to field preparation.

#### Pre-Professional Track

Students interested in majoring in English as preparation for professional careers in such areas as business, government, law, or administration should concentrate on courses in writing, and linguistics. Those specifically interested in law school should also take courses in philosophy and logic. This track is not intended for students pursuing teaching careers. The pre-professional track is recommended for students double majoring in English and a field with heavy course requirements.

# Minor in English

#### Required courses: 9 credit hours

• Engl 317: Introduction to Modern Grammar (3)

#### Choose two courses from the following:

- Engl 290: British Literature to 1700 (3)
- Engl 291: Brit Lit to 1700 to Present (3)
- Engl 294: Amer Lit to 1865 (3)
- Engl 295: Amer Lit, 1865 to Present (3)

# Electives: 12 credit hours Minor Total: 21 credit hours

# Minor in English Writing

# Required courses: 12 credit hours

- Engl 317: Intro to Modern Grammar (3)
- Engl 365: Nonfiction Prose (3)
- Engl 367: Technical Writing (3)
- Engl 443: Sociolinguistics (3)

#### OR

• Engl 485 Stylistics (3)

#### Electives: 9 credit hours

Choose three courses from the following:

- Engl 214: Autobiography (3)
- Engl 262: Intro to Creative Wrtg (3)
- Engl 305: Adv Composition (3)
- Engl 307: Writing as Advocacy (3)
- Engl 309: A Hist of Writing (3)
- Engl 310: Creative Nonfiction (3)
- Engl 350: Meth of Teaching Reading and Writing (3)
- Engl 362 Creative Wrtg: Poetry (3)
- Engl 364: Creative Wrtg: Fiction (3)
- Engl 400: Creat Wrtg: Experimental Fiction (3)
- Engl 401: Creat Wrtg: Adv Poetry (3)
- Engl 441: Hist of the English Lang (3)
- Engl 2/434 Practicum (1-4)
- Engl 463: Rhetoric & Reality (3)
- Engl 464: Women & Rhetoric (3)

Minor Total: 21 credit hours

# Minor in Philosophy

#### Required courses: 12 credit hours

- Phil 100: Intro to Phil (3)
- Phil 201: Ancient and Medieval Philosophy (3)
- Phil 203: Modern Phil (3)
- Phil 211: Formal Logic (3)

#### Electives: 12 credit hours

Choose one course from the following list:

- Phil 321: Business Ethics (3)
- Phil 322: Biomedical Ethics (3)
- Phil 323: Envir Ethics (3)

#### Choose one course from the following list:

- Engl 302: Literary Theory (3)
- Phil 472: Cognitive Science (3)

- Phil 484: Phil of History (3)
- PolS 458: Political Theory and Philosophy (3)

Choose two courses from the following list:

- Phil 2/435: Selected Topics: Philosophy (3)
- Phil 312: Phil of Science (3)

#### • Phil 316: Phil of Religion (3)

- Phil 317: The Bible as History (3)
- Phil 3/400: Major Philosophers (3)
- Phil 3/405: Major Philosophical Movements (3)
- Phil 440: Philosophy of Art and Aesthetics (3)

#### Minor Total: 24 credit hours

# Religious Studies Minor

# Required courses: 6 credit hours

Students taking this minor are strongly encouraged to select Phil 100 as part of their core requirements.

Choose at least two courses from the following list:

• Anth 422: Religion & Culture (3)

Students taking Anth 422 should fulfill the prerequisite for this course by selecting the appropriate anthropology or sociology options in the core.

- Engl 282: Classical Myth (3)
- Phil 316: Phil of Relig (3)

#### Electives: 15 credit hours

Fifteen additional credits will be chosen in consultation with the Religious Studies Minor Committee for the courses listed below. Six credits must be at the 300 or 400 level.)

- Anth 274: Indian Cultures in Latin America (3)
- Anth 235-435: Selected Topic in Anth (1-4)
- AH 310: Art History I (3)
- AH 380: Art History: The Americas (3)
- Engl 281: Norse Mythology (3)
- Engl 283: Celtic Mythology (3)
- Engl 341: Bible as Lit: Old Testament (3)
- Engl 342: Bible as Lit: New Testament (3)
- Engl 343: Eastern Spiritual Classics (3)
- Engl 391: Arthurian Lit (3)
- Engl 423: Milton (3)
- Hist 321: The Ancient World (3)
- Hist 322: Medieval Europe (3)
- Hist 435: Selected Topics: The Triumph of Christianity (3)
- Mus 311: Western Art Music Before 1750 (3)
- Mus 435: Selected Topics: Sacred Hispanic Musical Traditions (3)
- Phil 201: Ancient and Medieval Philosophy (3)
- Phil 317: Bible as History (3)
- Phil 318: Native American Philosophy (3)
- Phil 325: Ethics (3)
- Psy 479: Psychology of Religion (3)
- Span 462: Southwest Folklore (3)

#### Minor Total: 21 credit hours

# Cognitive Science

Cognitive science is an interdisciplinary field concerned with the nature of the mind. Drawing on the resources of mathematics, philosophy, psychology, computer science, linguistics, and other disciplines, students of cognitive science study such phenomena as consciousness, the relation of the mind to the body, and the nature and limits of computation. This discipline addresses long-standing questions about the nature of thought, intelligence, perception, emotion, and other aspects of mental life by examining the way information is processed in computers, the nature of language, and the relation of cognition to the brain.

Please refer to the Interdepartmental Programs section in this catalog for further details regarding this minor.

# Courses in English (Engl)

Note: Any 100-, 200- or 300-level literature course will satisfy the core requirement. Courses marked with an asterisk (\*) satisfy the core literature requirement.

# 100. Reading and Writing for College (3); 3,1

(This course is required of students scoring below 17 on the ACT. These students may attempt to test out by taking the Highlands Writing Placement Test.) This course is an intensive practice in reading, interpreting, and responding to written works. Students will be required to write a number of essays and pass a committee-graded exit exam at the end of the course. Note: This course does not count towards the 128-credit-hour requirement for graduation.

#### 105. College Discourse (3)

This course is to be taken in conjunction with English 100. It examines levels of formality in spoken and written English with particular attention to communicative situations of the university.

# 111. Freshman Composition I (3)

Students will be required to write a number of essays demonstrating mastery of a variety of forms of organization. Prerequisite: 17 or higher on the ACT English Usage Test or completion of Engl 100 with a grade of C or better. Students may also test out through the ETS Advanced Placement exam. See the Registrar's Office for details. NM Common Course Number: Engl 1113

#### 112. Freshman Composition II (3)

This course is an introduction to the analysis and interpretation of textual sources and the writing of documented papers, emphasizing use of secondary sources, bibliography, organization of material, and effective presentation of research findings. A grade of C or better in Engl 111 is required or 29 or higher on the ACT English Usage Test. Students may also test out through the CLEP exam. A grade of C or better is required in this course. See the Registrar's Office for details. *NM Common Course Number: Engl 1123* 

#### 151. Introduction to Drama (3) \*

This course is a close reading and analysis of drama selected from world literature of all ages. Prerequisite: Engl 100, passed with a grade of C or better.

# 152. Introduction to Fiction (3) \*

Close reading and analysis of prose fiction selected from world literature of all ages. Prerequisite: Engl 100, passed with a grade of C or better.

# 202. Fairy Tales (3) \*

This course examines fairy tales for their literary and cultural significance. Prerequisite: Engl 111.

#### 214. Autobiography (3) \*

This course approaches autobiography through both theory and practice by analyzing major autobiographies and by producing autobiographical writings. Prerequisite: Engl 111.

#### 234 - 434. Practicum (1 - 4 VC)

Students gain practical knowledge through internships in such areas as tutoring, editing, public relations, and feature writing. Prerequisite: Engl 111.

#### 235 – 435. Selected Topic in English (1 – 4 VC)

Course in a topic or topics in English. May be repeated with change of content. Prerequisite: Engl 111.

#### 262. Intro to Creative Writing (3)

This course provides students with introductions to various types of creative writing including fiction, poetry, playwriting, the personal essay, and the travel narrative. May be repeated with change of content. Prerequisite: Engl 111.

#### 272. Introduction to Poetry (3) \*

This is a survey course in the close reading and analysis of poetry. Class discussions are lively and engaging, encouraging students to take critical pleasure in poetry. The course covers a variety of U.S. and world poets and poetic themes. Prerequisite: Engl 111. NM Common Course Number: Engl 2313

# 277. Introduction to Popular Culture (3) \*

This course is a survey of popular literary genres (romances, action–adventure) as well as film and television. Focuses on the interrelationship between myth, culture, politics, and the "culture industry." Prerequisite: Engl 111.

#### 278. Science Fiction (3) \*

This course is a close reading and analysis of major science fiction works. Explores science fiction as cultural metaphor and modern myth. Prerequisite: Engl 111.

#### 279. Horror Literature (3) \*

This course is a study of the folk origins of the horror story and its manifestations in mainstream and genre fiction and film. Prerequisite: Engl 111.

#### 282. Classical Mythology (3) \*

This course examines Greek and Roman myths for their literary and cultural significance. Prerequisite: Engl 111.

#### 283. Celtic Mythology (3) \*

This course examines Celtic myths and sagas of medieval Ireland and Wales for their literary and cultural significance. Prerequisite: Engl 111.

#### 284. Twentieth-Century Literature (3) \*

This course is a study of modern sensibility as manifested in contemporary works written in English and English translation. Prerequisite: Engl 111.

#### 290. British Literature to 1700 (3) \*

This course examines British literature from the early Middle Ages through the late Renaissance, including Beowulf, Sir Gawain and the Green Knight, and selected works of Chaucer, Spenser, Shakespeare, Milton and others. Prerequisite: Engl 112. NM Common Course Number: Engl 2413

#### 291. British Literature from 1700 to Present (3) \*

This course is a study of representative authors of the neoclassic, Romantic, Victorian, and modern British periods. Prerequisite: Engl 112. NM Common Course Number: Engl 2513

#### 294. American Literature to 1865 (3) \*

This course is a study of major American works that exemplify the changing philosophies and literary trends of Colonial America, the early republic, and the American Renaissance. Emphasis is on the changing views of humankind and God and on the literary treatment of the elusive "American Dream." Prerequisite: Engl 112. NM Common Course Number: Engl 2513

#### 295. American Literature, 1865 to the Present (3) \*

This course examines the development of American poetry and fiction from Mark Twain and the rise of realism to the present. Emphasis is on the major literary schools and authors of the period. Prerequisite: Engl 112. NM Common Course Number: Engl 2523

#### 302. Literary Theory (3)

This course is an introduction to literary terms and to theories of literature from Plato to the present and their application to various ancient and modern works. Prerequisite: Two English courses beyond 111 and 112.

#### 305. Advanced Composition (3)

This course examines the relationship between reading, writing, and thinking, and how the craft of writing can strengthen all three. Students will study different authors' perspectives on an issue and develop their own written responses, crafted through sustained revision. Prerequisite: Engl 112.

# 307. Writing as Advocacy (3)

Students will study writing as advocacy or writings as social action taken on another's behalf. Students will select an individual, class of people, or organization for which to advocate, then research and create ways to act on their behalf. Prerequisite: Engl 112.

#### 309. A History of Writing (3)

This course is a cross-cultural study of writing and writing systems, the development of script, and the social contexts of use. Prerequisite: Engl 112.

#### 310. Creative Nonfiction (3)

This is a workshop class in creative nonfiction, "the literature of reality." Students compose nonfiction essays suitable for publication on such topics as memories, portraits, objects of desire, the city, the natural world, sports, spirituality and travel. Prerequisite: Engl 112.

#### 312. The American Fool (3) \*

This course is an in-depth study of the archetype of the fool and its appearance in American literature. Prerequisite: Engl 112.

#### 314. Women in Literature (3) \*

This course is a study of literary works chosen to demonstrate the historical and contemporary representation, including stereotyping, of women in poetry and fiction. Prerequisite: Engl 112.

## 315. Native American Women's Literature: Voices and Visions (3) \*

This course is a study and exploration of women's voices in contemporary Native American literature. Prerequisite: Engl 112.

#### 317. Introduction to Modern Grammar (3)

This class provides an introduction to the components of language – phonology, morphology, syntax, and semantics – as well as various grammar models. Topics also include the relations between language and social contexts, and language and writing.

# 318. Chicano/a Literature (3) \*

This course is a survey examining the major texts of the Chianco/a experience, including traditional, community-centered folktales and *corridos*, contemporary prose, poetry, drama and nonfiction. Prerequisite: Engl 112.

#### 342. The Bible as Literature: New Testament (3) \*

This course is a study of New Testament literature, focusing on the various literary arts of the Gospels, Acts, Epistles, and Revelation. Prerequisite: Engl 112.

# 350. Methods of Teaching Reading and Writing (3)

This course provides a review of traditional and current methods of teaching reading and writing. Students examine current reading and writing theory and research with an eye toward the implications for pedagogy.

# 362. Creative Writing: Poetry (3)

This course is an intensive and creative course in the craft of poetry. Objectives include the recognition and imitation of selected techniques and the writing of original works. Prerequisite: Engl 112 and Engl 272.

#### 364. Creative Writing: Fiction (3)

This course is an intensive study of selected works of short fiction with emphasis on the components of this literary form; writing of original works in the form. Prerequisite: Engl 112.

# 365. Nonfiction Prose (3) \*

This course is an introduction to the reading and analysis of creative nonfiction essays such as biography, travel, nature, social commentary, the urban scene, sports, and the domestic and fine arts. Prerequisite: Engl 112.

#### 367. Technical Writing (3)

Students develop the principles of scientific, professional, and technical writing. Major assignments include formal proposals and reports. Minor assignments include resumes, short reports, instructions, correspondence, and memoranda. Stress is placed on developing a clear and concise writing style. Prerequisite: Engl 112. NM Common Course Number: Engl 2113

#### 381. African-American Writers (3)

This course is a study of the scope, excellence, and distinctive qualities of the writing of African-Americans in the United States. Prerequisite: Engl 112.

#### 391. Arthurian Literature (3)

This course examines literature generated by the legends of King Arthur and his court, studied in a variety of European texts from the Middle Ages. Prerequisite: Engl 112.

#### 400. Creative Writing: Experimental Fiction (3)

This course examines advanced fiction writing with an emphasis on experimental techniques, styles, and approaches, including stream of consciousness and fictive autobiography. The reading component of this course will include theoretical and creative texts.

#### 401. Creative Writing: Advanced Poetry (3)

This course is a writing workshop for experienced poets. Students will write original poems and read 20th century poetry and poetics from the United States and around the world. Prerequisite: Permission of the instructor after review of a writing sample.

#### 405. Gender and the Politics of Literacy (3)

This course explores the historical connections between literacy and reason/emotion, focusing on how each has been historically gendered. The course begins with a history of style and how metaphors of gender have been used to describe writing. It then studies how cultural beliefs about literacy shape our conceptions of the "individual," "citizen," "aesthetic," and "rationality," particularly how those categories apply differently to men and women. Prerequisite: Engl 112.

#### 411. Major American Writers (3)

This course is an in-depth study of a major author or authors, school, genre, tradition in American literature. Possible topics include literature of the American West; American modernism; American poetry. May be repeated with change of content.

#### 412. Major British Writers (3)

This course is an in-depth study of a major author or authors, school, genre, or tradition of British literature. Possible topics include Byron and the Satanic School, the British moderns (Lawrence, Woolf, Joyce). May be repeated with change of content. Prerequisite: Junior standing.

#### 414. Literary Realism (3)

This course covers the international development of the theory and practice of the realist novel. Prerequisite: Junior standing.

#### 421. Chaucer (3)

This course is an intensive study of *The Canterbury Tales* and selected minor works. Prerequisite: Junior standing.

#### 422. Shakespeare (3)

This course is an intensive study of a group of Shakespeare's plays, such as comedies, tragedies, Greek plays, English history plays, or late romances. May be repeated with a change of content. Prerequisite: Junior standing.

#### 423. Milton (3)

This course is an intensive study of *Paradise Lost* and selected minor works. Prerequisite: Junior standing.

# 434. Practicum (1 – 4 VC)

Students gain practical knowledge in such areas as tutoring, editing, public relations, and feature writing. Prerequisite: Junior standing.

#### 435. Selected Topic in English (1 – 4 VC)

This is a course in a topic or topics in English. May be repeated with change of content. Prerequisite: Junior standing.

#### 441. History of the English Language (3)

This course is an investigation of the origin of modern English with a study of the evolution of English sounds, inflections, vocabulary, and syntax from earliest times to the present. Prerequisite: Junior standing.

# 442. Contemporary English Linguistics (3)

This course is an examination of the structures, processes, and functions of elements of the English language with particular attention to their description in the theories of cognitive grammar.

## 443. Sociolinguistics (3)

This course is an examination of language use and variation. Topics to be addressed include sociolinguistic theory, research methods and application; diglossia and multilingualism; pidgins and creoles; patterns of discourse; forms of addresses and reference; sociolinguistics of writing. Prerequisite: Junior standing and Engl 317.

#### 450. Seminar in English (1 – 4 VC)

This course is a seminar course in a topic or topics in English. Possible topics include literature of exploration, existentialism, literature and the law. Prerequisite: Junior standing.

#### 482. Literature of the Southwest (3)

This course is an examination of the tricultural literary heritage of the southwestern United States. Readings include journals and diaries of the territorial period as well as imaginative works by novelists of the Southwest. Emphasis on cultural traditions that shaped the literature. Prerequisite: Junior standing.

#### 485. Stylistics (3)

This course is an examination of linguistic principles specifically as they apply to the analysis of written texts. Students will learn to make the kind of textual observations needed to reveal the stylistic traits and tendencies in the language of literature. Prerequisite: Junior standing.

#### 490. Senior Readings (1 – 4 VC)

Primarily intended for English majors, this course is an individual, directed study of selected author(s) or topic(s) arranged with an instructor. Prerequisite: Junior standing and permission of instructor.

#### 499. Supervised Research (1 – 4 VC)

Primarily intended for English majors, this course is an individual, directed research project arranged with an instructor. Prerequisite: Junior standing and permission of instructor.

# Courses in Philosophy (Phil)

#### 100. Introduction to Philosophy (3)

This course examines the nature of philosophical inquiry, classical and contemporary solutions to major philosophical problems, ethics, philosophy of religion, philosophy of science, and basic principles of logic and critical thinking. NM Common Course Number: Phil 1113

#### 201. Ancient and Medieval Philosophy (3)

This course is a survey of ancient and medieval philosophy including, but not limited to, the pre-Socratics, Socrates, Plato, Aristotle, Augustine, and Aquinas.

# 203. Modern Philosophy (3)

This course is a survey of the philosophies of Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

#### 211. Formal Logic (3)

This course examines contemporary logical analysis. NM Common Course Number: Phil 1213

#### 235 - 435. Selected Topic in Philosophy (3)

Course in a topic or topics in philosophy. May be repeated with change of content.

#### 300 - 400. Major Philosophers (3)

This course is a study of a major philosopher's work. May be repeated with change of content.

#### 305 - 405. Major Philosophical Movements (3)

This course is a study of a major philosophical movement or philosophy. May be repeated with change of content.

#### 312. Philosophy of Science (3)

This course explores the foundations of science: nature, scientific methods, the ultimate constituents of matter, causality, laws of nature, the nature of hypotheses and theories.

#### 316. Philosophy of Religion (3)

This course examines proofs for the existence of God, the problem of evil and the immortality of the soul.

# 317. The Bible as History (3)

This course is a study of how the areas of Biblical criticism and archaeology have contributed to our understanding of the Old Testament (Hebrew Bible) as a historical document.

#### 318. Native American Philosophy (3)

This course will consider the world views, values and ideas that characterize various Native American groups in North America.

## 321. Business Ethics (3)

This course examines moral reasoning and issues in business with an emphasis on the application of ethical theories to practical business decision making.

#### 322. Biomedical Ethics (3)

This course examines topics such as euthanasia, research methods (fetal research, research on animals, drug experiments), patient-medical staff relationships, abortion, and the patient's right to know.

#### 323. Environmental Ethics (3)

This course is a study of the moral issues raised by human interactions with nonhuman forms of life and the environment as a whole.

#### 325. Ethics (3)

This course is a study of the basic theories of ethics and the application of these theories to ethical issues presented to us by modern society. NM Common Course Number: Phil 2113

#### 440. Philosophy of Art and Aesthetics (3)

This course is a study of the theoretical grounds for the various philosophers of art.

#### 450. Seminar in Philosophy (1 - 4 VC)

Seminar course in a topic or topics in philosophy.

## 472. Cognitive Science (3)

This course is an interdisciplinary investigation of the foundations of human knowledge, representation and understanding, the functioning of the human brain, and how these impact on recent computer technologies. Cross-listed as: Psy 472 and CS 472.

# 484. Philosophy of History (3)

This course is a chronological survey of the development of the concept of history and its philosophical foundations. Cross-listed as: Hist 484.

#### 490. Independent Study (1 - 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

# Major in History (B.A.)

#### Required courses: 6 credit hours

- Hist 301: Research Methods (3)
- Hist 480: Historiography (3)

#### Electives: 26 credit hours

Choose at least nine additional credits in 300- and 400- level courses from history (or political science courses that are cross-listed in history) in consultation with the major adviser. Choose 17 additional credits in courses at any level from history (or political science courses that are cross-listed in history) in consultation with the major adviser.

#### Major total: 32 credit hours

# Minor in History

Choose at least 20 credits from courses in history and allied fields, in consultation with the minor adviser, according to the following criteria: At least seven of the credits must be from courses at the 300- to 400 level; at least 14 of the credits must be from courses in history.

#### Minor Total: 20 credit hours

# Major in Political Science (B.A.)

The major in political science is offered with two emphases: liberal arts and law. The law emphasis provides a foundation in government and political systems and addresses legal systems and dimensions of constitutional, public and criminal law. The liberal arts emphasis provides extensive study of American national, state, and local government, comparative and international politics, political theory, and political behavior. A special feature of political science at Highlands is found in its focus on Southwest and minority political studies.

#### Liberal Arts Emphasis

Required courses: 12 credit hours

- PolS 151 Amer Natl Govt (3)
- PolS 312: Pol Parties & Beh (3)
- PolS 316: State & Local Gov (3)
- PolS 328: Comp Political Sys (3)

#### Electives: 20 credit hours

Choose one course from the following:

- PolS 410: Amer Constitution (3)
- PolS 458: Pol Theory & Phil (3)

Choose at least 17 additional credits from courses in political science (or history courses such as 315, 401, 403, 413, 414) in consultation with the major adviser. At least five of the credits must be from courses at the 300 or 400 level.

#### Minor Total: 32 credit hours

# Law Emphasis

Required courses: 26 credit hours

- PolS 151: Amer Natl Govt (3)
- PolS 314: Intro to the Law (3)
- PolS 316: State & Local Govt (3)
- PolS 320: Criminal Law (3)
- PolS 328: Comp Political Sys (3)
- PolS 410: Amer Constitution (3)
- PolS 417: Legislative Process (3)
- PolS 453: IR, Human Rights & Int'l Law (3)
- •PolS 497: LSAT Prep & Legal Logic Class (2)

#### Electives: 6 credit hours

Choose at least six additional credits from political science courses (or from history courses cross-listed in political science) in consultation with the major adviser.

#### Major Total: 32 credit hours

#### Minor in Political Science

Required courses: 6 credit hours

- PolS 151: Amer Natl Govt (3)
- PolS 316: State & Local Govt (3)

#### Electives: 14 credit hours

Choose one course from the following:

- PolS 410: Amer Constitution (3)
- PolS 458: Pol Theory & Phil (3)

Choose at least 11 additional credits in courses from political science and allied subjects, selected in consultation with the minor adviser. At least four of these credits must be from 300- or 400-level courses.

#### Minor Total: 20 credit hours

#### Pre-Law Preparation for Students Planning to Attend Law School

Comprehensive advising is available for students planning or considering the study and practice in law. Law or pre-law does not constitute a major. In fact, a wide variety of fields of study may be appropriate for the prospective lawyer. Many students select the major in political science, which offers a law emphasis, while others select major and minor fields in the humanities, social sciences, or sciences, mathematics or physical sciences.

Careful planning of appropriate fields of study – with special attention to a foundation of skills developed in classes with emphasis on written and oral communication, research, calculation, logical reasoning and critical thinking – is strongly recommended. The pre-law adviser will help all students with their plans to gain an appropriate preparation for entering law school. This adviser is a source of much information about law schools and their requirements as well as preparation for the LSAT examination, which is used to help law schools evaluate students' qualifications for entrance. The pre-law adviser is Thomas Corbin, Douglas Hall, Room 247.

# Major in history with a concentration in social studies, secondary teaching (B.A.) Required courses: 3 credit hours

•Hist 301: Research Methods in Hist & Pol Sci (3)

#### Electives: 10 credit hours

Select in consultation with a major adviser: in United States history, choose at least ten credits, to include three courses from the following:

- Hist 201: US History to 1865 (3)
- Hist 202: US History from 1865 (3)
- Hist 215: Hist of New Mexico (3)
- Hist 453: Hist of the Southwest (3)

In world history, choose at least two courses from the following:

- Hist 321: Ancient World (3)
- Hist 322: Medieval Europe (3)
- Hist 325: Modern Europe to 1815 (3)
- Hist 326: Modern Europe Since1815 (3)

and one course from the following:

- Hist 344: Colonial Latin Amer (3)
- Hist 345: Mod Latin America (3)
- Hist 346: Cont Latin American (3)
- Hist 347: Hist of Modern Mexico (3)

In political science/government, choose at least three courses from the following:

- PolS 314: Intro to the Law (3)
- PolS 316: State & Local Gov't (3)
- PolS 328: Comp Political Sys (3)
- PolS 353: Int'l Relations (3)
- PolS 417: Legislative Process (3)

#### Major Total: 32 credit hours

# Minor in Social Studies, Secondary Teaching

#### Required courses: 3 credit hours

• Hist 301: Research Methods in Hist & Pol Sci (3)

Choose one of the following, including at least ten credits from courses at the 300 or 400 level:

- A) Complete at least 22 credits in courses from one of the course options listed above for the social studies major for teachers: either 1) United States history, 2) world history, or 3) political science/govt.
- B) Complete at least 10 credits in courses from two of the course options listed above for the social studies major for teachers: 1) United States history, 2) world history, and 3) political science/gov't, together with additional courses to total at least 22 credits

#### Minor Total: 24 credit hours

# Courses in History (Hist)

#### 100. The Western World (3)

This course examines history from the ancient civilizations of the Middle East to contemporary Europe. NM Common Course Number: Hist 1053

#### 160. Chicano History to 1900 (3)

This course is a review of the Chicano historical experience in the United States beginning with the Spanish conquest of Mexico in 1521 and ending with the eve of the statehood movement for New Mexico.

# 161. Chicano History Since 1900 (3)

This course explores the history of Chicanos in New Mexico and the United States, beginning with the early 1900s and ending with the Chicano civil rights movement of the late 1960s.

# 201. United States History to 1865 (3)

This course examines U.S. history from the colonial period through Civil War. NM Common Course Number: Hist 1113

#### 202. United States History from 1865 (3)

This course examines U.S. history from the Reconstruction to the present. NM Common Course Number: Hist 1123

## 215. History of New Mexico (3)

This course is a survey from Cabeza de Vaca to the 20th century, including the Spanish period, the Mexican period, and the territorial period of the United States. NM Common Course Number: Hist 2113

#### 216. La Raza: A History of Hispanics in the Southwest (3)

This course presents a problem-oriented history of the evolution of political consciousness of Hispanics in the Southwest.

#### 225. Spain and Portugal (3)

This course examines the evolution of the Spanish and Portuguese people from Roman times to the present.

#### 235 - 435. Selected Topic in History (1 - 4 VC)

Course in a topic or topics in history. May be repeated with change of content.

#### 290 – 390. Independent Study

Directed study arranged with a history faculty member. Prerequisite: Permission of instructor.

# 301. Research Methods in History and Political Science (3)

This course provides training in historical methods, including location and use of sources, critical analysis, and historical writing. Cross-listed as: PolS 301.

#### 311. Indians and the Law (3)

This course explores legal and governmental development of Native American people in North America from precontact to the present.

#### 315. American Foreign Relations (3)

This course examines foreign policies and relations of the United States since 1776, with emphasis on 20th century development.

#### 321. The Ancient World (3)

Ancient Middle Eastern kingdoms and the classical civilizations of Greece and Rome.

#### 322. Medieval Europe (3)

This course explores Christianity, the Carolingian epoch, feudalism, and the foundations of modern Europe.

# 325. Modern Europe to 1815 (3)

This course examines European history from the Renaissance through the fall of Napoleon.

#### 326. Modern Europe Since 1815 (3)

This course examines European history from the Congress of Vienna to the post-World War II era.

#### 344. Colonial Latin America (3)

This course is a survey of Latin American history from before 1492 to early the 1800s with an emphasis on economic, social, and cultural development of the region.

#### 345. Modern Latin America (3)

This course is a survey of Latin American history from independence through the present. Topics include independence, political unrest in the 19th century, economic modernization, revolution, and current problems in the region.

#### 346. Contemporary Latin America (3)

This course examines current United States-Latin American relations, contemporary philosophies, and intellectual currents.

### 347. History of Modern Mexico (3)

This course examines the political, social, and economic development of modern Mexico.

# 348. Revolutions in Contemporary Latin America (3)

This course examines the patterns of revolution in Latin America in the 20th century.

# 350. Methods and Curriculum of Secondary Education in Social Studies (2)

This is a comprehensive course in teaching secondary-level social studies. Prerequisite: 20 hours toward a major or minor in history and admission to teacher education program.

#### 401. The Chicano Experience (3)

This course examines major trends in the historical experience and development of Chicanos in American society.

#### 403. Chicano Leadership (3)

This course is a study of significant leaders among the Hispanic population in the Southwest during the Mexican territorial and early statehood periods.

#### 406. North American Frontiers (3)

This course explores patterns of settlement in North America with an emphasis on frontier experience in the United States.

#### 411. Women in the United States (3)

This course is a survey of the role of women in the history of the United States, including methodological and conceptual developments.

#### 412. The Civil War and Reconstruction (3)

This course explores the Old South, secession, civil conflict, Radical Reconstruction.

#### 413. The United States Since World War II (3)

This course explores American society and foreign policy from Pearl Harbor to the present.

#### 414. The American Presidency (3)

This course explores history, institution, and powers of the chief executive of the United States.

#### 450. Seminar in History (1 – 4 VC)

Seminar course in a topic or topics in history.

#### 452. Seminar: New Mexico History (3)

Seminar course in a topic or topics in New Mexico history.

#### 453. History of the Southwest (3)

This course is an analysis of historic and contemporary issues confronting people of the Southwest.

#### 480. Historiography (3)

Development of historical thought and writing.

#### 490. Senior Readings (1 – 4 VC)

Individually assigned readings and supervised investigations of selected topics, arranged with an individual instructor. Prerequisite: Advanced standing toward a major or minor, with a B average, and permission of instructor.

#### 499. Supervised Research (1 – 4 VC)

Individual, directed research arranged with an individual instructor. Prerequisite: Advanced standing toward a major or minor, with a B average, and permission of instructor.

# Courses in Political Science (PolS)

#### 151. American National Government (3)

This course explores constitutional foundations, structural organization, citizenship, powers, functions, and services.

#### 217. Ethnic Politics (3)

This course examines the ethnic basis of minority group politics in the United States with an emphasis on the political development, problems, contemporary status, and activity of the Chicano, African-American, and Native American.

#### 235 – 435. Selected Topic in Political Science (1 – 4 VC)

Course in a topic or topics in political science. May be repeated with change in content.

#### 251. Introduction to Political and Economic Systems (3)

This course presents fundamentals of comparative economic and political systems, public finance, and international relations.

#### 301. Research Methods in History and Political Science (3)

This course presents training in historical methods, including location and use of sources, critical analysis, and historical writing. Cross-listed as: Hist 301.

#### 312. Political Parties and Behavior (3)

This course examines the organization, function, and methods of American political parties along with analysis of political opinion formation and political participation including voting behavior and styles of leadership.

#### 314. Introduction to the Law (3)

This course is an introduction to civil procedure, criminal procedure, and the substantive concepts and principles of civil and criminal law.

#### 316. State and Local Government (3)

This course examines the position of the states in the federal system as well as the organization, functions and administrations of state, county, and city government.

#### 320. Criminal Law (3)

Criminal Law provides the student with knowledge of the actual and potential use of criminal laws in the American legal process and how those uses might be evaluated.

#### 328. Comparative Political Systems (3)

This course is an introduction to the comparative analysis of political institutions, ideologies, and political cultures in the world community.

#### 334 - 434. Practicum (1 - 4 VC)

Experiential study directed by an instructor. Prerequisite: Permission of instructor.

#### 353. International Relations (3)

This course examines the national state system; international conflicts, development of international cooperation; the United Nations and its problems.

#### 402. Interest Groups (3)

This course explores the forms, tactics, and influence of interest groups as well as their role in a pluralistic society and their importance in a democracy.

#### 410. The American Constitution (3)

This course examines the origin and establishment of leading constitutional doctrines.

#### 415. Government and Business (3)

This course is a case study of United States government regulations of economic activity with emphasis on the administrative process.

# 417. The Legislative Process (3)

This course explores the process of national and state lawmaking in the United States, legislation drafting and legislative procedure.

#### 418. Administrative Law and Procedure (3)

This course will help students become aware of administrative law and its relationship to public administrative programs. Administrative law concerns the powers and procedures of administrative agencies, including especially the law governing judicial review of administrative action. Political science majors who endeavor to enter the public administration arena oftentimes will be involved in the administrative process, which is a complex of methods by which agencies carry out their tasks of adjudication, rule making, and related functions.

#### 419. Public Administration (3)

This course examines the organization of the administrative structure, problems of internal management, personnel, fiscal management, forms of administrative action, and procedure.

# 425. History of Economic Thought (3)

This course explores the development of economic thought from the Middle Ages to the present.

#### 433. Chinese Communist Government (3)

This course is an analysis of the Chinese government with emphasis on the role of the Communist Party and the relationship of policies to tradition and world affairs.

#### 446. Government and Politics of Latin America (3)

This course is an analysis of political systems, contemporary mass movements, and inter-American relations.

#### 450. Seminar in Political Science (1 – 4 VC)

Seminar course in a topic or topics in political science.

#### 451. Seminar: New Mexico Government and Politics (3)

This course explores the structure, organization, function, and operation of New Mexico state and local government.

#### 453. International Relations, Human Rights and International Law (3)

This course is a theoretical and critical analysis of the meaning and relevancy of international-relations politics and their collision with international law and human rights in the age of globalization. Prerequisite: PolS 353, or permission of instructor.

#### 458. Political Theory and Philosophy (3)

This course explores leading political ideas of the western world.

#### 460. The American and Russian Systems (3)

This course presents a comparison of political and economic institutions, including the underlying political theory of the two nations.

## 462. International Monetary Systems (3)

This course is an examination of the national and international procedural rules which channel the behavior of governments and monetary authorities.

#### 463. Political Economy (3)

This course presents a comparative study and analysis of the political economies of the major countries of the world, stressing the interdependence of the study of economics and politics.

#### 490. Senior Readings (1 – 4 VC)

Individually assigned readings and supervised investigations arranged with an instructor. Prerequisite: Advanced standing toward a major or minor, with a B average, and permission of instructor.

#### 497. LSAT Prep & Legal Logic Class (3)

This course provides students the fundamental skills sets to understand the fundamentals of logical reasoning and how it is used in law school and how to optimize their LSAT scores.

#### 499. Supervised Research (1 – 4 VC)

Individual, directed research arranged with an instructor. Prerequisite: Advanced standing toward a major or minor, with a B average, and permission of instructor.

# Major in Spanish (B.A.)

Prerequisite: Proficiency in first-year Spanish, as demonstrated by completion of Span 101 and Span 102, or Span 111 or Span 112, or the equivalent competency. (These courses do not count toward the 36 credit-hour major.)

# Required courses: 24 credit hours

- Span 201: Intermed Span 1 (3)
- Span 202: Intermed Span 2 (3)

#### OR

- Span 211: Intermed Span as Heritage Language 1 (3)
- Span 212: Intermed Span as Heritage Language 2 (3)
- Span 300: Advanced Grammar (3)
- Span 310: Adv Conversation (3)
- Span 330: Intro to Hispanic Lit (3)
- Span 424: Adv Composition (3)
- Span 430: Intro to Span Linguistics (3)
- Span 495: Senior Year Paper (3)

#### Choose one of the following:

- Span 431: Civilization & Culture of Spain (3)
- Span 432: Civilization & Culture of Latin America (3)
- Span 433: Civilization & Culture of NM and the Southwest (3)

#### Electives: 9 credit hours

In consulting with their program adviser, students can choose three upper-level elective courses to complete the major.

# Major Total: 36 credit hours

# Major in Spanish for Elementary and/or Secondary School Teachers (K - 12) (B.A.)

The following course must be taken as one of the six additional credits used in fulfillment of the general Spanish major:

• Span 445: Teaching of Spanish: Theory & Meth (3)

Those pursuing a teaching career must contact the School of Education for required certification/endorsement coursework, as stipulated by the State of New Mexico Public Education Department.

#### Major Total: 40 credit hours

# Minor in Spanish

Prerequisite: Proficiency in first-year Spanish, as demonstrated by completion of Span 101 and Span 102, or Span 111 or Span 112 or the equivalent competency. (These courses do not count toward the 24 credit-hour minor.)

#### Required hours: 15 credit hours

- Span 201 Interned Span 1 (3)
- Span 202 Interned Span 2 (3)

#### OR

- Span 211: Interned Span as Heritage Language 1 (3)
- Span 212: Interned Span as Heritage Language 2 (3)

- Span 300: Adv Grammar (3)
- Span 310: Adv Conversation (3)
- Span 424: Adv Composition (3)

Choose one of the following courses:

- Span 431: Civilization & Culture of Spain (3)
- Span 432: Civilization & Culture of Latin America (3)
- Span 433: Civilization & Culture of NM and the Southwest (3)

#### Electives: 6 credit hours

In consulting with their program adviser, students can choose two upper-level elective courses to complete the major.

#### Minor Total: 24 credit hours

# Minor in Native American/Hispano Cultural Studies (NAHS)

The Native-American/Hispano Cultural Studies Minor Program facilitates and implements the interdisciplinary study of peoples, languages, cultures, traditions and practices of the Southwest with specific emphasis on Northern New Mexico communities.

The program is strengthened by the adoption of a cultural-studies approach, which enables students to investigate lived realities of which they themselves are a part and where their involvement may provide clarifying insights.

#### Required courses: 3 hours

• NAHS 124: Intro to NA/Hispano Cultural Studies (3)

## Capstone option: 3 hours required

- NAHS 425: NA /Hispanic Comm and Cultural Contexts (3)
- Hist 453: History of the SW (3)

Thematic Area #1: Choose 6 hours from the following:

- Anth 413: Archeology of the SW (3)
- Anth 424: Cultural Dynamics of the SW (3)
- Anth 456: US Mex Immigration (3)
- Anth 476: Indians of the Greater SW (3)
- Anth 477: Hispanics of the SW (3)
- Hist 215: Hist of New Mexico (3)
- Hist 453: History of the SW (3)
- NAHS 375: Land Grant, Acequia & Reservation Comm (3)

Thematics Area #2: Choose 6 hours from the following:

- Soc 493: Race & Ethnic Relations (3)
- Engl 424: Mestizaje: Creative & Critical Thought in the SW (3)
- Phil 318: Native American Phil (3)
- Hist 160: Chicano History (3)
- Hist 401: Chicano Experience (3)
- Hist 403: Chicano Leadership (3)
- Pols 217: Ethnic Politics (3)
- NAHS 225: Indo/Hispano

Thematic Area #3: Choose 6 hours from the following:

- Mus 472: Chicano & Latino Music in the US (3)
- Anth 435: Ritual, Festival, and Celebration in the SW (3)
- Engl 315: Native American Women's Literature (3)
- Engl 318: Chicano/a Literature (3)
- Engl 482: Lit of the SW (3)

- Hist 161: Chicano History Since 1900 (3)
- Span 470: Chicano Lit of the SW (3)
- NAHS 325: Native American/Hispano Contexts for Language and Literacy (3)

#### Minor total: 24 hours

# Courses in Native American/Hispano Cultural Studies (NAHS)

# 124. Intro to Native American/Hispano Cultural Studies (3)

This course is an interdisciplinary introduction to Native American/Hispano cultural studies emphasizing thematic areas of place, environment, ethnicity, identity, language and community.

#### 225. Indo/Hispano Ethnicity and Identity Formation (3)

This course is a study of foundational concepts and research regarding the complex interrelationships and identities of Native American/Hispano ethnic communities.

# 325. Indo/Hispano Contexts for Language and Literacy (3)

This course is a study of social and cultural contexts for language and literacy practices within Indo/Hispano communities.

#### 375. New Mexico Land Grant, Acequia and Reservation Communities (3)

This course is an exploration of historical and contemporary community issues regarding land, water, economics, and sustainability.

# 425. Native American/Hispano Communities and Cultural Contexts (3)

This course is a study of structures and methodologies for conducting short-term research projects in cultural and social contexts.

# Courses in Spanish (Span)

#### 101. Beginning Spanish 1 (4)

This course is an introduction to the Spanish language with an emphasis on conversation and the development of the ability to read and understand Spanish. This course is open only to non-speakers of Spanish. One hour per week is required in the Language Learning Center in addition to four class hours. NM Common Course Number: Span 1114

#### 102. Beginning Spanish 2 (4)

This course is a continuation of Spanish 101, also open only to non-speakers of Spanish. One hour per week is required in the Language Learning Center in addition to four class hours. Prerequisite: Span 101 or equivalent. NM Common Course Number: 1124

#### 111. Beginning Spanish as a Heritage Language 1 (4)

This is a beginning course for students who grew up in a Spanish-speaking home or community, who might have comprehension, and/or might lack in oral proficiency. Emphasis is placed on four skills, listening, speaking, reading, and writing. Community and cultural activities are utilized to enhance these skills. Prerequisite: All students must be placed into this course through the Spanish Language Placement Exam.

#### 112. Beginning Spanish as a Heritage Language 2 (4)

This course is a continuation of Span 111. This course emphasizes the four language skills and will focus on building vocabulary, and strengthening knowledge of grammatical skills. Prerequisite: Span 111 or equivalent.

#### 200. Intermediate Spanish Conversation (3)

This course provides the student with the vocabulary necessary to interact effectively in Spanish in practical, real-life situations while also sharpening the student's oral fluency and listening comprehension. Prerequisite: Span 102 or permission of instructor.

#### 201. Intermediate Spanish (4)

This class is for students who understand simple conversational Spanish and have studied the elements of grammar. It focuses on an intensive grammar review and includes vocabulary building with readings and communicative oral and written exercises that enhance the student's awareness of contemporary Hispanic culture. Prerequisite: Span 101, 102 or equivalent. NM Common Course Number: Span 2113

#### 202. Intermediate Spanish 2 (3)

This class is a second-semester, second-year Spanish grammar course that reviews and expands the study of elements of speech such as pronouns, adjectives, prepositions, and adverbs, as well as other verb moods covered in a first-year, two-semester course sequence. Its primary focus is a review of grammar in addition to developing the student's four language skills in Spanish: reading, writing, listening comprehension and speaking. The class is conducted in Spanish. Prerequisite: Span 201.

# 211. Intermediate Spanish as a Heritage Language 1 (4)

This class is for Spanish heritage language learners who have completed Span 112 or its equivalent. This course reinforces and expands previous knowledge of Spanish with a focus on grammar. Prerequisite: Span 112 or an equivalent.

#### 212. Intermediate Spanish as a Heritage Language 2 (4)

This course is a continuation of Span 211. It emphasizes reading, writing, and conversation. Course activities increase students' awareness of the interactions between local culture and the Spanish-speaking world. Prerequisite: Span 211.

# 290 – 490. Independent Study (1– 4 VC)

Individual directed study arranged with an instructor. Prerequisite: Permission of instructor.

#### 291 - 491. Travel Study Topics (1-3 VC)

This course is for students traveling in a Spanish-speaking country and/or region. Prerequisite: Participation in one of the Spanish/English immersion programs offered through Highlands University's legislative funding (RPSP).

#### 300. Advanced Grammar (3)

This course is designed to help students establish a solid grammatical foundation as well as functional communicative skills. Subtle but complex conceptual distinctions between Spanish and English will be analyzed and applied to oral and written skills. The course will review grammatical concepts and analysis of both spoken and written Spanish. Prerequisite: Span 202 or 212.

#### 310. Advanced Conversation (3)

This course provides timely, comprehensive, and authentic video materials on current events, and the language and culture of the Hispanic world to enhance students' oral comprehension and communicative interaction. It targets intermediate students with a vocabulary of 1,500 to 2,000 words. At the completion of the course, students will have achieved total fluency at that level. Prerequisite: Span 200 and 201, or permission of instructor.

#### 330. Introduction to Hispanic Literature (3)

This course introduces intermediate-level students to Hispanic literature and to literary analysis. The reading selections encompass authors from Spain, Latin America and the United States, and exemplify a variety of literary forms. The readings will expand the students' awareness of the Hispanic culture and enrich their vocabulary. Prerequisite: Spanish 325.

# 337-437. Special Topics: Hispanic Literature & Culture (3)

This course focuses on a particular cultural period and/or literary or intellectual movement in the Hispanic world. Taught in English. Prerequisite: Permission of instructor

#### 338 - 438. Contemporary Cultural Developments in the Hispanic World (3)

This course examines the recent history of Spanish-speaking countries and regions within the context of cultural, sociohistorical, sociolinguistic, and sociopolitical changes and the literary and artistic works they have originated. Taught in English. Prerequisite: Permission of instructor

#### 340. Spanish Translation (3)

This course offers an introduction to principles of translation and interpretation dealing specifically in English to Spanish. Prerequisite: Span 325 or permission of instructor.

#### 354 - 454. Creative Writing Workshop in Spanish (3)

This course explores exemplary texts by selected Peninsular and Latin-American authors. Through the instruction of literary techniques, students will write original poetry, short fiction and/or a play, and develop a self-critique of their own works. Prerequisite: Span 201 or 202 or permission of instructor

#### 405. Film in the Hispanic World (3)

This course introduces the field of visual arts and techniques of representation. The work of major Hispanic film directors will be presented and compared. Prerequisite: Span 325 or permission of instructor.

#### 406. Hispanic Women Authors (3)

This course introduces the student to the works of women authors in Spanish America. The course covers most genres through the works of Sor Juana Ines de la Cruz, Alfonsina Storni, Domitilia Chungara, Rosario Castellanos, Barbara Delano, and others. Prerequisite: Span 325.

#### 415. Advanced Translation (3)

This course provides a systematic study and contrastive exercises in translation and interpretation. Translation of texts in general conceptual fields. Prerequisite: Span 400 or permission of instructor.

# 424. Advanced Composition (3)

This course develops written proficiency and critical thinking skills through readings and discussions of a variety of texts from the Spanish-speaking community. It guides students in their understanding of the reading selections at the textual and cultural level, with an ample analysis of vocabulary use and practice. It focuses on strategies with which students learn to compose different pieces of writing and overall develop written Spanish. The discussions focus on history, political and cultural topics pertaining to the Hispanic world. The emphasis is on development of writing skills in formal Spanish. Prerequisite: Span 300

#### 430. Introduction to Spanish Linguistics (3)

This course introduces the study of Spanish linguistics, including phonetics, phonology, morphology, syntax, historical linguistics, and sociolinguistics. The course combines discussions of theoretical issues with a linguistic analysis of Spanish. Prerequisite: Span 300.

#### 431. Civilization and Culture of Spain (3)

This course provides students with a synthetic and highly accessible overview of Spanish history, literature, and culture. Prerequisite: Span 325 or permission of instructor.

#### 432. Civilization and Culture of Latin America (3)

This course presents the Spanish-American experience of yesterday and today through the social, historical, political and literary aspects that this experience encompasses. Prerequisite: Span 325 or permission of instructor.

## 433. Civilization and Culture of New Mexico and the Southwest (3)

This course explores the Spanish cultural developments and events that have brought about ethnic, economic, political, social, literary, linguistic and historical changes, and typical features in New Mexico and in the southwestern United States. Prerequisite: Span 325 or permission of instructor.

#### 434. Practicum in Spanish (3)

Experiential study directed by an instructor. Prerequisite: Permission of instructor.

#### 441. Spanish for the Bilingual Classroom (3)

This course targets bilingual education students and presents the Spanish language as it is applied in school community settings. Use of both vernacular and formal language will be included. Spanish is the language of instruction, inclusive of student presentations/ participation. Prerequisite: Span 325 or permission of instructor.

#### 445. Teaching of Spanish: Theory and Methodology (3)

This course familiarizes prospective teachers with the philosophy, methodology, and practical techniques of teaching Spanish. Prerequisite: Span 325 or permission of instructor. May also be taken as a corequisite with 325.

#### 450. Seminar in Spanish (3)

Topic to be selected by instructor. Prerequisite: Span 325.

#### 460. Hispanic Literature of the SW (3)

This course presents a study of Hispanic southwestern literature written in English and in Spanish. The origins and evolution of this literature are discussed, from the early Spanish exploration to the most recent manifestations in every major literary genre. Prerequisite: Span 325 or permission of instructor.

# 467. History of the Spanish Language (3)

This course traces the development of the Spanish language from Latin to the present. It analyzes the cultural, literary and historical factors that have contributed to its evolution. The transformations that the language undergoes in a different linguistic settings are studied in a section on sociolinguistics issues of the U.S. southwest Spanish. Prerequisite: Span 430 or permission of instructor

#### 470. Chicano Literature of the Southwest (3)

This is a survey course which studies major literary genres in Chicano literature spurred by the Chicano movement, such as essay, poetry, short story, novel and drama, and folk literature. Prerequisite: Span 433 or permission of instructor.

## 481. Spanish Literature I: Middle Ages to 1700 (3)

This course examines selections by major authors of the Middle Ages, Golden Age, and the Baroque from 1100-1700, focusing on the development of the literary genres. Prerequisite: Span 325 and/or Span 330 or permission of instructor

# 482. Spanish Literature II: 1700 to Present (3)

This course explores readings representing key works of Spanish literature from the Enlightenment and Romantic Era to the present. Works studied include prose, poetry, and drama. Prerequisite: Span 325 and/or Span 330 or permission of instructor.

#### 483. Latin-American Literature I: Colonial to 1900 (3)

This course explores readings of seminal works from the discovery and conquest of the Americas to the colonial and independence periods. Prerequisites: Span 325 and/or Span 330 or permission of instructor.

# 484. Latin-American Literature II: 1900 to Present (3)

This course explores readings representing major literary works from literary movements: modernism, vanguardism, boom, and post-boom periods. Prerequisite: Span 325 and/or Span 330 or permission of instructor.

#### 495. Senior Year Paper (3)

This directed, individualized study is required of all Spanish majors. It consists of an in-depth study of a major author or authors, school, genre, or tradition of Hispanic literature. Analytical and research skills must be demonstrated.

# Courses in Languages Other Than Spanish (Lang)

#### 101. Beginning French 1 (4)

This course is an introduction to the French language with emphasis on conversation, essentials of grammar, and development of the ability to read. One hour weekly required in the Language Learning Center in addition to four class hours. NM Common Course Number: FREN 1114

#### 102. Beginning French 2 (4)

This course is a continuation of French 101. One hour per week is required in the Language Learning Center in addition to four class hours. Prerequisite: Lang 101. NM Common Course Number: 1124

#### 107. Beginning Italian 1 (4)

This course introduces the student to the language and culture of the Italian world. It also seeks to teach the four basic skills: speaking, listening, writing and reading. One hour per week is required in the Language Learning Center in addition to four class hours.

#### 108. Beginning Italian 2 (4)

This course is a continuation of Italian 101. One hour per week is required in the Language Learning Center in addition to four class hours. Prerequisite: Lang 107.

#### 109. American Sign Language 1 (4)

This course introduces the student to American Sign Language (ASL). It is interactive and develops basic ASL competency and to impart grammatical and cultural knowledge useful to the beginning signer.

## 110. American Sign Language 2 (4)

This is the second half of the beginning-level American Sign Language course expands the general objectives of the first course. The course continues to be interactive and develops basic ASL compe-

tency. Special attention is given to grammatical and cultural knowledge useful to the beginning signer. Prerequisite: Lang 109

# 135 –235. Selected Topic: Beginning Language (1 – 4 VC)

This is a beginning-level course in a language other than Spanish, French, Italian, and American Sign Language. The specific language and level are stated when the course is scheduled.

# 190 –390. Independent Study in a Language (1 – 4 VC)

This is an individual, directed study arranged with an instructor in a language other than Spanish. This course is intended only for students who have already completed some formal study in the language. Prerequisite: Permission of instructor.

#### 209. American Sign Language 3 (3)

This is an intermediate-level American Sign Language course. This course is interactive and develops ASL competency, and grammatical and cultural knowledge useful to the intermediate signer. Prerequisite: Lang 110 or equivalent.

#### 210. American Sign Language 4 (3)

This is a continuation of the intermediate-level American Sign Language course. This course continues to be interactive, develops intermediate ASL competency, and grammatical and cultural knowledge useful to the intermediate signer. Prerequisite: Lang 209 or equivalent.

# Major in Fine Art, Pre-Professional (BFA)

#### Required courses: 39 credit hours

All BFA majors are required to take course work in the following order:

Note: No minor is required for the completion of the professional degree program (BFA) in art.

Tier 1: 9 credit hours required

- Art 121: Fund of Design (3)
- OR
- MArt 121: Visual Concepts (3)
- Art 202: Drawing 1 (3)
- MArt 233: Digital Imaging (3)

Tier 2: 12 credit hours required

- Art 203: Drawing 2 (3)
- Art 221: Painting 1 (3)
- Art 241: Sculpture 1 (3)
- Art 271: Printmaking 1 (3)

Tier 3: 6 credit hours required

- AH 310: Art History 1 (3)
- AH 311: Art History 2 (3)

Electives: 9 hours 15 hours total

Tier 4: 12 credit hours required

- AH 340: 19th/20th Cent Art (3)
- AH 380: Art of the Americas (3)
- AH 450: Sem in Art History (3)
- Art 491: Senior Colloquium (2)
- Art 495: B.F.A. Exhibit (1)

Electives: 27 credit hours required

#### Studio Elective Courses for BFA and BA in Fine Arts:

- Art 231: Ceramics 1 (3)
- Art 261: Jewelry & Metalsmithing 1 (3)
- Art 285: Art Foundry 1 (3)

- Art 302: Life Drawing 1 (3)
- Art 321: Painting 2 (3)
- Art 322: Painting 3 (3)
- Art 331: Ceramics 2 (3)
- Art 335: ST in Art Studio (1-4)
- Art 341: Sculpture 2 (3)
- Art 361: Jewelry & Metalsmithing 2 (3)
- Art 371: Printmaking 2 (3)
- Art 372: Printmaking 3 (3)
- Art 385: Art Foundry 2 (3)
- Art 402: Life Drawing 2 (3)
- Art 422: Painting 4 (3)
- Art 431: Ceramics 3 (3)
- Art 435: ST in Art Studio (1-4)
- Art 441: Sculpture 3 (3)
- Art 442: Sculpture 4 (3)
- Art 461: Jewelry & Metalsmithing 3 (3)
- Art 472: Printmaking 4 (3)
- Art 485: Art Foundry 3 (3)
- Art 493: Directed Study in Art Studio (1-4)
- Art 496: Exhibit Design (3)
- Art 498: Prof Internship (1-4)

A maximum of three courses may be chosen from the media arts list totaling nine credits.

- MArt 309: Conceptual Imaging and Methods (3)
- MArt 320: Color Theory (3)
- MArt 414: Portfolio (3)
- MArt 433: Adv Digital Imaging (3)
- MArt 443: Digital Photography (3)
- MArt 445: Advanced Digital Photo (3)
- MArt 495: Exhibition Design (3)
- MArt 496: Adv Exhibition Design (3)

#### Maior Total: 66

# Interdisciplinary Bachelor of Fine Arts Required courses: 66 credit hours

Tier 1: 9 credit hours required

• Art 121 Fundamentals of Design Studio (3)

OR

- •MArt 121: Visual Concepts (3)
- Art 202: Drawing 1 (3)
- MArt 233: Digital Imaging (3)

Tier 2: 21 credit hours required

- Art 203: Drawing 2 (3)
- MArt 320: Color Theory (3)
- AH 310: Art History 1 (3)
- AH 311: Art History 2 (3)

#### Elective courses in MArt or FA: 9 credits

Tier 3: 18 credit hours required

- AH 340: 19th & 20th Century Art (3)
- AH 380: Art of the Americas (3)

#### Elective courses in MArt and FA: 12 credits

Tier 4: 18 credit hours required

• MArt 4XX Media Art Portfolio New Course (3)

OR

• Art 491: Senior Colloquium (2)

AND

- Art 495: BFA Exhibit 1 (1)
- AH 450: Seminar in History (3)

#### Elective courses in MArt or FA: 12 credits

# Major total: 66 credit hours

# Major in Fine Art, Liberal Arts (BA)

Required courses: 18 credit hours

Tier 1: 6 hours required

•Art 121: Fund of Design (3)

OR

- MArt 121: Visual Concepts (3)
- Art 202: Drawing I (3)

Tier 2: 9 credit hours

• Art 203: Drawing 2 (3)

#### Studio Electives: 6 credit hours

Tier 3: 12 credit hours

- AH 310: Art History 1 (3)
- AH 311: Art History 2 (3)

#### Studio Electives: 6 credit hours

Tier 4: 9 credit hours

• AH 340: 19th & 20th Century Art (3)

#### Studio Electives: 6 credit hours

# Studio Electives courses for B.A. in Fine Arts: (18 hours)

- Art 231: Ceramics 1 (3)
- Art 261: Jewelry & Metalsmithing 1 (3)
- Art 285: Art Foundry 1 (3)
- Art 302: Life Drawing 1 (3)
- Art 321: Painting 2 (3)
- Art 322: Painting 3 (3)
- Art 331: Ceramics 2 (3)
- Art 335: ST in Art Studio (1-4)
- Art 341: Sculpture 2 (3)
- Art 361: Jewelry & Metalsmithing 2 (3)
- Art 371: Printmaking 2 (3)
- Art 372: Printmaking 3 (3)
- Art 385: Art Foundry 2 (3)
- Art 402: Life Drawing 2 (3)
- Art 422: Painting 4 (3)

- Art 431: Ceramics 3 (3)
- Art 435: ST in Art Studio (1-4)
- Art 441: Sculpture 3 (3)
- Art 442: Sculpture 4 (3)
- Art 461: Jewelry & Metalsmithing 3 (3)
- Art 472: Printmaking 4 (3)
- Art 485: Art Foundry 3 (3)
- Art 493: Directed Study in Art Studio (1-4)
- Art 496: Exhibit Design (3)
- Art 498: Prof Internship (1-4)

# Major Total: 36 credit hours

# Minor in Art (Art Studio Emphasis)

Required courses: 15 credit hours

- Art 121: Fundamentals of Design (3)
- OR
- MArt 121: Visual Concepts (3)
- Art 202: Drawing 1 (3)
- Art 203: Drawing 2 (3)
- AH 310: Art History 1 (3)
- AH 311: Art History 2 (3)

#### Electives: 9 credit hours

#### Studio electives: 9 credit hours (6 credits must be at the 300 or 400 level)

#### Minor Total: 24 credit hours

Note: No minor is required for the completion of the professional degree program (BFA) in media arts.

# Minor in Art History

Required courses: 21 credit hours

- Art 100: Intro to Art (3)
- Art 121: Fund of Design (3)

#### OR

- MArt 121: Visual Concepts (3)
- AH 310: Art History 1 (3)
- AH 311: Art History 2 (3)
- AH 380: Art of the Americas (3)
- AH 340: 19th & 20th Cent Art (3)
- AH 450: Sem in Art History (3) (Repeatable)

#### Minor Total: 21 credit hours

## Media Arts (BFA)

Tier 1: Media Arts Prerequisites

- MArt 121: Visual Concepts (3)
- MArt 221: Videography (3)
- MArt 233: Digital Imaging (3)

#### Tier 2: BFA/Major/Minor

- MArt 318: Prin of Multimedia (3)
- MArt 320: Color Theory (3)
- MArt 373: Typography (3)

# Additional Required Courses

- MArt 350: Media Arts Seminar (3)
- MArt 366: Audio for Video (3)
- MArt 443: Digital Photography 1 (3)

# Total Requirements: 27 hours

Students will complete one of the following areas of emphasis:

#### Tier 3: Visual Communication Emphasis

- MArt 313: Design for the Web (3)
- MArt 317: Publication Design (3)
- MArt 327: Web Prod Workshop (3)
- MArt 445: Digital Photography 2 (3)
- MArt 461: Adv Design Practice (3)
- MArt 465: Adv Media Projects (3)

#### Tier 3: Multimedia & Interactivity Emphasis

- MArt 313: Design for the Web (3)
- MArt 327: Web Production Workshop (3)
- •MArt 413: Nonlinear Digital Video Editing (3)
- MArt 457: Surround & Installation Workshop (3)
- MArt 459: Advanced Interactive Multimedia (3)
- MArt 456: Physical Computing (3)
- MArt 465: Adv Media Projects (3)

#### Tier 3: Video & Audio Emphasis

- MArt 322: HD Cinema Workshop (3)
- MArt 346: Screenwriting (3)
- MArt 362: Video Effects (3)
- MArt 413: Nonlinear Digital Video Editing (3)
- MArt 457: Surround & Installation Workshop (3)
- MArt 465: Adv Media Projects (3)

#### Tier 3: Photographic Imaging Emphasis

- MArt 445: Digital Photography II (3)
- MArt 447: Digital Photography III (3)
- MArt 449: Digital Photography IV (3)
- MArt 460: Alternative Photographic Techniques (3)
- MArt 465: Adv Media Projects (3)
- MArt 313: Design for the Web (3)

#### OR

• MArt 327: Web Production Workshop (3)

# Emphasis Total: 27 credit hours

#### Media Arts (BA)

## Tier 1: Media Arts Prerequisites

- MArt 121: Visual Concepts (3)
- MArt 221: Videography (3)
- MArt 233: Digital Imaging (3)

#### Tier 2: BFA/Major/Minor

- MArt 318: Prin of Multimedia (3)
- MArt 320: Color Therapy (3)
- MArt 373: Typography (3)

# Additional Required Courses:

- MArt 350: Media Arts Seminar (3)
- MArt 366: Audio for Video (3)
- MArt 443: Digital Photography (3)

Emphasis Total: 27 credit hours

#### Electives: 21 credit hours

Students will complete 21 elective credit hours in media arts in consultation with an adviser.

Note: No minor is required for the completion of the professional degree program (B.F.A.) in media arts.

#### Major Total: 66 credit hours

# Media Arts (BA)

Total requirements: 27 credit hours

#### Tier 1: Media Arts Prerequisites

- MArt 121: Visual Concepts (3)
- MArt 221: Videography (3)
- MArt 233: Digital Imaging (3)

#### Tier 2: BFA/Major/Minor

- MArt 318: Prin of Multimedia (3)
- MArt 320: Color Theory (3)
- MArt 373: Typography (3)

#### Additional Required Classes

- MArt 350: Media Arts Seminar (3)
- MArt 366: Audio for Video (3)
- MArt 443: Digital Photography 1 (3)

#### Electives: 9 credit hours

Students will complete nine elective credit hours in media arts in consultation with an adviser.

#### Major Total: 36

#### Minor in Media Arts

Students may minor in media arts if they are majoring in another discipline. The minor will give students a taste of some of the skill and topics that media arts students study in depth.

#### Tier 1: Media Arts Prerequisites

- MArt 121: Visual Concepts (3)
- MArt 221: Videography (3)
- MArt 233: Digital Imaging (3)

#### Tier 2: BFA/Major/Minor

- MArt 318: Prin of Multimedia (3)
- MArt 320: Color Theory (3)
- MArt 373: Typography (3)

#### Additional Required Classes

- MArt 350: Media Arts Seminar (3)
- MArt 366: Audio for Video (3)
- MArt 443: Digital Photography (3)

#### Minor Total: 27 credit hours

# Interactive Cultural Technology Certificate

The objectives are to learn industry-standard practices and principles while working in a hands-on, collaborative environment with museum staff and in a museum setting. The students are to conceive, produce, and fabricate materials for an exhibition space. The outcome assessment would be not unlike another production-based course. Attendance, professionalism, comprehension, verbal skills, profi-

ciency of necessary software, and critical thinking all come into play.

#### Required courses: 15 credit hours

- MArt 326 Multimedia Proj Mgmt (3)
- MArt 495 Exhibition Design (3)
- MArt 498 Professional Internship (3)

#### Electives 6 credit hours

Students will complete six elective credit hours in media arts in the 3/400 level.

#### Certificate total: 15 credit hours

# Bachelor of Arts in Music (B.A.)

#### Required core: 41 credit hours

- Mus 100: Intro to Music (3)
- Mus 101: Rudiments of Music (3)
- Mus 201: Class Piano 1 (1)
- Mus 202: Class Piano 2 (1)
- Mus 208: Class Piano 3 (1)
- Mus 210: Functional Piano (1)
- Mus 211: Theory 1 (3)
- Mus 213: Theory 2 (3)
- Mus 231: Aural Skills 1 (1)
- Mus 232: Aural Skills 2 (1)
- Mus 244: Sight Singing (3)
- Mus 260: Recital Attendance (0) (4 semesters required)
- Mus 311: Western Art Music to 1750 (3)
- Mus 312: Western Art Music since 1750 (3)
- Mus 322: Choral Conducting (2)
- Mus 323: Instrumental Conducting (2)
- Mus 331: Theory 3 (3)
- Mus 332: Theory 4 (3)
- Mus 333: Aural Skills 3 (1)
- Mus 360: Half Recital (1)\*
- Mus 469: Recital Attendance (0)(3-4 semesters required)

#### Core Total: 41 credit hours

# Bachelor of Arts in Music with a Concentration in Music Education Required Core: 41 credit hours

## Additional Requirements: 24 credit hours

- Mus 251: Applied Music (4)\*
- Mus 283: Ensemble (4)\*\*
- Mus 350: Multicultural Approaches in Music Ed (3)
- Mus 383: Ensemble (3)\*\*
- •Mus 425: Instrumental Tech (4)
- Mus 451: Applied Music (4)\*
- Mus 470: Full Recital (2)

#### Major Total: 65 credit hours

Music education majors must choose a minor in secondary education through the School of Educa-

<sup>\*</sup>Instructors permission and Applied Music required.

<sup>\*</sup>Four semesters of approved 251 lessons and four semesters of approved 451 lessons.

<sup>\*\*</sup>Four semesters of approved 282 ensembles and three semesters of approved 383 ensembles.

tion. Students begin integration between music and education minor as early as their sophomore year. Students choose a primary area of study in voice and/or instrumental areas. It is highly recommended that music education students regularly consult with advisers in both music and education. The music education degree is a five-year program that conforms to the state requirements for licensure.

# Bachelor of Fine Arts in Music with a Concentration in Music Composition (B.F.A.) Required courses: 41 credit hours

# Additional Provinced Courses, 10 a

# Additional Required Courses: 19 credits

- Mus 251: Applied Music (4)\*
- Mus 220: Music Technology (3)
- Mus 410: Form & Analysis (3)
- Mus 426: Orchestration (3)
- Mus 451: Applied Music (4)\*
- Mus 470: Full Recital (2)

Electives: 6 credit hours from the following list:

- Mus 244: Sight Singing (3)
- Mus 2/476: Musical Theater (2)
- Mus 425: Instrumental Tech (4)
- Mus 471: History of Jazz (3)

Note: Composition and theory majors must participate in a weekly composition forum.

# Major Total: 66 credit hours

# Bachelor of Fine Arts in Music with a Concentration in Vocal Performance (B.F.A.) Required Courses: 41 credit hours

# Additional Required Courses: 26 credits

- Mus 244: Sight Singing (3)
- Mus 251: Applied Music (4)\*
- Mus 283: Ensemble (4)\*\*
- Mus 320: Diction for Singers (2)
- Mus 383: Ensemble (4)\*\*
- Mus 412: History of Opera (3)
- Mus 451: Applied Music (4)\*
- Mus 470: Full Recital (2)

Choose eight credits from the following list:

- Mus 244: Sight Singing (3)
- Mus 350: Multicultural Approaches in Music Education (3)
- Mus 425: Instrumental Tech (4)
- Mus 426: Orchestration (3)
- Mus 471: History of Jazz (3)

Choose five credits from the following list:

- Mus 220: Music Technology 1 (3)
- Mus 2/476: Musical Theater (2)
- Mus 410: Form & Analysis (3)

#### Major Total: 80 credit hours

<sup>\*</sup>Four semesters of approved 251 lessons and four semesters of approved 451 lessons.

<sup>\*</sup>Four semesters of approved 251 lessons and four semesters of approved 451 lessons.

<sup>\*\*</sup>Four semesters of approved 282 ensembles and four semesters of approved 383 ensembles.

#### Minor in General Music

This minor is for students who are majoring in fields other than music. This minor is not appropriate for students majoring in music performance, music composition, or music education.

Required courses: 24 credit hours

- Mus 100: Intro to Music (3)
- Mus 101: Rudiments of Music (3)
- Mus 201: Class Piano 1 (1)
- Mus 202: Class Piano 2 (1)
- Mus 211: Theory 1 (3)
- Mus 213: Theory 2 (3)
- Mus 231: Aural Skills 1 (1)
- Mus 232: Aural Skills 2 (1)
- Mus 251: Applied Music (2)\*
- Mus 260: Recital Attendance (0) (2 semesters required)
- Mus 283: Ensemble (2)\*\*
- Mus 383: Ensemble (2)\*\*
- Mus 451: Applied Music (2)\*
- Mus 469: Recital Attendance (0) (2 semesters required)

#### Minor Total: 24 credit hours

# Minor in Music Technology and Composition

#### Required Courses: 24 hours

- Mus 100: Introduction to Music (3)
- Mus 101: Rudiments of Music (3)
- Mus 201: Class Piano 1 (1)
- Mus 202: Class Piano 2 (1)
- Mus 211: Theory 1 (3)
- Mus 213: Theory 2 (3)
- Mus 220: Music Technology (3) (May be repeated for credit)
- Mus 231: Aural Skills 1 (1)
- Mus 232: Aural Skills 2 (1)
- Mus 251: Applied Music (2) \*
- Mus 260: Recital Attendance (0) (2 semesters required)
- Mus 360: Half Recital (1)
- Mus 451 : Applied Music (2)
- Mus 469: Recital Attendance (0) (2 semesters required)

Choose three credits from the following list:

- Mus 425: Instrumental Tech (3)
- Mus 426: Orchestration (3)

All BA and BFA students must pass the Keyboard Proficiency Examination. Piano classes 1, 2, 3, and Functional Piano prepare students for the exam, which occurs around the ninth week of the spring semester. Additionally, Applied Piano may be helpful; however, these courses will not substitute for passing the Keyboard Proficiency Examination.

# Minor Total: 27 hours

<sup>\*</sup> Two semesters of approved 251 lessons and two semesters of approved 451 lessons

<sup>\*\*</sup>Two semesters of approved 282 ensembles and two semesters of approved 383 ensembles

<sup>\*</sup>Two semesters of approved 251 lessons and two semesters of approved 451 lessons.

<sup>\*\*</sup>Two semesters of approved 282 ensembles and two semesters of approved 383 ensembles.

# Courses in Art (Art)

#### 100. Introduction to Art (3)

This course presents the nature, vocabulary, media, and formal elements of art. Students will gain visual literacy enabling them to appreciate artistic, aesthetic, and social values in art. NM Common Course Number: Art 1013

# 121. Fundamentals of Design (3); 2,4

This is an introductory studio course in design basics for both two-dimensional and three-dimensional visual arts, including the concepts of unity, emphasis, balance, scales, rhythm, line, texture, space, motion, and color.

# 135-435. Selected Topics in Art (1 – 4 VC)

Course in a topic or topics in media arts. May be repeated with a change of content. Prerequisite: Permission of instructor.

#### 202. Drawing 1 (3); 2,4

This course explores basic drawing concepts and skills to assist the student in acquiring a graphic vocabulary in a variety of drawing media.

# 203. Drawing 2 (3); 2,4

This course is a continuation of Art 202 with emphasis placed on the figure, still life, landscape, and personal imagery. Prerequisite: Art 202 or permission of instructor.

### 221. Painting 1 (3); 2,4

This course serves as an introduction to painting materials, techniques, color and fundamental composition. A brief history of painting will be acquired through lectures. Prerequisite: Art 121 and 202, or Des 121, permission of instructor.

# 231. Ceramics 1 (3); 2,4

This course explores the fundamentals of ceramic construction involving activities in pottery and sculpture, throwing, hand building, glazing, firing, and equipment design and maintenance. Prerequisite: Art 203 and Des 121 or permission of instructor.

#### 241. Sculpture 1 (3); 2,4

This course is a study of three dimensional design and techniques for sculpture in non-permanent materials. Prerequisite: Art 121 and 202, or permission of instructor.

#### 261. Jewelry and Metalsmithing 1 (3); 2,4

This course is a comprehensive study of the history, techniques, and processes used in the fabrication of jewelry and related small objects. Prerequisite: Art 203 and Des 121 or permission of instructor.

#### 271. Printmaking 1 (3); 2,4

Students in this course acquire the basic printmaking skills of the relief processes of linoleum and woodblock, and knowledge of intaglio processes of line etch, soft and hard ground, and aquatint. The basic history of prints and editing techniques will be acquired. Prerequisite: Art 121 and 202, or Des 121, or permission of instructor.

#### 285. Art Foundry 1 (3); 2,4

This course is designed to introduce the student to all aspects of lost wax casting in bronze. Prerequisite: Art 241 or permission of instructor.

#### 302. Life Drawing 1 (3); 2,4

This is an advanced drawing class working with the human figure, the landscape and still life. Students explore a variety of techniques, expressive and conceptual approaches in image making. Prerequisite: Art 203 or permission of instructor.

#### 321. Painting 2 (3); 2,4

This course is a continuation of Art 221 with an introduction to advanced painting techniques and concepts through still life, landscape, and the figure. Contemporary issues in painting will be explored through lectures. Prerequisite: Art 221 or permission of instructor.

#### 331. Ceramics 2 (3); 2,4

This course explores the fundamentals of ceramic construction involving activities in pottery and

sculpture, throwing, hand building, glazing, firing, and equipment design and maintenance. Prerequisite: Art 231 or permission of instructor.

# 334-434. Practicum (1 - 4 VC)

Experience in an on-campus or work placement. Prerequisite: Permission of instructor.

# 341. Sculpture 2 (3); 2,4

This course is a continuation of Art 241. Exploration of three-dimensional form in permanent materials. Prerequisite: Art 241, or permission of instructor.

# 361. Jewelry and Metalsmithing 2 (3); 2,4

This course is a comprehensive study of the history, techniques, and processes used in the fabrication of jewelry and related small objects. Prerequisite: Art 261 or permission of instructor.

# 371. Printmaking 2 (3); 2,4

This course is a continuation of Art 271 with emphasis on advanced methods of intaglio and relief processes in color, and introduction to black and white stone lithography. Prerequisite: Art 271, or permission of instructor.

# 372. Printmaking 3 (3); 2,4

This course is a continuation of Art 371 with emphasis placed on innovative techniques in intaglio, the art of monotype, and advanced practices in lithography including color. Attention will be placed highly on individual imagery. Prerequisite: Art 371, or permission of instructor.

### 385. Art Foundry 2 (3); 2,4

This course is a continuation of Art 285 with an emphasis on the aesthetics of cast sculpture. Prerequisite: Art 285 or permission of instructor.

# 390 - 490. Independent Study (1-4 VC)

Individual research in a selected area of art history or criticism arranged with an instructor. Prerequisite: The appropriate 300-level course and permission of instructor.

#### 402. Life Drawing 2 (3); 2,4

This course is a continuation of Art 302. Prerequisite: Art 302 or permission of instructor.

#### 422. Painting 4 (3); 2,4

This course is a continuation of Art 421 with emphasis placed on an individual topic decided upon both student and instructor resulting in a series of paintings. This course is intended for majors anticipating a B.F.A. or B.A. degree in studio art. May be repeated for additional credit.

#### 431. Ceramics 3 (3); 2,4

This course is a continuation of Art 331, including firing and glaze formulation. Course may be repeated for credit. Prerequisite: Art 331 or permission of instructor.

#### 441. Sculpture 3 (3): 2.4

This course is a continuation of Art 341 and an introduction to bronze casting. Prerequisite: Art 341 or permission of instructor.

#### 442. Sculpture 4 (3); 2,4

This course is a continuation of Art 441 and focuses on the development of a personal aesthetic in sculpture course intended for majors anticipating the BFA or BA degree. Course is repeatable for multiple credit.

# 461. Jewelry and Metalsmithing 3 (3); 2,4

This course is a continuation of Art 361. Prerequisite: Art 361 or permission of instructor.

#### 472. Printmaking 4 (3); 2,4

This course is a continuation of Art 372 with emphasis placed on an individual topic decided upon by both student and instructor resulting in a suite or series of images in print. This course is intended for majors anticipating a BFA or BA in art studio. May be repeated for additional credit.

#### 485. Art Foundry 3 (3); 2,4

A continuation of Art 385 with an emphasis on refining aesthetic knowledge and technical skills. Course may be repeated for multiple credit. Prerequisite: Art 385 or permission of instructor.

# 491. Senior Colloquium (2)

This course is taken during the fall semester of the senior year of a B.F.A. candidate. The student will make slides, prepare a portfolio and artist's statement. Prerequisite: Permission of instructor.

#### 493. Directed Study in Art Studio (1 - 4 VC)

This course is advanced, independent work arranged with a faculty member to expand upon knowledge and techniques gained in other studio classes. This course is intended for majors anticipating a BFA or a BA degree in studio art. May be repeated for credit. Prerequisite: The appropriate 400-level course or permission of instructor.

#### 495. B.F.A. Exhibit (1)

Students prepare for exhibition of works in their major area that demonstrates ability and achievement. Faculty will provide some guidance in the projects required, however, evaluation is based on an individual's self-motivated approach. Prerequisite: Permission of instructor.

# 496. Exhibit Design (3)

Students will participate in mounting a multimedia exhibit on a topic in fine arts.

# 498. Professional Internship (1-6 VC)

A student will work under the joint supervision of a work-supervisor and an art faculty member either at an on- or off-campus site.

# Courses in Art History (AH)

### 310. Art History 1 (3)

This is a survey course of Western art and architecture from prehistory to the Medieval period. NM Common Course Number: AH 2113

# 311. Art History 2 (3)

This is a survey course of Western art and architecture from the Renaissance to the modern period. NM Common Course Number: AH 2123

#### 340. Modern Art (3)

This course is a survey of European and American art from the late 18th century until the present. Major artists and trends in painting, sculpture, photography and architecture will be discussed with particular emphasis on personality and innovation.

#### 380. Art of the Americas (3)

This course is a survey of the arts of the Americas, covering the pre-Columbian indigenous cultures, Hispanic colonial presence, and contemporary Native American and Hispanic arts.

### 390-490. Independent Study (1 - 4 VC)

Individual research in a selected area of art history or criticism arranged with an instructor. Prerequisite: AH 310, AH 311, or permission of instructor.

### 450. Seminar in Art History (3)

Seminar course in a topic or topics of art history. May be repeated with a change of content. Prerequisite: AH 310, AH 311, or permission of instructor.

# Courses in Media Arts (MArt)

### 121. Visual Concepts (3); 2, 2

This course is an introductory course in visual literacy for both two-dimensional and three-dimensional visual arts, including the concepts of unity, emphasis, balance, scales, rhythm, line, texture, space, motion, and color. Students will become acquainted with these fundamental visual concepts through the use of both manual and digital tools.

#### 124. Beginning Speech (3)

This course is a beginning course in public speaking with emphasis on the composition and delivery of the extemporaneous speech. NM Common Course Number: Comm 1113

### 135-435. Selected Topics in Media Arts (1-4 VC)

Course in a topic or topics in media arts: may be repeated with a change of content. Perquisite: Permission of instructor.

#### 221. Videography (3); 2,2

This course is a study of the basic production theories of video production with special emphasis in camera operation, shot composition, shot sequencing, and lighting.

#### 233. Digital Imaging (3)

This course is an introduction to computer-generated graphics technology in art and design. Students will generate and manipulate various image types including vector graphics, bitmaps, and animations, as well as, determine the image type useful for given situations.

#### 234-434. Practicum (3)

This is a course to help students become leaders on multimedia projects.

### 261. History of Motion Pictures (3) 2,2

This is a course for both majors and non-majors intended to familiarize students with the technological and aesthetic evolution of motion picture. Students will be introduced to the major genres through viewing and analyzing representative films. Satisfies the fine arts requirement in the general education core.

# 290-490. Independent Study (1-4VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

# 298-498. Internship (1-6VC)

A student will work under the joint supervision of a work-supervisor and a faculty member either at an on- or off-campus site. Prerequisite: Permission of instructor.

#### 305. Digital Painting (3)

This course is designed for students interested in learning how to use Corel Painter\* and the Wacom\* table tools to enhance their digital art skills. Painter\* is a digital studio application to recreates the analog tools of an artist's studio (painting, ink drawing, pastels, and other techniques).

#### 311. Graphics and Meaning (3)

This course is an exploration of meaning in graphic art forms within social and cultural contexts. This course introduces the print media design process of conveying message though concept development and visual problem-solving. Emphasis will be on the synthesis of context, aesthetics and content in support of graphic communication. Prerequisites: MArt 121, MArt 233 or permission of instructor.

#### 313. Design for the Web (3)

This course is designed to introduce digitally savvy students to website structure, design, function and terminology. Prerequisite: MArt 233 and 121.

# 317. Publication Design (3)

This course is a study of digital design, layout, typography, illustration, photo manipulation, and work processing applications as it relates to multipage output. Prerequisite: MArt 373 and familiarity with the operation of a Macintosh-based computer or permission of the instructor.

# 318. Principles of Multimedia (3)

This course examines the basic principles and applications used to create interactive animated movies, games and websites.

#### 320. Color Theory (3)

This is an introductory course examining the scientific, physiological and artistic to color perception and usage. Manual and digital color models are explained in conjunction with color exercises.

#### 322. HD Cinema Workshop (3)

This is an advanced production course focusing on documentary and narrative video production as well as HD cinema production tools. Prerequisite: MArt 221 or permission of the instructor.

#### 326. Multimedia Project Management (3)

Through working on a creative team, students will learn how to interact with clients, manage exhibition content, information flow, budget, and production schedule, and master the art of problem solving and troubleshooting. Prerequisite: MArt 318.

# 327. Web Production Workshops (3); 2,2

This is a course dealing with Internet history, information architecture, and interface design and usability. This class will address issues such as change in technologies, designing for mobile and portable

devices, and streaming audio and video. Prerequisite: MArt 233 or Permission of instructor.

# 328. Principles of Game Design (3)

This course provides the basic theories and implementation of game design. Students will study structure, strategy and work on developing their own games, digital or analog.

# 334. Media Arts Practicum (1-4VC)

Campus work placement with specific responsibilities appropriate to the discipline.

### 350. Media Arts Seminar (3)

This is an introduction to the basic concepts and topics of media arts in terms of graphic design, photography, multimedia, video and audio.

# 362. Video Effects (3);2,2

This course is a study of digital video postproduction techniques such as chroma-key matte production, image morphing and video compositing.

# 363. Video Animation (3);2,2

This course is a study of 3-D video animation utilizing LightWave™.

#### 366. Audio for Video (3)

The course prepares students to create multitrack audio for use in a variety of video, film, and multimedia programs. Digital audio tools are given special emphasis in the course.

# 367. Character Animation (3)

This course focuses on character animation. Students will develop their skills in 2D and clay animation by learning the concepts of storyboarding, character movement, walk cycles, facial expression, audio syncing and camera angles.

# 373. Typography (3)

This course is an introduction to typographic form and technology. The course covers the design and appropriateness of letterform systems in the communication process and gives experience with current typographic production equipment and techniques. Prerequisite: MArt 121, MArt 233 or permission of instructor.

#### 413. Non-Linear Digital Video Editing (3)

This course is a study of video editing techniques and systems which have emerged from the intersection of television and computer techniques.

### 415. Design Projects for the Community (3)

This course focuses on the developing critical-thinking skills for relating media content to context and for understanding how social and cultural issues impact public perceptions and behaviors. Through advocacy of a noncommercial cause, students will explore the many facets of an issue, identify key points to impact public appeal, develop a media promotional strategy, and employ visual communication skills to promote social change.

# 436. Experimental Video Production (3)

In this course, students will explore approaches to experimental storytelling using advanced HD video. Students will learn the basics of project proposal writing as well as how to secure funding and seek distribution for experimental projects. Prerequisite: MArt 221 and 322 or permission of the instructor.

### 443. Digital Photography 1 (3)

This course covers how to properly use a digital SLR camera, how to manipulate and print an image with Photoshop\*, and how to use those skills to successfully communicate ideas through the medium of digital photography. Prerequisite: MArt 233.

# 445. Digital Photography 2 (3)

This course expands the possibilities of the creative, technical, and conceptual aspects of digital photography through advanced techniques such as advanced masking, the creation of panoramic imagery, high dynamic range shooting, and large-format printing. Prerequisite: MArt 233 and 443.

# 446. Screenwriting (3)

This course is a study of the format, the writing styles, and the creative and technical techniques useful in the development of the dramatic screenplay for television and film.

#### 447. Studio Lighting (3)

This course introduces students to skills that are imperative in professional photography: studio lighting, portraiture, product photography and macro photography. The techniques learned in this class will be introduced through lectures about historical and contemporary photographers and photographic movements. Professional modes of presentation such as matting, framing, shipping, and archival treatments for gallery and commercial settings will be addressed as well. This course is structured with the assumption that you will create a sound, professional, presentation-ready portfolio of work by the end of the semester. Prerequisite: MArt 445.

# 449. Digital Photography 4: Photographic Installation (3)

This class explores the ever-evolving area of interactive photography. Starting with an introduction to a 3-D imagery through stereoscope and lenticular photography, the course will introduce students to new ways of thinking about photography as an interactive rather than an indexical tool. Students will research contemporary photographic installation artists and will present their academic findings in the form of an oral presentation. The final class project will culminate in the creation of a photographic installation that uses at least one form of interactivity. Students will learn how to write professional artist's statements to accompany their work and how to document their work. Prerequisite: MArt 447.

#### 452. Audio Production for Radio (3)

This course is the study of digital audio hardware and software used in the audio production and radio industries. An introduction to audio engineering concepts.

# 456. Physical Computing (3);2,2

This course focuses on physically interactive technology, enabling a student's work to sense and respond to its environment. This course is geared towards people interested in exploring new possibilities for screen based and installation art, robotics, and smart architecture, The course begins with the basic theories of electronics and leads to fully functional interactive projects. Through current examples, technical lectures, and hands-on supervised work time, students will learn the process of building projects that react to physical interactions, as well as, build a series of working prototypes.

#### 457. Surround & Installation Workshop (3)

This course prepares students to create multimedia, interactive audio installations. Works for gallery and public art installation are given special emphasis in this course. Prerequisite: One of the following: MArt 366, MArt 326, or MArt 318.

### 459. Advanced Interactive Multimedia (3)

This course is designed for students interested in advanced multimedia and web development. This course is designed to relate directly to current professional standards in multimedia, interaction and web production. Prerequisite: MArt 318 & 327 or permission of instructor.

#### 460. Alternative Photographic Techniques (3)

This course will focus on alternative processes and techniques: light box imagery, Lazertran, imagery on silk, digital negatives, and cyanotypes. The course also explores creative shooting options such as Holga cameras and Lensbabies. Throughout this semester, students will question and evaluate how alternative photographic techniques can be used to extend the meaning of a piece. Prerequisite: MArt 233 and MArt 443.

### 461. Advanced Design Practice (3)

This class is an advanced design class and an advanced practice class. The course projects will focus on targeting audiences in a cohesive manner with print, web, and interactive materials as well as how to identify users and buyers. Prerequisite: Permission of instructor.

# 464. Advanced Digital Cinema (3)

This is a capstone course in video production that requires the student to write, produce and direct a professional-quality video piece. Prerequisites: MArt 436 or permission of the instructor.

#### 465. Advanced Media Projects (3)

This course is for advanced students who wish to develop professional-quality projects for their portfolio. Students will have their current work evaluated, then focus on one project to highlight their strongest skills. Students will look at existing professional work in video effects, 3-D animation, web

development, interactive media, animation, and video/audio production. Students will have one-onone and group critiques, resulting in presentation of a final high-quality media project.

# 468. Advanced LightWave™ Modeling (3)

This course is the study of three-dimensional computer modeling techniques for virtual objects. Prerequisite: MArt 363.

#### 469. Advanced Video Animation (3)

This course is a study of advanced techniques of LightWave animation, including the use of metanurbs, inverse kinematics, multiple-target morphing, and quasi-cel animation. Prerequisite: MArt 363.

# 470. Advanced Design Practice 2 (3)

This class is an advanced design class and an advanced practice class with an emphasis on process as well as client relations. The curriculum focuses on accurately targeting audiences for professional clients with print, web, and interactive materials. Students will learn how to most effectively position a unique brand in the market. Prerequisite: Instructor permission.

# 475. Advanced Screenwriting Workshop (3)

The advanced screenwriting course establishes a workshop atmosphere where students can participate seriously and intently into the discussions of each other's work. Students will be expected to complete a feature-length screenplay. Prerequisite: MArt 446.

# 490. Independent Study (1-4VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

# 495. Exhibition Design (3)

In this class, students will be introduced to exhibition design principles. Projects include the participation in designing of a physical space, the static and interactive elements, and combining design, construction and multimedia skills to produce a final exhibit for the public.

### 496. Advanced Exhibition Design (3)

Through readings, class discussions, field trips and guest presentations, students will gain a mastery of exhibition content, the principles of exhibiting design, the design of physical spaces, static and interactive exhibition elements, and how to combine design, construction and multimedia skills. Some weekend and evening meetings will be required.

# Courses in Music (Mus)

# 100. Introduction to Music (3); All

This course is a survey of the range of musical expressions in a variety of times and places. Examines music as a uniquely expressive means with particular attention to its historical, social, and cultural contexts. Satisfies the fine arts requirement in the general education core. NM Common Course Number: Mus 1013

#### 101. Rudiments of Music (3); Fa, Sp

This course is a study of the basic elements of music, especially the rhythmic, melodic, and harmonic aspects. Intended as a first course in music theory for students with little or no academic music background and as a review of basic musical concepts for potential music majors and minors in preparation for the music theory sequence. Satisfies the fine arts requirement in the general education core. *NM Common Course Number: Mus 1213* 

### 201. Piano Class 1 (1); 0,2; Fa

This course explores the fundamentals of piano playing.

#### 202. Piano Class 2 (1;) 0,2; Sp

This course explores progressions, sight-reading, and harmonization with extended repertoire. Prerequisite: Mus 201

# 203. Voice Class (1); 0,2; Fa, Sp

This course is study of the fundamentals of singing, vocal production, and technique. Repertoire will be drawn from classical, Broadway, and folk song traditions.

### 206. Guitar Class (1); 0,2; Fa, Sp

This course is an introduction to guitar performances in all styles and includes basic guitar performance technique, music reading, choral accompaniment, and melody playing.

#### 207. Guitar Class 2 (1); 0,2; Sp

This course is a continuation of Music 206 and provides an intermediate-level study of guitar technique and exploration of various styles of guitar performance. Prerequisite: Mus 206, or permission of instructor.

#### 208. Piano Class 3 (1)

This course explores progressions, sight-reading, and harmonization with extended repertoire. Prerequisites: Mus 201 and 202.

#### 210. Functional Piano (1)

This course explores score reading on the piano, harmonic study through practical applications. Prepares learners for the Keyboard Proficiency Examination. Prerequisites: Mus 201, 202 and 208.

# 211. Music Theory 1 (3); 4,0; Fa, Sp

This course examines the basics of functional harmony in Western art music tradition. Prerequisite: Mus 101 or successful completion of Theory Placement Exam.

# 213. Music Theory 2(3); 3,0; Fa, Sp

This course is a continued study of functional harmony in the Western art music tradition. Prerequisite: Mus 211.

# 220. Music Technology (3); Fa, Sp

This course is a study of basic and intermediate elements of music technology including historical background, lexicon of electronic music, computer-based composition, and digital audio. For students with an interest in sound generation, audio recording, and digital audio editing. Suitable for music majors, minors, and non-majors. Course is repeatable.

### 231. Aural Skills 1 (1)

This course develops skills in melodic, harmonic, and rhythmic dictation and sight singing. Prerequisite: Some knowledge of music theory recommended. Corequisites: Mus 202 and 211.

#### 232. Aural Skills 2 (1)

This course continues to increase skills in melodic, harmonic and rhythmic dictation and sight singing. Prerequisite: Mus 231 or permission of instructor. Recommended as a corequisite to Mus 211 or 213.

### 235-435. Selected Topic in Music (1-4 VC); All

Course in a topic or topics in music. May be repeated with change of content.

#### 244. Sight-Singing (3)

This course enables the student to sing written melodies at first sight without the aid of a musical instrument. Topics include reading rhythmic notation, recognizing key signatures, seeing melodies as part of a scale, and learning the sounds of musical intervals.

#### 251. Applied Music (1-2 VC); 1-2,0; Fa, Sp

This course is for music majors and minors only. It is individual study in voice, keyboards, guitar, string, wind, and percussion instruments. Students receive one 30-minute lesson per week for each credit hour and perform in Convocation and before a jury at the end of the semester. May be repeated. Prerequisite: Permission of instructor.

#### 260. Recital Attendance (0); Fa, Sp

Music students attend and participate in convocations, concerts, and recital performances, creating a wider appreciation for the performing arts.

#### 276-476. Musical Theater (2); Fa, Sp

This course involves participation in a current musical theater production in an on-stage voice role. Assignments vary from production to production. Prerequisite: Permission of instructor.

#### 283-483. Ensemble (1 - 2 VC); All

This course involves musical performance in large- and small-group contexts, both choral and instrumental. See the Schedule of Classes for a list of ensembles offered during any given semester or summer session. Course may be repeated for credit. Prerequisite: Permission of instructor.

# 290-490. Independent Study (1 - 4 VC); 1-4, 0; All

Individual, directed study arranged with an instructor. May not replace a course listed in the catalog. Prerequisite: Permission of instructor.

#### 311. Western Art Music to 1750 (3); 3,0; Fa

This course is an overview of the history of Western art music from the ancient world through the Medieval, Renaissance, and Baroque periods. Prerequisite: Mus 213.

#### 312. Western Art Music since 1750 (3), 3,0; Sp

This course is an overview of the history of Western art music from preclassical periods to the present. It satisfies the fine arts requirement in the general education core. Prerequisite: Mus 213.

# 320. Diction for Singers (2); 2, 0; Fa, Sp

This is a course in the proper pronunciation of German, French, and Italian. Prerequisite: Voice class.

#### 322. Choral Conducting (3); 2,2; Alt Sp

This is a conducting course that focuses on the rehearsal and performance of works for choral ensembles. Topics include baton technique, score analysis, rehearsal techniques, and performance preparation. Prerequisite: Mus 213.

# 323. Instrumental Conducting (3); 2,2; Alt Fa

This is a conducting course that focuses on the rehearsal and performance of works for instrumental ensemble. Topics include baton technique, score analysis, rehearsal techniques, and performance preparation. Prerequisite: Mus 213.

# 331. Theory 3 (3); 3,0; Fa, Sp

This is a study of harmonic function in chromatic music, particularly focusing on modulation and advanced harmonic structures. Prerequisite: Mus 213.

#### 332. Theory 4 (3); 3,0; Sp

This course is an exploration of theories and techniques of the 19th and 20th century composition. Prerequisite: Mus 331.

#### 333 Aural Skills 3 (1)

This course continues to increase skills in melodic, harmonic and rhythmic dictation and sight-singing. Prerequisite: Instructor permission, corequisite Mus 211 and 213.,

#### 350. Multicultural Approaches in Music Education (3); 3,0; Alt Fa

This course explores music education methods from a variety of perspectives. Examination of the cultural basis of music and how that focus can be important to students in the music classroom.

#### 360. Half Recital (1); 1,0; Fa, Sp

The student will prepare a 30-minute public recital. Prerequisite: Permission of instructor.

#### 400. Audition (3): 3,3

This course explores audition techniques and preparation for community, university, and professional music theater. Prerequisite: One semester of acting class (theater) and one semester of voice class (music).

#### 410. Form and Analysis (3); Fa, Sp

This course is a study of the formal and harmonic structure of common practice, Romantic, and 20th century composition. Prerequisites: Mus 211, 213, 313 and 332 and their corequisites.

### 412. The History of Opera (3); Fa, Sp

This course is an overview of the history of opera.

#### 425. Instrumental Techniques (4); Alt Sp

This course is a study of performing and teaching techniques of instruments of the band and orchestra.

#### 426. Orchestration (3); 3,0; Fa, Sp

A study of the techniques of scoring for instruments and voices for the purpose of creating orchestra, band, choral, and other ensemble scores.

#### 450. Seminar in Music (1 – 4 VC)

Seminar course in a topic or topics in music.

#### 451. Applied Music (1 – 2 VC); 1-2,0; Fa, Sp

For music majors and minors only, this course is an advanced private study in voice, keyboard, guitar, string, wind, and percussion instruments. Students receive one 30-minute lesson per week for each credit hour and perform before a jury at the end of the semester. Course may be repeated for credit. Prerequisite: Permission of instructor.

#### 469. Recital Attendance (0); Fa, Sp

Music students attend and participate in a variety of convocations, concerts, and recital performances, creating a wider appreciation for the performing arts.

#### 470. Full Recital (2); 2,0; Fa, Sp

The student will prepare a 60-minute public recital. Prerequisite: Permission of instructor.

#### 471. History of Jazz (3); 3,0; Alt Sp

This course is a study of the origins and development of jazz from traditional New Orleans jazz through big band swing, belop and contemporary styles. Satisfies the fine arts requirement in the general education core.

# Courses in Theater (Thea)

#### 100. Introduction to Theater (3)

This is a general introduction to the art of theater that acquaints the student with the elements that make up theatrical production.

# 134-434. Theater Practicum (1-3 VC)

This course involves technical participation in theater department shows working as set crew, light crew, stage hand, running crew, etc. Student must put in labor hours arranged with the instructor.

# 200. Introduction to Technical Theater Production (3)

This course is an introduction to basics of technical theater as applied to the creation scenery, lighting, sound, and costumes. This course will introduce students to the basic job titles and responsibilities found in a contemporary theater.

# 201. Stagecraft 1 (3)

This course is an introduction to the design and execution of stage scenery with an emphasis on construction techniques and the properties of construction material and how to safely operate tools. The student is instructed on all aspects of stage sets and design including the art of building and painting scenery and how to handle scenery on stage.

#### 261. Stage Movement for the Actor (3)

State Movement for the Actor is designed to develop and expand the actor's knowledge of movement for the stage through practical, physical exercises. Included in the course are exercises for increased body awareness and alignment, physical relaxation and flexibility, body communication, tempo/rhythm changes and scoring a character's movement choices. The class also includes an exploration of movement theory, use of props and development of a system for creating physical characterization for both theatrical realism and non-realism.

#### 271. Acting 1: The Actor Prepares (3)

This course is an introduction to the Stanislavski approach to acting and the development of the actor's resources. Included in the course are exercises in sensory awakening, imagination, focus and concentration, observation, improvisation and storytelling. The student actor is also introduced to a basic philosophical and practical approach to acting, which includes development of analytical skills as well as an understanding of vocal and movement conventions for the stage.

#### 272. Acting 2: Creating a Character (3)

A continuation of Acting I, Creating a Character explores individual characterization using analytical techniques and observation and imagination resources to create character. Emphasis is placed on physical, vocal and psychological characterization developed through analysis, internal and external technique, and costume and prop use.

### 281. Theater History for the Actor (3)

This course is an overview of the history of Western theater as an individual art form from the Greeks to the present time with emphasis on the actor's place in theater history along with the study of the major acting styles and theorists of each period. The student will also study selected plays related to specific acting styles and/or theorists.

#### 301. Stagecraft 2 (3)

This course is provides the stagecraft student with an intensive examination of each of the primary subjects presented in Stagecraft 1. The goals include acquainting students with the skills needed to operate in the various areas of theatrical production. Prerequisite: Thea 201.

#### 302. Lighting (3)

Students will gain an appreciation for the art of stage lighting by drafting light plots through play analysis. There will be an emphasis on tools and instruments involved in theater lighting through practical application. Prerequisite: Thea 201.

# 363. Voice and Diction for the Stage (3)

Voice and Diction for the Stage is a course dedicated to the development of the actor's voice for performance. Areas of concentration will be on voice theory, breathing techniques, developing range, power and flexibility in the voice. Through practical exercises, the actor will learn voice control and will explore how to use language, develop subtext, activate the voice and use sound to express character.

#### 372. Acting 3: Scene Work (3)

A continuation of the study of the Stanislavski system with focus on rehearsal process, scene work with a partner, listening, moment to moment playing, creating a play's environment, creating individual characterization and the continued development of an individual philosophical and analytical approach to the craft and art of acting.

# 383. Play Analysis for the Actor (3)

Based primarily on the theory of play analysis developed by Constantin Stanislavski and Francis Hodge's book, *Play Directing*, the student actor is introduced to the tools of theatrical analysis: given circumstances, unites of action, objective, obstacles, tactics, through-line of action, subtext, "the magic if...," researching the role outside the world of the play and imaging. The student will be tested by applying the tools of theatrical analysis of the study of selected play scripts. Prerequisite: Thea 281.

# Biology (BS)

Biology majors must take the following required courses and electives:

# Required courses: 65-67 credit hours

- Biol 211: General Biology 1 (4)
- Biol 212: General Biology 2 (4)
- Biol 300: Genetics (4)
- Biol 301: General Microbiology (4)
- Biol 302: Animal Structure & Function (4)
- Biol 303: Plant Structure & Function (4)
- Biol 405: Bacterial Phys (4)

#### OR

- Biol 423: Molecular & Cell Biol (4)
- Biol 492: Senior Project (3)
- Chem 211: General Chemistry 1 (3)
- Chem 212: General Chemistry 2 (3)
- Chem 215: Chemistry Lab 1 (2)
- Chem 216: Chemistry Lab 2 (2)
- Chem 341: Organic Chemistry 1 (4)
- Math 160: Pre-Calculus (5)
- Math 211: Calculus (4)
- For 340: Quantitative Methods (3)

#### OR

• Math 345: Statistics (3)

Choose one set from the following:

- Phys 151: Algebra Physics 1 (4)
- Phys 152: Algebra Physics 2 (4)

#### OR

- Phys 291: Calculus Physics 1 (5)
- Phys 292: Calculus Physics 2 (5)

#### Electives: 16 credit hours

In consultation with your biology adviser, choose any combination of electives to receive a minimum of 16 credit hours with at least 12 hours from biology and the remainder from other sciences. See below for examples of electives. Most of these courses are offered every other year and some every three years. See course descriptions for prerequisites. Students anticipating advanced degrees are encouraged to take additional science electives to better prepare for the MCAT or GRE exams.

Choose at least 12 hours from the following list of biology electives:

- Biol 331: Human Anat & Phys 1 (4)
- Biol 332: Human Anat & Phys 2 (4)
- Biol 359: Lab Safety (1)
- Biol 389: Ecology & Lab (4)
- Biol 401: Pre-Med (1)
- Biol 405: Bacterial Phys (4)
- Biol 410: Func Genomics (4)
- Biol 415: Biotechnology (4)
- Biol 422: Plant Physiology (4)
- Biol 425: Marine Biology (4)
- Biol 427: Immunology (3)
- Biol 428: Pathogenic Microbiol (4)
- Biol 430: Livestock Mgmt (3)
- Biol 432: Vertebrate Physiology (4)
- Biol 455: Wildlife Diseases (3)
- Biol 463: Animal Nutrition (3)
- Biol 476: Evolution (3)
- Biol 480: Parasitology (4)
- Biol 481: Developmental Biol (4)
- Biol 485: Endocrinology (4)
- Biol 487: Histology (4)
- Biol 488: Soil Ecology (4)
- Biol 490: Independent Study (1-4)
- Biol 493: Field Botany (2)
- Biol 494: Field Zoology (2)
- Biol 499: Ind Research (1-4)

Only eight hours from Biol 331, 332, and 432 will qualify for the electives for the BS degree in biology. Biol 332 is a continuation of Biol 331.

#### Major Total: 81-83 credit hours

# Major in Biology with a Concentration in Teaching

Biology degree requirement, except only the following four credits of electives:

- Biol 359: Fund of Lab Safety (1)
- Biol 42: Teaching Science & Math in Middle & Secondary Schools (3)

And must minor in secondary education.

#### Concentration Total: 69-71 credit hours

# Minor in Biology

# Required Courses: 16 credit hours

- Biol 211: General Biology 1 (4)
- Biol 212: General Biology 2 (4)

Take at least two courses of the following list:

- Biol 301: General Microbiology (4)
- Biol 302: Animal Structure & Function (4)
- Biol 303: Plant Structure & Function (4)

#### Electives: 8 hours\*\*

\*\*Choose at least two 300- to 400-level courses in biology.

# Minor Total: 24 credit hours

#### Reauired core: 49 credit hours

- Biol 211: Gen Biology 1 (4)
- Biol 212: Gen Biology 2 (4)
- Chem 211-215: Gen Chem/Lab 1 (5)
- Chem 212-216: Gen Chem/Lab 2 (5)
- CS 144: Intro to Computer Sci (3)
- Geol 101: Survey of Earth Sci (4)
- Geol 202: Earth History (4)
- Biol 420: Tchng Sci & Math in Secondary School (3)
- Phys 151-152: Algebra Physics 1 & 2 (8)

#### OR

- Phys 291-292: Calculus Phys 1 & 2 (10)
- Biol 359: Fund of Lab Safety (1)

#### OR

• Chem 359: Fund of Lab Safety (1)

#### Total Core: 43 credit hours

#### Electives: 16 credit hours

With the advice of a science adviser, select at least one course from each of biology, chemistry and geology for a minimum of 16 credits above the 300 level. In addition, the student must undertake a minor in secondary education. Students must fulfill requirements for entrance to teacher preparation and licensure. Please contact the School of Education for details.

#### Major Total: 59 credit hours

### Major in Chemistry (BA)

#### Required Courses: 31 credit hours

- Chem 211: Gen Chemistry 1 (3)
- Chem 212: Gen Chemistry 2 (3)
- Chem 215: Gen Chem Lab 1 (2)
- Chem 216: Gen Chem Lab 2 (2)
- Chem 321: Quantitative Analysis (4)
- Chem 341: Organic Chem 1 (4)
- Chem 342: Organic Chem 2 (4)
- Chem 371: Physical Chem 1 (3)
- Chem 481: Biochemistry 1 (3)
- Chem 495: Senior Chem Applic (3)

### Electives: 6 credit hours

- Chem 317: Physical Chem Lab (3)
- Chem 322: Instrumental Analysis (4)
- Chem 372: Physical Chem 2 (3)
- Chem 419: Adv Snyth & Instr Lab (3)
- Chem 441: Reaction Mech (3)
- Chem 461: Inorganic Chem 1 (3)
- Chem 442: Synthetic Chem (3)

- Chem 442: Ch Research Sem (1)
- Chem 462: Inorganic Chem II (3)
- Chem 473: Chem Kinetics (3)
- Chem 482: Biochemistry 2 (3)
- Chem 499: Indep Research (1)

# Additional Requirements: 15-17 credits

- Engl 367: Technical Writing (3)
- Math 211: Calculus I (4)
- Phys 151: Algebra Physics 1 (4)

#### OR

- Phys 291: Calculus Physics 1 (5)
- Phys 152: Algebra Physics 2 (4)

#### OR

• Phys 292: Calculus Physics 2 (5)

### Major total: 52-54 credit hours

Students must complete a minor or complete the forensics option below. Most minors such as biology or psychology, in combination with the chemistry major, will satisfy the university's requirement that students earn 51 upper-division credits.

### Forensics Concentration

#### Additional requirements: 35-36 credits

- Anth 442: Forensic Anth (3)
- Biol 211: General Biology 1 (4)
- Biol 212: General Biology 2 (4)
- Biol 300: Genetics (4)
- Biol 302: Animal Struct & Funct (4)
- Biol 415: Biotechnology (4)
- Soc 231: Criminal Justice Syst (3)
- Soc 427: Criminology (3)
- Biol 310: Mensuration & Biomet (3)

#### OR

- Bus 210: Statistical Analysis Bus (3)
- Psy 301: Research Methods (4)

#### OR

• Soc 330: Research Methods (3)

#### Total hours: 87 - 90 credit hours

# Major in Chemistry (ACS Approved B.S.)

### Required courses: 47 credit hours

- Chem 211: Gen Chemistry 1 (3)
- Chem 212: Gen Chemistry 2 (3)
- Chem 215: Chem Lab 1 (2)
- Chem 216: Chem Lab 2 (2)
- Chem 317: Physical Chem Lab (3)
- Chem 321: Quantitative Analysis (4))
- Chem 322: Instrumental Anayls 2 (4)
- Chem 341: Organic Chem 1 (4)
- Chem 342: Organic Chem 2 (4)
- Chem 371: Physical Chem 1 (3)
- Chem 372: Physical Chem 2 (3)

- Chem 419: Advanced Synthesis & Instrumental Analysis (3)
- Chem 461: Inorganic Chem 1 (3)
- Chem 481: Biochemistry 1 (3)
- Chem 495: Senior Chem Appl (3)

#### Electives: 6 credit hours

Chemistry majors must choose a minimum of six elective credits from the following courses or other upper-division courses with the approval of the chemistry curriculum adviser:

- Chem 441: Reaction Mech (3)
- Chem 442: Synthetic Chem (3)
- Chem 450: Seminar in Chem (1-3)
- Chem 455: Chem Rsrch Sem (1)
- Chem 462: Inorganic Chem II (3)
- Chem 473: Chem Kinetics (3)
- Chem 482: Biochemistry 2 (3)
- Chem 499: Indep Research (1-6)

#### Additional requirements: 28 credits

The following courses in mathematics and physics must be completed. The inclusion of Calculus 1 meets the bachelor of science degree requirement of three credits in mathematics including Math 211.

- Engl 367: Technical Writing (3)
- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Math 273: Calculus 3 (4)
- Math 320: Linear Algebra (3)
- Phys 291: Calc Physics 1 (5)
- Phys 292: Calculus Physics 2 (5)

### Major Total: 81 credit hours

Chemistry students may choose mathematics, physics, or biology as an optional minor. The combined science minor is sometimes used as an alternative. (See Interdepartmental Programs.)

Depending upon high school background and ACT scores, the student may be required to take mathematics courses prerequisite to Calculus 1, and it may also be advisable to take Physics 151 and 152.

The student may also choose a non-American Chemical Society approved bachelor of science program. This program deletes Chem 419, Inorganic Chem, Calculus 3, and Diff Equations from the above list of required courses. If students choose this option, they must add nine more upper-division credits in consultation with a major adviser.

# Minor in Chemistry

# Required courses: 18 credit hours

- Chem 211: Gen Chemistry 1 (3)
- Chem 212: Gen Chemistry 2 (3)
- Chem 215: Chem Lab 1 (2)
- Chem 216: Chem Lab 2 (2)
- Chem 321: Quantitative Analysis (4)
- Chem 341: Organic Chem 1 (4)

### Electives: 3-4 credit hours

Choose a minimum of one course from the following list:

- Chem 322: Instrumental Anayls 2 (4)
- Chem 342: Organic Chem 2 (4)
- Chem 371: Physical Chem 1 (3)

#### Minor Total: 21-22 credit hours

# Courses in Biology

# 110. Biology Perspectives (4); 3,2

This course is an introduction to biology that includes consideration of the diversity of life, the origin of species, and ecology. The course emphasizes those aspects of biology that are of immediate importance to the non-scientist. (Required of biology majors whose ACT science scores are below 20.) Does not count toward biology major. NM Common Course Number: Biol 1114

# 131. Human Biology (4); 3,2; Fa

This is a lecture and lab course that conceptually presents the basic aspects of human anatomy and physiology and their interaction with the environment. Current medical and basic science topics are discussed and made relevant. This introductory course is for non-science majors interested in professions related to human conditions.

# 135-435. Selected Topics in Biology (1-4 VC)

Course in a topic or topics in biology. May be repeated with change of content.

# 211. General Biology 1 (4); 3,2

This lecture and laboratory course analytically presents a large scale, evolutionary framework for biological systems. A rigorous, but practical, observational approach to basic evolutionary processes, biodiversity and the ecology of ecosystems is given. This course is one of two parts of a two-semester general biology sequence, which is required for students who major in the life sciences. Prerequisite: Eligible for English 111, and Math 120 or completion of Biol 110 with a grade of C or better. Recommended prerequisite/corequisite: Chem 211. NM Common Course Number: Biol 1214

# 212. General Biology 2 (4); 3,2

This course provides a general survey of the fundamental concepts of cell biology including structure and function of small and large molecules, cellular membranes and organelles, an introduction of the biochemical pathways, enzyme function, chromosomes, cell cycle, cell division, Mendelian genetics, cell communication and signaling, and molecular biology techniques and applications. The laboratory exercises follow the lecture topics and are designed to encourage students to ask questions, to pose hypotheses, and to make predictions before they initiate laboratory work. Prerequisite: Biol 211 and Chem 211 or permission of instructor. Recommended corequisite: Chem 212. NM Common Course Number: Biol 1224

### 231. Intro to Human Anatomy & Physiology (4); 3,2; Fa

This course explores the structure and function of the human body at the cellular, tissue, organ, and organ-system levels of organization. Prerequisite: Math 100, Chem 100, Engl 100 completion with a grade of a C or better or permission of instructor. NM Common Course Number: Biol 2414

### 232. Intro to Human Anatomy & Physiology (4); 3,2; Sp

This course explores the structure and function of the human body at the cellular, tissue, organ, and organ-system levels of organization. Prerequisite: Biol 231 completion with a grade of C or better or permission of instructor. NM Common Course Number: Biol 2424

#### 300. Genetics (4); 3,2; Sp

This course explores the fundamental concepts of genetics. The course will cover Mendelian genetics, population genetics and the fundamentals of DNA replication, transcription, translation and regulation. Prerequisite: Biol 212, Chem 211, Math 120 or permission of instructor.

#### 301. General Microbiology (4); 3,2; Fa

This course is designed to offer students an intensive and comprehensive introduction to microbiology. The course will focus on the physiology and molecular biology of bacteria and viruses. Some emphasis will be placed on microbial pathogenesis. Prerequisite: Biol 212 or permission of instructor. NM Common Course Number: Biol 2514

#### 302. Animal Structure and Function (4); 3,2; Fa

This course is an introduction to the anatomy, embryology, and physiology of animals. Prerequisite: Biol 212 or permission of instructor.

#### 303. Plant Structure and Function (4); 3,2; Sp

This course examines comparative microscopic and gross structures of plants; major physiological processes. Prerequisite: Biol 212 or permission of instructor.

#### 331. Human Anatomy & Physio (4); 3,2; Fa

This course explores structure and function of the human body at the cellular, tissue, organ, and organsystem levels of organization. Prerequisite: Biol 211, and 212, Chem 211, 215, and Chem 212, 216 completion with a grade of C or better or permission of instructor.

### 332. Human Anatomy & Physio (4); 3,2; Sp

This course is a continuation of Biol 331 and explores the structure and function of the human body at the cellular, tissue organ, and organ-system levels of organization. Prerequisites: Biol 331 completion with a grade of C or better or permission of instructor.

### 359. Fundamental Principles of Laboratory Safety (1); 1

This course explores the introduction to the principles of laboratory safety including the proper use of emergency safety equipment and personal protective equipment, instructions for the safe handling, labeling, storage and disposal of chemicals, and safety in the biology and physics labs. Emphasis will be placed on preparing science educators in safety procedures. Prerequisite: Chem 211 and Chem 212 or permission of instructor.

# 389. Ecology (4); 3,2; Fa

This course examines the organizational and functional processes of ecosystems: distributions, abundance, and interactions of organisms. Prerequisite: Biol 212 and Biol 302 or Biol 303 or permission of instructor.

# 399. Undergraduate Research (1 - 6 VC)

Special research problems for selected biology majors. A terminal research paper and oral presentation are required. Prerequisite: Permission of instructor.

# 401. Pre-med Education & Development (1); 1; Sp

This course is designed to aid in the preparation of students planning to apply for medical school or other health-related fields. This course will provide students with MCAT review to be taught by experts in the field. Two practice exams will be administered before and near the end of the MCAT review preparation to evaluate the progress of the students. The remainder of the semester will be concentrated on preparation of the application packet for admission into med school or other health-related fields. Workshops will be setup during class time and will address a variety of issues pertinent to the application process. Must meet eligibility requirements.

### 405. Advanced Bacteriology (4); 3,2; Alt Sp

This course examines aspects of the physiology and molecular biology of microorganisms. The genetics, molecular structure and functional aspects of prokaryotic cells will be discussed. Bacterial metabolism will be studied, including energy production and use by aerobic and anaerobic microorganisms. Concepts of cellular growth, biosynthesis and molecular genetics will also be addressed. Prerequisite: Biol 300, 301 and Chem 212 or permission of instructor.

#### 410. Functional Genomics (4); 2,4; Alt Sp

Functional genomics includes the study of function-related aspects of the genome. Different techniques and tools are used to improve our understanding of gene and protein functions, their interactions, and molecular evolution. Because of the large quantity of data produced by these techniques and the desire to find biologically meaningful patters, bioinformatics is crucial to these types of analyzes. In this course, students will analyze and explore the genome of a model organism to learn techniques and better understand the function and relationships of genes and proteins. Prerequisite: Permission of instructor.

# 415. Biotechnology (4); 2,4, Alt Sp

Introduces students to latest techniques in biotechnology including recombinant DNA, tissue culture, and organelle isolation as well as genetic engineering, industrial microbiology, and agricultural biotechnology. Prerequisite: Biol 300, and Chem 211 or permission of instructor. A special fee is charged.

### 420. Teaching Science and Math in Middle and Secondary School (3)

This course familiarizes students with learning theory and methods of teaching specifically related to middle and high school students of science and math. National and state science and math standards will be incorporated into the course. Prerequisite: Completion of all level-2 classes in general science

major or at least 30 credit hours in life and/or physical science or math, Field-Base 2 or concurrent enrollment and permission of instructor.

# 422. Plant Physiology (4); 3,2; Alt Sp

This course examines the physiology of germination, growth, flowering, fruiting, and senescence in plants. Prerequisite: Biol 303 and Chem 341, or permission of instructor.

# 423. Molecular & Cell Biology (4); 3,2; Fa

This course is a detailed exploration of basic cellular chemistry, macromolecules, cell structure and function, and mechanisms and regulation of gene expression. The laboratory will explore eukaryotic cell biology using modern molecular biology techniques. Topics include DNA and protein structure and function. Prerequisite: Biol 301, Biol 302, Biol 303.

# 424. Molecular & Cell Biology Laboratory (1); 0,2; Fa

This is the laboratory course to accompany Biol 423. This lab is required of students that have satisfied the molecular and cellular lecture requirement but have not taken the laboratory portion.

# 425. Marine Biology (4); 3,2; Alt Sp

Students participate in a ten-day field trip during the spring break to observe and study major groups of marine invertebrates and algae in their natural habitats. Transportation and room charge will be determined at the time of the class. Enrollment limited to 16. Prerequisite: Major or minor in biology, Biol 302 and Biol 303 and permission of the instructor.

# 427. Immunology (3); Alt Sp

This course includes principles of isolation, characterization, and control of pathogenic organisms as well as principles of vertebrate response to infection, antigen-antibody interaction, hypersensitivity, and autoimmune diseases. Prerequisite: Biol 301.

# 428. Pathogenic Microbiology (4); 2,4; Alt Fa

This course covers fundamental concepts in the isolation, characterization, and control of pathogenic organisms as they relate to human-host parasite interactions. Prerequisite: Permission of instructor.

# 430. Livestock Management (3); 3 Alt Sp

This course will address livestock health management, livestock production economics and effects on natural resources. Primary emphasis will be on beef cattle production, but other species of domestic animals and wildlife will be discussed. Prerequisite: Permission of instructor.

### 432. Vertebrate Physiology (4); 3,2; Alt Sp

This course examines the fundamental life processes in the vertebrates. Prerequisite: Biol 302 and Chem 341 and permission of instructor.

#### 455. Wildlife Diseases (3); 3; Alt Fa

This course is an introduction to viral, bacterial, and fungal diseases found in wildlife species. The diagnosis and management of the diseases are explored. Prerequisite: Permission of instructor.

#### 463. Animal Nutrition (3); 3; Alt Fa

This course is designed to provide students with an understanding of animal nutrition and appreciation of the importance of nutrition in health and economics. Subjects to be covered will include digestive anatomy, physiology, and nutrition of various animal species. Prerequisite: Permission of instructor.

#### 476. Evolution (3); Alt Fa

This course explores evolution, studied in terms of molecular, Mendelian, and population genetics. Prerequisite: Biol 300 or permission of instructor.

### 480. Parasitology (4); 2,4

This course is an introduction to the taxonomy and life cycles of vertebrate parasites and pathogenic effects upon their animal hosts as well as protozoan, trematode, scythed, nematode, and acanthocephalan parasites of domestic animals and man. Prerequisite: Biol 423 or permission of instructor.

# 481. Developmental Biology (4); 3,2; Alt Sp

This course investigates cellular and molecular mechanisms that regulate animal development. Topics include fertilization cleavage, gastrulation, axis specification, organogenesis, morphologies, and stem cells. Laboratory sessions focus on experimental manipulations of early invertebrate and vertebrate

embryos and emphasize student-designed research projects. Prerequisites: Biol 301, Biol 302.

### 485. Endocrinology (4); 3,2; Alt Fa

This course will review the embryological origin, histological structure, and function of the endocrine glands. Individual organs, the hormones that it produces, and how its function may be integrated at the systemic and cellular level will be examined. Endocrine topics will be presented with real-world examples and presented in a comparative manner among species. Prerequisite: Biol 302 or permission of instructor.

# 487. Histology (4); 2,4; Alt Sp

This course examines the microanatomy and functional organization of basic tissues: epithelium, connective tissue, cartilage, bone, muscle, and nerve. The course covers the histology of the blood and lymph vascular systems, glands, and secretions, particularly of man. Prerequisite: Biol 302 or permission of instructor.

#### 488. Soil Ecology (4);3,2

This course explores soil as a habitat, including physical and chemical properties of soil, classification of soils, soil organisms (emphasis on soil fungi and bacteria), and nutrient cycling. Prerequisite: Biol 212.

# 490. Independent Study (1 – 6 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

#### 491. Senior Project (2); 1,3-4; Fa

With the help of the instructor and a faculty mentor, students will use the theoretical and experimental expertise acquired in their classes to develop a scientific question, design an appropriate laboratory, field or other methods of study to gather information that will help them answer the question, and begin the study that will be completed next semester. Prerequisite: Senior standing in biology or permission of instructor.

#### 492. Senior Project (3); 1,3-4; Sp

This is part two of a two-semester course. With the help of the instructor and a faculty mentor, students will continue to use the theoretical and experimental expertise acquired in their classes to conclude their research from the previous semester. Prerequisite: Biol 491 with a passing grade of a C or better and senior standing in biology or permission of instructor.

#### 493. Field Botany (2); 1,2

This course examines qualitative and quantitative techniques of community analysis including floral sampling techniques for estimating population demographic patterns. The taxonomy and natural history of representative groups of land plants will be studied in the field. Prerequisite: Biol 303.

#### 494. Field Zoology (2); 1,2

This course examines qualitative and quantitative techniques of community analysis including faunal sampling techniques to estimate population demographic patterns. The taxonomy and natural history of representative groups of land animals will be studied in the field. Prerequisite: Biol 302.

#### 499. Independent Research (1 – 6 VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

#### Forensic Science (B.S.)

The forensic science program is currently suspended.

# Courses in Chemistry (Chem)

#### 100. Chemistry for the Non-Scientist (4); 3,2

This is an introductory chemistry course for the non-science major and includes a study of basic concepts of chemistry and offers students an understanding of the chemical aspects of nature and how they affect their lives.

#### 105. Intro to Chemistry (4); 3,1 Recitation

This course is designed primarily for students who have never had a course in chemistry and wish to have a preparatory course before enrolling for Chem 211 and Chem 215. It examines the fundamental principles in chemistry, including units of measurement, characteristics of elements and compounds, atomic structure, chemical bonding, chemical equations and quantitative calculations, gas characteris-

tics and behavior, energy, solutions and solubility, acids and bases. Corequisite: Math 120. NM Common Course Number: Chem 1114

# 211. General Chemistry 1 (3)

This course explores the fundamental concepts of chemistry including the metric system, significant figures, characteristics of matter, chemical formulas and equations, periodicity, chemical bonding, electronegativity, Lewis structures, molecular geometry, characteristics of gases, liquids, solids, solutions, and the mole concept and its applications. Prerequisite: Math 120 with a minimum grade of C. Corequisite: Chem 215. NM Common Course Number: Chem 1213

# 212. General Chemistry 2 (3)

This course is a continuation of Chem 211. Topics include energy forms and changes, introductory thermodynamics, reaction kinetics, chemical equilibria, acids and bases, electrochemistry, nuclear chemistry, and introductory organic chemistry and biochemistry. Prerequisite: Chem 211 and Chem 215. Corequisite: Chem 216 and Math 140. NM Common Course Number: Chem 1223

# 215. General Chemistry Laboratory 1 (2); 0,3,1 recitation; Fa

The recitation will focus on theoretical problem-solving skills, while the laboratory develops practical experimental skills including basic laboratory techniques, determination of physical and chemical properties of matter, separation of mixtures, determination of empirical formulas, use of molecular models, gas behavior, and colligative properties of solutions. Corequisite: Chem 211. NM Common Course Number: Chem 1211

# 216. General Chemistry Laboratory 2 (2); 0,3,1 recitation; Sp

The recitation will focus on theoretical problem-solving skills, while the laboratory develops practical experimental skills including calorimetry, chemical kinetics, chemical equilibria, acid/base titrations, electrochemistry, metal reactivity, and qualitative analyses of ions. Corequisite: Chem 212. NM Common Course Number: Chem 1221

# 235 - 435. Selected Topic in Chemistry (3)

Course in topic or topics in chemistry. May be repeated with change of content.

# 241. Preview of Organic Chemistry (2)

This course is an overview and introduction to organic chemical nomenclature, structures, and reactions.

#### 255. Chemistry Research Seminar (1)

Lower-division students participating in a chemical research project will present one or two 30-minute presentations on their project to faculty members, graduate students and other undergraduate students registered in the course. In addition, the students will participate in the discussion evolving from other students' presentations.

# 299. Undergraduate Research (1 – 3 VC)

Problems in laboratory or literature may be undertaken as individual research arranged with an instructor. Prerequisite: Permission of instructor.

### 317. Physical Chemistry Lab (3); 0,6

This course explores basic electronics, optics, thermodynamic properties, reaction kinetics, and instrumentation analysis including IR, UV-VIS, GC, NMR, MS, X-ray, LC, and electro-analytical techniques for the determination of molecular structure and properties. Prerequisite: Chem 322, Chem 342 and Math 252.

# 321. Quantitative Analysis (4); 3,1,3 Fa

Quantitative aspects of chemical analysis are covered including statistical data analysis, chemical equilibrium especially in acid/base and systems, electrochemistry, and an introduction to optical methods and separations including HPLC, GC-MS, UV-vis, AA, and electrochemistry. Prerequisite: Chem 212, Chem 216, and Math 140.

#### 322. Instrumental Analysis (4); 3,3

Instrument design, use, and range of application are considered. Major instrumentation covered includes gas and liquid chromatography (GC and LC), extraction and preconcentration methods, mass spectrometry, capillary electrophoresis, and X-ray methods. Prerequisite: Chem 321.

#### 325. Environmental Chemistry (3)

Environmental chemistry explores the sources, distribution, reactions, fate, transport and consequences of chemicals in natural systems. Reactions in aquatic, terrestrial and atmospheric environments will be considered, including both biological and abiotic transformations. Prerequisite: Chem 341.

### 341. Organic Chemistry 1 (4); 3, 3, 1 recitation

This course is an intensive study of the chemistry of carbon compounds, including structure, synthesis and reaction mechanisms. The lab component includes the study of the isolation, purification and identification of various classes of organic compounds. Prerequisite: Chem 212 and Chem 216.

# 342. Organic Chemistry 2 (4); 3, 3, 1 recitation

This course is a continuation of Chem 341. Special topics, including an introduction to biochemistry and polymer chemistry, are included. The lab component includes the synthesis of various classes of organic compounds and their identification using modern spectroscopic techniques. Prerequisite: Chem 341.

# 359. Fundamentals of Laboratory Safety (1)

This course is an introduction to the principles of laboratory safety, including the proper use of emergency safety equipment and personal protective equipment, instructions for the safe handling, labeling, storage and disposal of chemicals, and safety in the biology and physics labs. Emphasis will be placed on preparing science educators in safety procedures. Prerequisite: Chem 211 Chem 212, or permission of the instructor.

# 371. Physical Chemistry 1 (3)

This course explores chemical theory of states of matter, thermodynamics, equilibria, and kinetics. Prerequisite: Chem 342, Math 212, and Phys 292.

# 372. Physical Chemistry 2 (3)

This course examines topics such as quantum mechanics, statistical mechanics, spectroscopy, and molecular structure. Prerequisite: Chem 371, Math 252, and Phys 292.

# 419. Adv Synthesis & Instr Analysis (3); 0,6

This is an advanced chemical preparation and chemical instrumentation laboratory. Synthesis emphasizes inorganic compounds and uses modern separation, purification, and instrumental analysis techniques. Additional instrumental analysis will explore modern methods of trace analysis. Instrumentation may include NMR, GC-MS, FT-IR, fluorescence, HPLC, CE, powder X-ray diffraction, and electrochemistry. Prerequisite: Chem 321 or 322 are required, while Chem 317 and Chem 372 are recommended.

#### 441. Reaction Mechanisms (3)

This course examines theoretical organic chemistry including molecular orbital theory, photochemistry, orbital symmetry, and reaction mechanisms. Prerequisite: Chem 317, Chem 342, and Chem 372.

#### 442. Synthetic Chemistry (3)

This course is an advanced treatment of synthetic organic and inorganic chemistry and reaction mechanisms. Prerequisite: Chem 317, Chem 342, and Chem 372.

# 450. Seminar in Chemistry (1 – 3 VC)

Seminar course in a topic or topics in chemistry. Prerequisite: Chem 317, Chem 342, and Chem 372.

#### 455. Chemistry Research Seminar (1)

Upper-division undergraduate students participating in a chemical research project will present one or two 30-minute presentations on their project to faculty members and other graduate and undergraduate students registered in the course. In addition, the students will participate in the discussion evolving from other student presentations. Cross-listed as: Phys 455.

### 461. Inorganic Chemistry 1 (3)

This course examines the quantum mechanical approach to chemical bonding, crystal and ligand field theory, acid/base theories, and transition metal chemistry. Prerequisite: Chem 317 and Chem 372.

#### 462. Inorganic Chemistry 2 (3)

This course is a continuation of Chem 461. Topics include metal, transition metal, and nonmetal inorganic topics and symmetry as related to spectroscopy and reaction mechanisms. Prerequisite: Chem 461.

#### 473. Chemical Kinetics (3)

This course is an in-depth study of chemical reaction kinetics. Prerequisite: Chem 317 and Chem 372.

# 481. Biochemistry 1 (3)

This course is an introduction to the chemistry of biologically important molecules, including proteins, carbohydrates, lipids, and nucleic acids; physical properties, mechanisms of action, and enzyme kinetics. Prerequisite: Chem 342.

# 482. Biochemistry 2 (3)

This course is a continuation of Chem 481. Prerequisite: Chem 481.

#### 490. Independent Study (1 - 6 VC)

Individual, directed study arranged with an instructor. A thesis and oral presentation are required. Prerequisite: Permission of instructor.

#### 495. Senior Chemistry Applications (3)

This course will consist of an open-ended advanced chemistry project and a series of oral and written examinations that are designed to reveal each student's overall understanding of chemistry. Prerequisite: Chem 372, or permission of the instructor.

# 499. Independent Research (1 - 6 VC)

A research problem in chemistry, explored through individual, directed research arranged with an instructor. A thesis and oral presentation are required. Prerequisite: Permission of instructor.

# Courses in Forensic Science (FSci)

#### 201. Survey of Forensic Science (3)

This course is a review of the development of forensic science, mainly in the Western world, from a study of the primary contributors and their works as well as a survey of the modern subfields of forensic science, their scientific methods, their contribution to the medico-legal investigations, and career opportunities in these subfields. The course emphasizes the importance of multidisciplinary approaches in modern forensic science study and practice.

#### 301. Professional Practice

The course is an introduction to standards and ethics for professional forensic scientists; analysis of cognitive processes, scientific methods and quality control and quality assurance issues in forensic investigations; and, examination of ways to maintain credibility in an adversarial legal system through the development of technical and scientific speaking and writing skills.

#### 401. Legal Evidence (3)

This course is a review of forensic applications of experimental science and examination of the crime scene through collection of samples, physical analysis and documentation, and, ultimately, presentation of evidence in court. Case studies are used to help guide this inquiry.

### 402. Forensic Microscopy (3) 2, 2;

This course is an introduction to microscopic analysis with emphasis on the fundamentals necessary for identification and characterization of trace evidence materials such as glass, hair, fibers, explosives, soil, paint, and biological samples. Prerequisites: Chem 342, and Biol 212, or permission of instructor.

#### 434. Forensic Research/Internship (3-6 VC)

Laboratory investigations and research on forensic topics under the direction of a faculty member. Alternatively, students will serve an internship at the New Mexico State Crime Laboratory or other forensics laboratory. Prior approval must be obtained from the faculty supervisor and the Internship Services office. Prerequisite: Senior standing in forensic science and permission of instructor.

# Major in Human Performance and Sport (B.A.)

The human performance and sport physical education concentration and human performance and sport minor prepare elementary and secondary physical education teachers. This area offers a broad technical foundation in scientific principles and relevant technology, including kinesiology, exercise physiology, sports techniques, and pedagogical methodology. Students in the physical education concentration should minor in secondary education to obtain the K-12 teaching licensure in New Mexico.

The exercise science concentration is designed to prepare students who wish to become personal trainers and/or work in the area of corporate fitness. This concentration offers a more scientifically focused curriculum, including kinesiology, exercise physiology, fitness program design, and fitness and wellness program leadership. Students in this concentration are encouraged to minor in either health or business.

The recreational sport management concentration prepares students for a variety of sports industry fields, including amateur sports (youth and high school sports, collegiate sports, and international sport), professional sports, sport facility management, management, sporting goods and licensed products, health and fitness, and recreational sports. No minor is required for students completing this concentration.

Prerequisite: • PE 100: Fit for Life (2)

# Required Courses: 9 credit hours

- HPS 370: Kinesiology (3)
- HPS 376: Exercise Physiology (3)
- HPS 410: Meas & Eval in Phys Ed (3)

Students must also choose an area of concentration and complete all courses in the concentration area.

#### A. Concentration in Exercise Science

#### Required courses: 27 credit hours

- Hlth 213: Nutr for Exer & Sport (3)
- HPS 223: First Aid & CPR (3)
- HPS 405: Body Composition (3)
- HPS 421: Designs for Fitness (3)
- HPS 428: Nutrition & Support in Sport (3)
- HPS 472: Biomechanics of Sport (3)
- HPS 476: Stress Testing (3)
- Hlth 489: Fitness/Wellness Prog Ldrshp (3)
- HPS 430: ACSM Health Fitness Instructor Review (3)

OR

• HPS 432: NSCA Strength Coach Review (3)

Major Total: 36 credit hours

# B. Concentration in Physical Education

# Required courses: 27 credit hours

- HPS 223: First Aid & CPR (3)
- HPS 350: Meth of Teaching HPE (3)
- HPS 387: PE for Elem Teach (3)
- HPS 402: Motor Learning (3)
- HPS 421: Designs for Fitness (3)
- HPS 468: PE for Special Pop (3)
- HPS 495: Capstone/Senior Seminar (3)

#### And three of the following:

- HPS 227: Water Safety Instructor Course (2)
- HPS 261: Tech of Team Sports (2)
- HPS 263: Tech of Individual Sports (2)
- HPS 265: Tech of Innovative Sports (2)

# Major Total: 36 credit hours

#### C. Concentration in Recreational Sport Management

#### Required courses: 36 credit hours

- Acct 287: Prin of Financial Acct (3)
- Econ 217: Prin of Micro Econ (3)

- Fin 341: Prin of Fin Mgmt (3)
- LSvc 230: Intro to Sport Mgmt (3)
- LSvc 315: Intro to Golf Course (3)
- Hlth 402: US-Mexico Border Hlth Issues (3)
- Hlth 489: Fit/Well Prog Lead (3)
- HPS 409: Econ & Fin in Sport (3)
- HPS 461: Sport Market & Prom (3)
- HPS 465: Plan Areas & Facil (3)
- Mktg 302: Prin of Marketing (3)
- Mgmt 303: Prin of Management (3)

#### Electives:

In ESS choose six credits from the following:

- HPS 412: Public Rel in Sport (3)
- HPS 416: Aquatic Mgmt (3)
- HPS 421: Designs for Fit (3)

In School of Business, choose nine credits of electives in consultation with business adviser.

# Major Total: 60 credit hours

# Minor in Human Performance and Sport

This minor is available to all students

# Required courses: 21 credit hours

- HPS 223: First Aid & CPR (3)
- HPS 350: Meth of Tch HPE (3)
- HPS 376: Exercise Physiology (3)
- HPS 410: Measurement & Evaluation (3)
- HPS 468: PE for Spec Pops (3)
- HPS 472: Biomechanics of Sport (3)
- HPS 495: Capstone/Senior Seminar (3)

Select two classes from the following:

- HPS 225: Lifeguard Training (2)
- HPS 227: Water Safety Instruc (2)
- HPS 261: Tech of Team Sports (2)
- HPS 263: Tech of Individual Sports (2)
- HPS 265: Tech on Innovative Games (2)

### Minor Total: 25 credit hours

# Minor in Coaching

This minor is available to students with any major.

#### Required courses: 24 credit hours

- Hlth 213: Nutr for Exer & Sport (3)
- HPS 223: First Aid & CPR (3)
- HPS 376: Exercise Physiology (3)
- HPS 381: Injury Assessment & Management (3)
- HPS 408: Prin, Ethics, & Prob of Ath Coaching (3)
- HPS 421: Designs for Fitness (3)
- HPS 428: Nutrition and Supplements for Sports (3)
- HPS 478: Psy of Coaching (3)

#### Electives: 4 credit hours

Choose two courses from the following:

- HPS 365: Coaching/Officiating Baseball/Softball (2)
- HPS 366: Coaching/Officiating Basketball (2)
- HPS 367: Coaching/Officiating Football (2)
- HPS 368: Coaching/Officiating Volleyball (2)
- HPS 369: Coaching/Officiating Track & Field (2)

#### Minor Total: 28 credit hours

# Major in Health (BA)

The health major has four tracks. The health education track prepares the health science teacher. The health promotion and wellness track prepares students interested in health careers with commercial, corporate, community, or government health/fitness/wellness programs. The pre-professional health track prepares students for professional school in allopathic, osteopathic, chiropractic, podiatric, naturopathic, veterinary medicine, dentistry, optometry, pharmacy, nursing, physical therapy, or similar health related areas. The pre-professional athletic training concentration teaches students the competencies for national certification as an athletic trainer (ATC). All tracks prepare the student for advanced training in graduate school.

#### Student must take:

Math 120, Math 140, Math 150, or the equivalent of algebra and trigonometry in high school and PE 100 (Fit for Life) to qualify for the major in health.

#### The Health Education Track

Human Biology (Biol 131) should be taken as part of the students' science requirement. Students who intend to teach health in the public schools must consult with an adviser in the School of Education for licensure requirements.

#### Required courses: 36 credit hours

- Hlth 151: Personal & Comm Hlth (3)
- Hlth 213: Nutr for Exer & Sport (3)
- Hlth 350: Meth of Teaching HPE (3)
- Hlth 380: Human Diseases (3)
- Hlth 489: Fitness/Wellness Prog Ldrshp (3)
- Hlth 402: US-Mexico Border Hlth Issues (3)
- HPS 223: First Aid & CPR (3)
- HPS 370: Kinesiology (3)
- HPS 410: Meas & Eval in Phys Ed (3)
- Psy 408: Drugs & Behavior (3)

AND

• Psy 422: Human Sexuality (3)

OR

Hlth 353: Hlth & Drug Ed (3)

ANT

• Hlth 352: Hlth & Sex Ed (3)

#### Electives: 3 credit hours

Choose three credits in English, Spanish, sociology, history, or psychology.

#### Major Total: 36 credit hours

#### The Health Promotion and Wellness Track

Human Biology (Biol 131) should be taken as part of the student's science requirement.

#### Required courses: 36 credit hours

• Hlth 151: Personal & Comm Hlth (3)

- Hlth 213: Nutr for Exer & Sport (3)
- Hlth 3/400: Elective (3)
- Hlth 402: US-Mexico Border Hlth Issues (3)
- Hlth 421: Epidemiology (3)
- Hlth 489: Fit/Well Prog Lead (3)
- HPS 223: First Aid & CPR (3)
- HPS 2/434: Practicum (3)
- HPS 370: Kinesiology (3)
- HPS 376: Exercise Physiology (3)
- HPS 410: Meas & Eval in Phys Ed (3)
- HPS 476: Stress Testing (3)

# Major Total: 36 credit hours

# The Pre-Professional Allied Health Required courses: 56 credit hours

- Biol 211: Gen Biology I (4)\*
- Biol 212: Gen Biology II (4)\*
- Biol 331: Human Anat & Phys 1 (4)
- Biol 332: Human Anat & Phys 2 (4)
- Chem 211: Gen Chem 1 (3)\*
- Chem 212: Gen Chem 2 (3)\*
- Chem 215: Chem Lab 1 (2)\*
- Chem 216: Chem Lab 2 (2)\*
- Hlth 151: Personal & Comm Hlth (3)
- Hlth 213: Nutr for Exer & Sport (3)
- Hlth 402: US-Mexico Border Hlth Issues (3)
- HPS 370: Kinesiology (3)
- HPS 376: Exercise Physiology (3)
- HPS 381: Injury Assessment & Mgmt (3)
- Phys 151: Algebra Physics 1 (4)\*
- Phys 152: Algebra Physics 2 (4)\*
- Psy 324: Abnormal Psychology (3)

#### OR

• Psy 340: Develop Psychology (3)

# Major Total: 55

### Pre-Professional Athletic Training Track

The major in pre-professional athletic training is rapidly changing the health care profession. Athletic training is recognized by the American Medical Association as an allied health care profession. Traditionally, athletic trainers are thought of working only in an athletic setting, such as university athletics, professional athletics and, more recently, high school athletics. No minor is required for students completing this track.

Prerequisites: 5 credit hours

- Math 140: College Algebra (3)
- PE 100: Fit for Life (2)

Courses required of all students in the health major:

<sup>\*</sup> This block of coursework is required for most pre-professional applicants to physical therapy schools. Other professional schools may require less laboratory preparation in which case electives may be taken instead to structure a program according to individual needs and goals. This curriculum is not designed to prepare students for medical school. If students are interested in pre-med, they should contact the biology faculty.

- Biol 131: Human Biology (4)
- Biol 231: Intro to Human Anat & Physiology 1 (4)
- Biol 232: Intro to Human Anat & Physiology 1 (4)
- Chem 211: General Chemistry 1 (3)
- Chem 215: General Chem 1 Lab (2)
- Chem 212: General Chemistry 2 (3)
- Chem 216: General Chem Lab 2 (3)
- Hlth 151: Personal & Comm Hlth (3)
- Hlth 210: Athletic Training Observation I (1)
- Hlth 213: Nutrition for Exercise & Sport (3)
- Hlth 311: Athletic Training Observation II (2)
- Hlth 370: Prevention of Athletic Injuries and Illnesses (4)
- Hlth 402: US Mexico Border Hlth Issues (3)
- Hlth 410: Examination & Diagnosis of the Upper Extremities (4)
- Hlth 411: Examination & Diagnosis of the Lower Extremities (4)
- HPS 370: Kinesiology (3)
- HPS 376: Exercise Physiology (3)
- HPS 472: Biomechanics of Sport (3)
- Phys 151: Algebra Physics 1 (4)
- Phys 152: Algebra Physics 2 (4)
- Psy 101: Psychology & Society (3)

Major Total: 66 credit hours

NOTE: To be certified as an athletic trainer by the NATA, students must take an additional five credits of practicum.

#### Minor in Health

The health minor is designed for students wishing to study information related to the various aspects of health. The changes proposed under the health major. All changes and paperwork can be found under the changes to the health major. Additionally, the methods classes for both health and physical education were combined into a revised course, HPS 350 Methods of Teaching HPE. The paperwork for this change is located under the HPS major.

#### Required courses: 24 credit hours

- Hlth 151: Personal & Comm Hlth (3)
- Hlth 213: Nutr for Exer & Sport (3)
- Hlth 380: Human Diseases (3)
- Hlth 402: US-Mexico Border Hlth Issues (3)
- Hlth 489: Fitness/Wellness Prog Ldrshp (3)
- HPS 350: Meth of Teaching HPE (3)
- Psy 408: Drugs & Behavior (3)

AND

• Psy 422: Human Sexuality (3)

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 $\bullet$  Hlth 353: Hlth & Drug Ed (3)

AND

• Hlth 352: Hlth & Sex Ed (3)

#### Minor Total: 24 credit hours

#### Minor in Recreation

- HPS 223: First Aid & CPR (3)
- LSvc 230: Intro to Sport Mgmt (3)

- LSvc 315: Intro to Golf Course Mgmt (3)
- HPS 409: Econ & Finance in Sport (3)
- HPS 412: Public Relation in Sport (3)
- HPS 416: Aquatics Mgmt (3)
- HPS 461: Sport Market & Promotion (3)
- HPS 465: Planning Areas & Facilities (3)

#### Minor Total: 24 credit hours

# Courses in General Physical Education (PE)

#### 100. Fit for Life (2)

This course is to helps students develop an understanding and appreciation for personal wellness as a healthy lifestyle. Problem-solving and decision-making skills on numerous topics, such as design of a personal physical activity program, prudent nutrition strategy, and stress management, are included. Participation in this class enables students to take advantage of the opportunities to maximize prevention of disease and improve quality of life. Fit for Life is a prerequisite for all students who plan to major in HPLS. Special lab fee.

#### 101. Beginning Swimming (1); 0,2

Physical education activity course.

# 102. Intermediate Swimming (1); 0,2

Physical education activity course.

# 103. Advanced Swimming (1)

This course is designed to polish strokes that students already know, so students can swim with more ease, efficiency, power, and smoothness over great distances. It is also an opportunity to learn advanced strokes, which are mostly taught only to swimming instructors.

#### 106. Folk Dance (1); 0,2

Physical education activity course.

#### 107. Square Dance (1); 0,2

Physical education activity course.

# 108. Modern Dance (1); 0,2

Physical education activity course.

#### 109. Riflery (1); 0,2

Physical education activity course.

#### 110. Tumbling (1); 0,2

Physical education activity course.

### 112. Self Defense (1); 0,2

Physical education activity course.

#### 113. Weight Training (1); 0,2

Physical education activity course. May be offered in separate sections for men and women.

#### 114. Conditioning Exercise (1): 0.2

Physical education activity course. May be offered in separate sections for men and women.

### 115. Aerobic Dance (1); 0,2

Physical education activity course. May be offered in separate sections for men and women.

### 116. Advanced Aerobic Dance (1); 0,2

Physical education activity course.

#### 117. Water Aerobics (1); 0,2

Physical education activity course. May be offered in separate sections for senior citizens.

### 118. Lifetime Fitness for Senior Citizens (1 - 2 VC); 0,4

Nonmedical supervision of physical activity and fitness/wellness information specifically designed for senior citizens (older than 50 years of age). Seniors must have a physician's clearance prior to admission. This is an HU-Wellness Program activity.

# 119. Walk-Jog for Fitness (1); 0,2

Walking or jogging as a lifetime fitness exercise.

### 120. Basketball (1); 0,2

Physical education activity course.

### 122. Soccer (1); 0,2

Physical education activity course.

#### 123. Softball (1); 0,2

Physical education activity course.

# 124. Volleyball (1); 0,2

Physical education activity course.

# 130. Archery (1); 0,2

Physical education activity course.

#### 131. Badminton (1); 0,2

Physical education activity course.

### 132. Bowling (1); 0,2

Physical education activity course. Special fee charged.

# 133. Golf (1)

Physical education activity course. Special fee charged. Course meets for extended hours during a halfsemester

# 135. Selected Topic: Activity Course (1)

Course in topic or topics in activity course: may be repeated with change of content.

#### 137. Beginning Tennis (1); 0,2

Physical education activity course.

# 138. Intermediate Tennis (1); 0,2

Physical education activity course.

#### 140. Backpacking (1); 0,2

Physical education activity course. Course meets for extended hours during a half-semester.

### 141. Canoeing (1); 0,2

Physical education activity course.

#### 142. Cross-Country Skiing (1); 0,2

Physical education activity course. Special fee charged. Course meets for extended hours during a half-semester.

### 144. Fitness Activity (1 - 2 VC); 0,4

Nonmedical supervision of physical activity and fitness/wellness information exclusively for university employees. An HU-Wellness Program activity.

#### 147. Beginning Skiing (1); 0,2

Physical education activity course. Special fee charged. Course meets for extended hours during a half-

#### 148. Beginning Racquetball (1); 0,2

Physical education activity course.

# 149. Intermediate Racquetball (1); 0,2

Physical education activity course.

# 150. Cardiovascular Exercise Therapy (1 - 3 VC); 0,2-4

Supervised exercise for patients enrolled in the Cardiovascular Health Enhancement and Exercise Rehabilitation (CHEER) Program. Prerequisite: Physician referred.

#### **151. Bicycling (1)**

Physical education activity course.

#### 152. Line Dancing (1)

Physical education activity course.

### 153. Step Aerobics (1)

Motivational course in which the healthy student, through active participation, will develop knowledge and skills sufficiently adequate to provide enjoyment for this cardiovascular and respiratory activity.

# 154. Yoga I (1); 0,2

Learn body alignment principals of the yoga poses and movements. The yoga poses release tension, quiet mental anxiety, and increase circulation. Yoga increases strength and flexibility both in body and mind.

#### 155. Yoga II (1); 0,2

A vigorous practice of fluid yoga movements linked with the breath to create overall health. A more advanced yoga to build up heat in the body to stretch and strengthen the muscles.

#### 156. Beginning Salsa Dancing (1); 0,2

Latin dances are the most popular contemporary dance music in the world. This class provides the environment for students to learn a variety of Latin dances such as salsa, merengue, cha-cha, and bachata.

# 157. Intermediate Salsa Dancing (1); 0,2

With the growing popularity of Latin dance, this section allows dancers to have lots of fun, connect with each other, to build community, develop body and environment awareness, lose weight and stay in shape.

#### 160. Wellness Program (1); 0,2

This course allows participants to utilize the HU Wellness Program during its normal operating hours. Additionally, students may use the Wilson Complex and the swimming pool.

#### 161. Intramurals (1); 0,2

This course allows community members to participate in the intramurals program at Highlands. Participants may compete in the intramurals program for the semester for which they are registered.

# Courses in Health (Hlth)

#### 151. Personal and Community HIth (3); Fa

The course is an introduction and overview of both personal and community health principles, including concepts and strategies known as health promotion. Identification and discussion of how habits, attitudes, judgments, and choices relate to quality of life and disease prevention. Introduction and overview of the philosophical and practical foundations of public and community health, including expectations of the profession. Topics include historical survey, service organization, epidemiology, societal behavior, lifespan health promotion, government administration, recreation, disease control, environmental protection, information resources, and new job opportunities developing in the health profession.

# 210. Athletic Training Observation (1);0,2

This course will be a student's initial exposure to the role and skills of an athletic trainer. The student will learn basic tasks performed as an athletic trainer. This course will include learning medical terminology and certification in emergency cardiac care.

# 213. Nutrition for Exercise and Sport (3)

This course examines nutrition strategy for optimal health, including disease prevention and human performance. Topics include selecting healthy foods, nutrient metabolism, energy use, ergogenic aids, herbal supplements, and holistic health science philosophy.

# 235 - 435. Selected Topic in Health (3)

Course in topic or topics in health. May be repeated with change of content.

#### 311. Athletic Training Observation II (1);2,0

This course provides clinical athletic training observations under the supervision and guidance of a program-approved health care provider in an approved setting. Course will meet for formal competency development. Course includes skill development in first aid and taping and wrapping techniques. Minimum of 64 hours of clinical experience required.

### 352. Health and Sex Education (3)

This course examines healthy sexuality and sexual abuse prevention strategies for student teachers.

Health promotion, wellness, self-responsibility, and lifestyle choices and consequences are emphasized in techniques of early intervention and preventive techniques for school children. Prerequisite: Hlth 151 or the equivalent.

#### 353. Health and Drug Education (3)

This course examines drug and alcohol abuse prevention concepts and strategies for student teachers. Health promotion, wellness, self-responsibility, and lifestyle choices and consequences are emphasized in techniques of early intervention and preventive techniques for school children. Prerequisite: Hlth 151 or the equivalent.

# 370. Prevention of Athletic Injuries and Illnesses (4);3,2;

This course emphasizes the prevention of injury and includes content on the history of athletic training, the role of the athletic trainer as a health care professional, the health care team, environmental stress issues, pre-participation screening, protective equipment fitting, nutritional aspects for the physically active and strength and conditioning principles and techniques. Prerequisites: HPS 370, Hlth 210, Chem 212,216 and Biol 212. Corequisite: Hlth 311.

#### 380. Human Diseases (3); 3,0

This course is a survey of various diseases commonly occurring in the United States. Focus is provided for both infectious diseases and noninfectious diseases. Instruction in hemorrhagic viruses such as Ebola and hantavirus are introduced along with other emerging diseases, such as childhood diseases, acute and chronic diseases, and pathogen-caused. Control, treatment, and prevention strategies are presented.

### 402. US-Mexico Border Health Issues (3)3,0

This course is a problem-based approach to case-study analysis designed to instill a broader appreciation of health issues and multidisciplinary collaboration to solve complex social issues. Instruction and research reflects upon the physical, mental, emotional, social, judicial, psychological, racial, cultural, financial, spiritual, occupational, and international concerns of those living along the United States-Mexico border. Attention is given to the broader ramifications of such issues for all United States citizenry. No previous background in health or any specific discipline is required.

# 410. Examination and Diagnosis of Upper Extremity Injuries (4);3,2

This course will study the upper extremities, spine, thorax, and abdomen as they relate to the recognition, evaluation, diagnosis and immediate care orthopedic injuries from physical activity. Prerequisites: Hlth 472, HPS 370, 376, Biol 332 and Chem 342.

#### 411. Examination and Diagnosis of Lower Extremity Injuries (4);3,2; Sp

This course will study the lower extremities, spine, thorax, and abdomen as they relate to the recognition, evaluation, diagnosis and immediate care of sport-related orthopedic injuries. Prerequisites: Hlth 410 Examination and Diagnosis of Upper Extremity Injuries.

#### 421. Epidemiology (3)

Epidemiology is the science behind public health statistics. Epidemiological concepts and skills involving interpretation and use of health-related data in populations or groups are studied. The course enables the understanding of causes and transmission of disease, tracking community health problems, and identifying trends related to public health problems. Critical judgment in assessing health-related data is developed. Prerequisite: Hlth 321 or the equivalent.

# 469. Public Health and Wellness (3)

This course includes advanced public health concepts and development of critical thinking about the role of public health in the community. With interactive discussions, the course reviews community health promotion objectives and epidemiologically derived statistical information. Comprehensive focus is on three major areas: community health promotion, environmental health promotion, and health resources and services. Prerequisite: Hlth 321 or the equivalent.

#### 474. Stress Management (3)

This course includes an overview of the body of literature available on the topic of stress and the techniques required to effectively manage stress. With interactive discussions, the course reviews health promotion objectives as they relate to stress. Course modules include the nature of stress, the mind and soul, coping strategies, and relaxation techniques. There is a comprehensive focus on strategies de-

signed to help one cope with the stressors of life. Prerequisite: Hlth 151, hold at least junior standing, and by instructor permission.

# 489. Fitness/Wellness Program Leadership (3)

This course is a practical field experience and supportive lecture in the fitness and wellness program management aspects of health promotion. Leadership skills include administration, health education, nutrition strategy, and applied exercise science/technology. Students assist in the operation of the HU Wellness Program. Students may choose another worksite to gain field experience upon approval from the professor.

### 490. Independent Study (1 – 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

# Courses in Human Performance and Sport (HPS)

# 135 – 435. Selected Topic in Human Performance and Sport (1 – 4 VC)

Course in topic or topics in human performance and sport. May be repeated with change of content.

#### 223. First Aid and CPR (3)

This course provides instruction in appropriate procedures for rendering emergency care for victims of an accident or sudden illness as well as prevention techniques. American National Red Cross certification is available.

### 224. Emergency Medical Training (EMT) (6)

The purpose of this course is for students to understand the theory of emergency care and first aid and to be able to demonstrate the skills needed to give emergency care. This course is designed specifically for ambulance personnel who have access to specialized vehicles and equipment. The course content trains ambulance attendants to recognize and stabilize patients with life-threatening emergencies at the scene and in transport, utilizing the specialized items of equipment. Students across campus are invited to enroll to supplement their education. In addition to ambulance attendants, community members such as firefighters, police officers, and search and rescue personnel would benefit from this class. Upon successful completion of the course, the student will receive certificates from New Mexico Highlands University, the Emergency Medical Service Academy, and the School of Medicine at The University of New Mexico.

# 225. Lifeguard Training (2)

This course provides students with knowledge and skills to save own or another's life in an aquatic emergency. Life guarding procedures, the management and maintenance of aquatic facilities, and safety policies in and around those facilities are included in this course. American Red Cross certification is available. Prerequisite: PE 102 or equivalent.

### 227. Water Safety Instructor Course (2); 0,4

This course provides training for water safety instructors. Students will be trained to teach and/or certify swimmers in the following aquatic courses: Basic and Emergency Water Safety, Infant and Preschool Aquatic Program, progressive swimming courses (Beginning Swimming to Advanced Swimming). Theoretical and practical knowledge of aquatic instruction is covered in depth. Prerequisite: Current lifeguard certificate or equivalent.

### 231. Adapted Aquatics (2); 0,4

Students will be trained to teach the physically and mentally challenged to swim. It is preferred, but not required, that students have a background in swimming.

#### 234 – 434. Practicum (1 – 4 VC)

Hands-on experience of various intensity and time.

### 261. Tech of Team Sports (2);1,2;

This course prepares teachers to be able to give movement prescription regarding team skills activities. The team skills activities include dribbling, ball handling, use of implements, catching, throwing, passing manipulation, kicking, striking, dodging and chasing. Class experiences will include analyzing movement and performance techniques including the use of specific performance feedback, and applications to team sport activities.

#### 263. Tech of Individual Sports (2);1,2;

This course prepares teachers to be able to give movement prescription regarding individual sports activities such as racquet sports, golf, and others. Instruction in the techniques inherent to each individual sport will be presented. Class experiences will include analyzing movement and performance techniques including the use of specific performance feedback, and applications to individual sport activities.

#### 265. Tech of Innovative Games and Activities (2);1,2;

This course prepares teachers to be able to give movement prescription regarding innovative games and activities such as disc golf, flickerball, and team handball. Instruction in the techniques inherent to innovative games and activities will be presented. Class experiences will include analyzing movement and performance techniques including the use of specific performance feedback, and applications to regarding innovative games and activities.

# 270. Introduction to Athletic Training (4); 3,2

This course is an introduction to clinical athletic training for entry-level athletic training majors. Emphasis will be on clinical education components, policies and procedures as used in the clinical/athletic training room, and beginning taping skills. Students study principles in the prevention, recognition, and immediate care and treatment of athletic injuries. Prerequisites: Chem 211, Chem 212, Chem 215, Chem 216, Hlth 213, HPS 223, and HPS 273.

#### 273. Medical Terminology (2); 2,0

This course is strictly lecture in medical and physiologic terminology. Prerequisites: Chem 211, Chem 212, Chem 215, Chem 216, and Hlth 213.

# 290 - 490. Independent Study (1 - 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

#### 334 - 434. Practicum (1 - 4 VC)

This course is field experience work placement with specific responsibility over a sustained period of time. All practicum courses include on-campus seminars with supervisors. Credit hours for each experience are approved separately by program area. May be repeated for a maximum of four credit hours. Practicum areas may be offered in aquatics, adapted physical education, athletic coaching, athletic training, health education, and physical education. Prerequisite: permission of instructor.

### 350. Methods of Teaching Health Physical Education (3)

This is a comprehensive course in health education and in physical education methods and curriculum. Practical skills include curriculum construction, writing behavioral objectives, writing lesson plans, and carrying out effective health instruction and effective physical education instruction such as use of methods, materials, resources, and evaluation techniques. Much class time is spent in hands-on planning and teaching of lessons. Students will develop a health promotion or wellness philosophy and practical skills for teaching health science. Micro-teaching in both health education and in physical education is a requirement in the course. Prerequisite: Hlth 151 or the equivalent.

# 365. Coaching/Officiating Baseball/Softball (2)

This course examines philosophy, strategy, leadership, team, and practice organization and coaching methods for baseball/softball as well as lecture and laboratory experience in the rules and mechanics of officiating baseball/softball. This course prepares students for the New Mexico Activities Association Officials' Examination. Prerequisite: HPS 238 or equivalent.

#### 366. Coaching/Officiating Basketball (2)

The course examines strategy, leadership, team organization, and coaching methods for basketball, with lecture and laboratory experience in the rules and mechanics of officiating basketball. Prerequisite: HPS 237 or equivalent.

#### 367. Coaching/Officiating Football (2)

The course develops knowledge regarding offensive football, defensive football, the kicking game as well as special phases such as scouting, film work, organization, coaching assignment, and public relations. The course prepares students for the New Mexico Activities Association Officials' Examination. Prerequisite: HPS 240 or equivalent.

# 368. Coaching/Officiating Volleyball (2)

The course teaches coaching and officiating techniques of volleyball, including strategy, leadership, team organization, and budgeting. Prerequisite: HPS 245, or equivalent.

# 369. Coaching/Officiating Track and Field (2)

The course examines strategy, leadership, team organization, budgeting, and methods of coaching and officiating track and field.

# 370. Kinesiology (3); 2,2

This course is an examination of body structure as it relates to human movement, with particular emphasis on the musculoskeletal system and the biomechanics that govern movement.

# 376. Exercise Physiology (3); 2,2

The course examines the physiological basis of exercise and fitness, including muscle strength, cardiorespiratory endurance, environmental factors affecting performance, and conditioning programs. Prerequisite: HPS 370.

# 381. Injury Assessment and Management (3)

The course teaches recognition techniques and guidelines for initial care of common athletic injuries and prevention of injuries through conditioning, flexibility, equipment fitting, and taping techniques.

# 387. Physical Educ for Elementary Teachers (3)

This course prepares students for teaching physical education activities to elementary school children, including methods and materials.

### 391. Assessment and Evaluation of Upper Extremities (3); 2,2

This course studies the upper extremities, head, neck, and face as they relate to the prevention, recognition, evaluation and assessment, and immediate care and treatment of injuries sustained in sport. Prerequisite: Chem 211, Chem 212, Chem 215, Chem 216, Hlth 213, HPS 223, HPS 270, HPS 273, and HPS 472.

#### 393. Assessment and Evaluation of Lower Extremities (3); 2,2

This course studies the lower extremities, spine, thorax, and abdomen as they relate to the prevention, recognition, evaluation and assessment, and immediate care and treatment of injuries sustained in sport. Prerequisite: Chem 211, Chem 212, Chem 215, Chem 216, Hlth 213, HPS 223, HPS 270, HPS 273, and HPS 472.

#### 402. Motor Learning (3)

Information will be presented on motor learning with an emphasis on the learning process, the individual learner, and the task and instructional procedures that may be employed by those working in a movement setting of any kind.

#### 405. Body Composition (3);3,2

This course examines the theory and practice of body composition assessment. Weight management programs will be presented. Laboratories will include skinfolds, bioimpedance, and hydrostatic weighing techniques.

### 408. Principles, Ethics, and Problems of Athletic Coaching (3)

This course is a seminar approach to nontechnical, off-field aspects of athletic coaching, including education implications, equipment, financing, liability, and coach-athlete rapport. Prerequisite: HPS major/minor, coaching minor, athletic training minor, or consent of instructor.

# 409. Economics and Finance in Sport (3);3,0

This course explores the principles of financial management and economics of the sport industry. Budgeting practices, fundraising methods, economic impact analyses, methods of financing, and computer applications in financial management will be analyzed in the context of sport.

# 410. Measurement and Evaluation in Physical Education (3)

This course examines the measurement and evaluation principles and techniques applied to the learner and to programs in physical education.

### 412. Public Relations in Sports (3); 3,0

This course provides both theoretical and practical applications of public relations with regard to the

sport industry. Specific managerial functions relating to effective communication with various audiences will be analyzed, including employee relations, community relations, media relations, customer relations, and image enhancement.

#### 415. Women in Sport (3)

This course discusses the past, present and future of women in sport. Information includes the historical and cultural foundation of women's sport from ancient to modern times, biomedical considerations specific to women, and the psychosocial dimensions of women's sport.

### 416. Aquatic Management (3)

This course provides guidelines for safe operation and efficient management of swimming pools and other related aquatic facilities. Students will take the Certified Pool Operator Certification Examination at the end of the course. A score of 70 percent or better certifies the student as a certified pool operator for five years.

### 420. Advanced Athletic Training (4); 3,2

This one-semester course is designed for student athletic trainers in their last semester/year of athletic training. It includes topics of interest on the most recent developments in the area of injury assessment, evaluation treatment and rehabilitation. Also included will be topics on nutrition and conditioning of the athlete for optimal performance. Prerequisites: Chem 211, Chem 212, Chem 215, Chem 216, Hlth 213, HPS 223, HPS 273, and HPS 472.

## 421. Designs for Fitness (3); 3,0

This course teaches the fundamentals of writing exercise prescriptions for cardiorespiratory and muscular fitness and weight management programs.

### 428. Nutrition and Supplements for Sports (3)

This course examines various sports supplements used as ergogenic aids and their use, safety, and validity.

#### 430. ACSM Health Fitness Instructor Review (3)

This course will help prepare students for the certification in health/fitness instructor by the American College of Sports Medicine.

## 432. NSCA Strength Coach Review (3) 3,0

This is a course designed to help students prepare for the National Strength and Conditioning Association's Certified Strength and Conditioning Specialist (CSCS) exam. The course will focus on NSCA terminology and training philosophy, helping to integrate the student's knowledge of personal training, exercise physiology, and kinesiology.

#### 436. Pediatric Exercise Physiology (3) 3,0

The physiological aspects of exercise in children will be discussed. Differences between the physiology of adults and children will be compared to enhance the understanding of this special population.

### 438. Physical Activity and Aging (3) 3,0

This course explores the biological aspects of aging and their relationship to physical fitness and assessment.

#### 440. Experiential Activities (3) 3,0

Developing a repertoire of activities useful in promoting self esteem, improving communication skills, promoting group cohesion and trust among individuals in developing problem-solving skills.

### 446. Administration of Athletic Training (3); 3,0

This course presents a discussion of issues in the organization and administration of athletic training programs to include the knowledge to develop, administer, and manage an athletic training room. Professional responsibilities and avenues of professional development as well as legal implications of misconduct will be addressed. Prerequisites: Chem 211, Chem 212, Chem 215, Chem 216, Hlth 213, HPS 223, HPS 270, HPS 273 and HPS 472.

### 450. Seminar in Human Performance and Sport (1-4VC)

The seminar investigates physical education and/or the related areas of health education, recreation, and athletics.

#### 461. Sport Marketing and Promotion (3); 3,0

The course will cover elements and salient issues in management of sport marketing and promotion

including segmentation and targeting, marketing mix, research and analysis.

### 465. Planning Areas and Facilities (3)

This course explores planning, financing, and managing physical education and athletic grounds and facilities, health and fitness centers, private and commercial facilities, and campsites for professional personnel.

### 468. Physical Educ for Special Populations (3)

This course investigates the historical aspects and current issues of providing adapted/special education programs for special populations. The course covers implications of federal legislation, practice in preparing individualized education programs (IEPs), and program assessment, planning, and evaluation.

### 472. Biomechanics of Sport (3)

This course is an examination of the musculoskeletal system and its relations to human movement. This will include analysis of human movement and sport techniques using principles of biomechanics. Prerequisite: HPS 370.

### 476. Stress Testing (3); 2,

This course examines the theory and practice of graded exercise testing for analysis of safe functional capacity and for prescription of exercise training programs. Students will learn to read EKGs and monitor blood pressure during testing. Special lab fee. Prerequisite: HPS 370 and HPS 376.

### 478. Psychology of Coaching (3)

This course is a practical survey of sport psychology that is grounded in science. Attitudes, feelings, and behaviors that affect athletic performance and coaching effectiveness are dealt with from the standpoint of description, explanation, and prediction. Students develop the ability to interpret research results. Major topic areas include the psychological needs of athletes and coaches and development of mental skills and control with applied techniques.

### 481. Therapeutic Modalities (4); 3, 2

This course explores the basic physiological responses of the human body to the application of therapeutic heat, therapeutic cold, therapeutic electricity, iontophoreses, ultrasound, and other basic therapeutic modalities used in sports medicine and orthopedic physical therapy. Discussion of pharmacology agents on athletes and others engaged in physical activity is also an integral part of the lecture. Perquisites: Chem 211, Chem 212, Chem 215, Chem 216, Hlth 213, HPS 223, HPS 270, HPS 273, and HPS 472.

#### 482. Therapeutic Exercise (4); 3, 2

This course explores systematic responses of the human body to the application of therapeutic heat, therapeutic cold, therapeutic electricity, iontophoreses, ultrasound, and other basic therapeutic modalities used in sports medicine and orthopedic physical therapy. Discussion of pharmacological agents on athletes and others engaged in physical activity is also an integral part of the lecture. Perquisites: Chem 211, Chem 212, Chem 215, Chem 216, Hlth 213, HPS 223, HPS 270, HPS 273, and HPS 472.

### 495. Capstone/Senior Seminar Course (3);3,0

This course prepares pre-service physical education teachers for their student teaching experience. This capstone/seminar course is designed to review and synthesize knowledge and experience from previous coursework in the major. Assessment of the students' knowledge of history, issues, problems, New Mexico physical education standards, technology, portfolio development and trends will be the focus. A major research project is required. Prerequisite: Senior HPE majors.

#### 499. Independent Research (1-4VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission on instructor.

## Courses in Leisure Services (LSvc)

### 230. Intro to Sport Management (3); 3,0

This course introduces the foundations of sport management, skills and competencies required of sport managers in various sport or sport related organizations including strategic management planning process, human resource management, financial management, sport marketing, facility and event management in amateur and professional industry.

### 235-435. Selected Topics in Leisure Service (1-4 VC)

Course in topic or topics in leisure services. May be repeated with change of content.

### 310. Tourism Planning and Development (3)

This course discusses the planning of marketing strategy in travel and tourism. Topics include marketing research, analysis, and strategy.

### 315. Introduction to Golf Management (3)

This course provides the student with an understanding of the golf industry and turf management of golf courses. It includes a study of the history of golf and the management, operation and maintenance of clubs, including member-owned, private/corporate-owned, and city/county-owned courses.

### 334. Prac in Tourism, Leisure, & Fitness (2)

Work in an approved setting for a minimum of eight hours each week for an entire semester. Prerequisite: leisure services major and recommendation of the coordinator of the program based on a formal request made during the prior semester.

### 340. Issues in Tourism and Travel (3)

This course explores issues in the tourism industry including, but not limited to, environmental, economic, and cultural sociological considerations.

### 342. Leadership in Leisure Services (3)

This course explores leadership principles and group dynamics in leisure and recreation settings. Problem-solving techniques utilized to resolve leadership issues in leisure services are presented. Prerequisite: LSvc 230.

## 379. Recreational Programs & Resources (3)

This class acquaints students with the variety of recreational programs available and the types of resources that are necessary to provide such programs. Field trips to existing recreational settings may be a part of the course.

### 444. Internship in Adventure Leadership and Education, Tourism, Leisure, and Fitness (6)

External work placement with substantial independent responsibilities. Prerequisite: Leisure services major and two practicum experiences (minimum four semester credits for adventure leadership).

## 490. Independent Study (1-4VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

#### 499. Independent Research (1-4VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

#### Nursing

### Required prerequisite courses: 9 hours

• Soc 152: Intro to Sociology (3)

OR

• Anth 102: Intro Sociocult Anth (3)

OR

- Anth 103: Intro to Phys Anth & Archaeology (3)
- Math 145: Intro to Statistics (3)

#### Major Course Requirements: 31-33 credit hours

- Nurs 320: Evidence Based Appl in Hlth Assessment (3)
- Nurs 332: Intro to Nursing Informatics (3)
- Nurs 340: Advancement of Professional Nursing (3)
- Nurs 360: Cultural Competencies & Health Care (3)
- Nurs 370: Nursing Research & Evidence Based Practice (3)
- Nurs 380: Gerontological Nursing Practice (3)
- Nurs 431: Community Hlth Nurs (3)
- Nurs 447: Community Hlth Prac (4)
- Nurs 451: Seminar on Professional Nursing Leadership (3)
- Nurs 452: Nursing Leadership Practicum (4)

Transfer Credit:

Only college courses with a grade of C or better will transfer.

Total Program:

Core curriculum: 35 credits

Lower-division courses/electives: 33 credits

RN license nursing upper-division credits: 30 credits

Nursing upper-division: 32 credits

Courses in Nursing (NURS)
205. TEAS Preparation (2); Fa

This course focuses on expanding the knowledge and understanding of the four areas covered in the TEAS exam: reading, English, math, and science. This course prepares students for this pre-nursing entry exam. This course will include a practice test and study sessions on the four content areas and provides students with study strategies and test taking tips.

### 214. Clinical Nutrition (3) Fa

This course provides a basic foundation on understanding nutrition and applying this knowledge to dietary modifications personally and in clients. Nutritional implications and therapeutic diets for common disease conditions will be explored. The overall goal is to encourage the consumer to take responsibility for his or her nutritional status and to have the health care worker provide ongoing education on nutrition for the client.

### 215. Medical Terminology (3); Sp

This course presents systematic study of medical terminology for the health professional. The student focuses on prefixes, suffixes, word roots and their combining forms. This course includes medical word construction, spelling, usage, comprehension and pronunciation. Students are provided with information, and pronunciations of terms regarding anatomy, symptomatology, pathology, and diagnostic/surgical procedures. Prerequisite or corequisite: Engl 111.

## 320. Evidence-Based Application in Health Assessment (3)

This course focuses on expanding the basic health assessment skills necessary for critical thinking in professional nursing. Emphasis is on identification of normal findings as well as developmental and cultural variations. The course is designed to assist the student to differentiate between normal and abnormal findings and furthering the development of the students' assessment skills. Lab practice of assessment skills will be included within this course.

#### 332. Intro to Nursing Informatics (3)

This course focuses on the importance of information systems and technology to nursing practice, education, research, and administration. Students will understand the importance of becoming knowledgeable workers and develop skills for information literacy. The emphasis of the course is to provide the student with the expertise and knowledge to function effectively in the modern health care IT environment.

#### 340. Advancement of Professional Nursing (3)

This course focuses on nursing practice foundations for continuing development of the student's knowledge essential for functioning in a rapidly changing health care system. Content includes professional issues, quality improvement, safe practice, interdisciplinary collaboration, and influences of social, cultural, political and economic factors on health care delivery systems.

#### 360. Cultural Competencies & Health Care (3)

This course explores the role of the nurse practicing in culturally diverse health care delivery systems. Students will learn how to increase their skills in providing culturally competent care for patients across the lifespan. Skills needed to work collaboratively with health care workers from diverse backgrounds will also be emphasized.

### 370. Nursing Research & Evidence-Based Practice (3)

This course teaches skills to increase the student's sense of inquiry essential to evidence-based practice in nursing. Skills will be taught to search scholarly literature and the process of evaluating material for the application in the clinical setting to obtain better patient care outcomes.

### 380. Gerontological Nursing Practice (3)

This course explores health promotion, disease prevention, and management of acute and chronic health problems in the older adult. Emphasis is placed on chronic health problems exacerbated by the normal changes of aging and the increased risk of illness associated with old age. Learning will also include some community activities with older adults.

### 431. Community Health Nursing (3)

This theory course focuses on the knowledge needed for community/public health nursing practice. Concepts presented discuss the nursing care of families, groups and communities with an emphasis on community assessment, health promotion, risk reduction, disease prevention and health maintenance. Special emphasis will focus on community health nursing in diverse cultures and rural communities.

## 447. Community Health Practicum (4)

This course provides clinical experience in community and public health nursing, focusing on the application of community health and nursing principles for the care of families, groups and communities. Clinical experiences will have an emphasis on community assessment, health promotion, risk reduction, disease prevention and health maintenance. Special emphasis will focus on community health nursing in diverse cultures and rural communities.

### 451. Seminar on Professional Nursing Leadership (3)

This course focuses on leadership and management principles and functions essential to the practice of professional nursing. Political, social, cultural, legal and ethical issues are explored from a leader's viewpoint. Nursing leaders from diverse health care settings will be studied to determine their influence on the nursing profession.

### 452. Nursing Leadership Practicum (4)

This clinical course facilitates the application of the leadership and management principles from course NURS 451 through leadership projects and activities with health care settings in the community.

## Computer Science

The Computer Science Department has two large teaching labs, three small research labs, a student work lab, and an area set aside for network experimentation. The labs are equipped, for the most part, with machines running both Windows\* and Linux\*\*. The department has a 16-node high-performance cluster. Software includes symbolic and numerical products, compilers for a number of languages, integrated development environments, web and multimedia development tools, Mathematica\*, MATLAB\*, databases, and packages for special fields such as artificial intelligence. Some computers are set aside for student experimentation with the understanding that students may install any software as long as copyright laws are not violated.

## Mathematics

For the mathematics major and minor, Highlands University offers a relatively broad program. A student can emphasize the applied areas of mathematics for a future in industry, the theoretical areas for advanced study, or a combination of the two for teachers. The mathematics discipline also provides supportive courses for academic programs throughout the university at both the undergraduate and graduate levels. Proficiency and introductory courses may be required to correct deficiencies in mathematics preparation.

# Major in Mathematics (BS)\*

A major in mathematics leading to a bachelor of science requires at least 47 hours, consisting of 35 hours of required mathematics courses, at least six hours of mathematics electives, and six hours of computer science courses. In addition, the student is required to obtain a minor in one of the sciences, with a minor in physics being highly desirable.

#### Required courses: 35 credit hours

- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Math 273: Calculus 3 (4)

- Math 317: Discrete Math (4)
- Math 325: Applied Ordinary Differential Equations (3)
- Math 320: Linear Algebra (3)
- Math 345: Math Statistics 1 (3)
- Math 421: Applied Abstract Algebra (3)
- Math 425: Intro to Real Analysis (3)
- Math 430: Mathematical Problem Solving (4)

#### Electives: 6 credit hours

Choose two 400-level math electives.

#### Additional required courses: 6 hours

- CS 144: Intro to Computer Sci (3)
- CS 145: Intro to Object Oriented Programming (3)

#### Major Total: 47 credit hours

## Major in Mathematics (BA)

The bachelor of arts in mathematics comprises the same curriculum of mathematics courses as the bachelor of science degree. However, bachelor of arts candidates will select an academic minor in a field other than science.

# Major in Computer and Mathematical Modeling (BS)

## Required Courses in Computer Science: 26 credit hours

- CS 145: Computer Science 1 (3)
- CS 245: Computer Science 2 (3)
- CS 327: Hands-on UNIX (1)
- CS 328: C and UNIX (3)
- CS 350: Prog Seminar 1 (3)
- CS 421: Advanced Data Structure & Algorithm Develop (3)
- CS 451: Software Engineering (3)
- CS 481: Sr. Project Design (1)
- CS 482: Senior Project Implementation (3)
- CS 477: Parallel & Distributed Programming (3)

#### Required Courses in Mathematics: 41 credit hours

- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Math 273: Calculus 3 (4)
- Math 317: Discrete Mathematics (4)
- Math 320: Linear Algebra (4)
- Math 325: Differential Equations (3)
- Math 345: Mathematical Stats 1 (3)
- Math 407: Mathematical Models (3)
- Math 421: Applied Abstract Algebra (3)
- Math 425: Intro to Real Analysis (3)
- Math 426: Intro to Complex Variable (3)
- Math 444: Matrix Theory and Applications (3)

#### Specialization Sequences

The following comprise a list of three different 400-level tracks with a focused curriculum concentration. Students will select, with approval of their adviser, one of these tracks to study in their fifth year.

<sup>\*</sup>Science minor required

### Modern Cryptography

Track 1: 12 credit hours

- Math 415: Intro to Cryptography (3)
- Math 419: Modern Methods of Cryptography (3)
- And two 400-level computer science courses approved by adviser.

OR

• Discrete Dynamical Systems and Chaos

Track 2: 12 credits

- Math 401: Discrete Chaos and Fractals (3)
- Math 402: Discrete Dynamical Systems and Chaos (3)
- And two 400-level computer science courses approved by adviser.

OR

Applied Multivariate Statistics

Track 3: 12 credit hours

- Math 460: Applied Multivariate Statistics 1 (3)
- Math 461: Applied Multivariate Statistics 2 (3)
- And two 400-level computer science courses approved by adviser.

AND

- Other requirements: 9 credit hours
- 400-level math elective (3)
- 400-level computer science elective (3)
- Engl 367: Technical Writing (3)

### Total Required: 88 credit hours

### Minor in Mathematics

Students desiring a minor in mathematics are required to complete at least 29 hours in mathematics courses, consisting of 23 hours of required courses and at least six hours of mathematics electives.

#### Required courses: 23 credit hours

- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Math 273: Calculus 3 (4)
- Math 317: Discrete Math (4)
- Math 320: Linear Algebra (3)
- Math 430: Math Prob Solving (4)

### Electives: 6 credit hours

Choose two 300 or 400-level math electives.

#### Minor Total: 29 credit hours

## Engineering Articulation Program (EAP)

In collaboration with the New Mexico Higher Education Department, Accreditation Board for Engineering and Technology and with the well-respected engineering schools at New Mexico State University, New Mexico Tech, and the University of New Mexico, the Department of Mathematics offers the first four semesters (eight courses) of standard general engineering training via an Engineering Articulation Program. Working with their engineering adviser at Highlands University, students can transfer credits seamlessly to any national accredited engineering program including those at NMSU, NMT, and UNM. The credits earned at Highlands will apply toward engineering degrees in mechanical, civil, electrical, chemical and other standard engineering fields at the designated schools.

With strong social and environmental awareness and the tools of science, mathematics and communications, engineers design, build and implement processes and products. With specific postgraduate training, they also become excellent physicians, scientists, lawyers, business managers and other professionals. Engineering

training emphasizes analysis, teamwork, and an interdisciplinary approach to problem solving and design. Classes and laboratories are small (generally less than 10 students), and the instructional, computer, and research laboratories are modern and well equipped. The faculty are educational mentors and active masters of their research and industrial endeavors, and teach all the classes and laboratories. Student study groups are encouraged. The EAP is a rigorous curriculum that prepares the student for both graduate school and licensure as a professional engineer. Students with a solid foundation in English, mathematics, and science may enter the program during their first semester at Highlands University. Students who are not prepared for the rigorous mathematics and science classes required for engineers during their first semester of college (Math 211 and Chem 211) may enroll in the program but will be required to spend their first two semesters at Highlands in proficiency classes. Although there is no guarantee of success, resources are available to optimize the student's educational experience, professional options and lifelong learning. Students can expect to complete an engineering degree in five years or less, including a minimum of two years at the transfer engineering school. All students considering enrolling in this engineering degree program are strongly urged to contact the program coordinator and request advisement prior to enrolling or transferring to Highlands University. Some engineering courses are offered once a year (alternate semesters).

Thus, it is important that students stay on schedule for efficient completion of their degree. All prerequisites are enforced. A grade of C or better is required of all courses in the major. Students with math ACT scores less than 17 are required to take Math 100. Students with math ACT 17-22 scores will take Math 120. Students with math ACT 23 scores or above may take Math 140, 150, 160, or with approval, Math 211. Students with English ACT scores less than 17 are required to take English 100.

### Articulated Courses that are Transferable for BS Degree in Engineering:

- Engr 115: Intro. to Engineering (1)
- Engr 220: Circuit Theory (3)
- Engr 237: Vector Mechanics/Statics (3)
- Engr 241: Strength of Materials (3)
- Engr 245: Programming for Engineers & Scientists (3)
- Engr 251: Digital Sys Design (3)
- Engr 288: Vector Mechanics / Dynamics (3)
- Engr 298: Thermodynamics (3)

### Additional Standard Articulated Courses for a BS Degree in Engineering

- Chem 211: General Chemistry 1 (3)
- Chem 215: Chemistry Lab 1 (2)
- Chem 211: General Chemistry 2 (3)
- Chem 216: Chemistry Lab 2 (2)
- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Math 273: Calculus 3 (4)
- Math 320: Linear Algebra (3)
- Math 325: Differential Equations (3)
- Phys 291: Calculus Physics 1 (5)
- Phys 292: Calculus Physics 2 (5)
- Engl 367: Technical Writing (3)

### **Physics**

Physics is the most fundamental science since, in its most basic form, it allows the direct application of the scientific method to the description and quantitative understanding of elementary phenomena that are accessible by direct observation. The central role played by physics in the exposition of modern scientific reasoning makes physics essential to the understanding of all science and engineering.

Consequently, the physics curriculum is designed not only to teach the student the fundamental concepts and laws of physics, but also to develop practical and analytical tools for problem solving through use of the

scientific method. Topics in physics range from the largest dimensions, as in astronomy and cosmology, to the smallest, as in subatomic and particle physics. Students of physics progress from an empirical description of the laws of physics to an understanding of the fundamental forces of nature at the frontiers of science.

The ability to identify problems, formulate solutions and communicate these findings to others are all highly marketable skills. Today, people with a physics background are in demand in many different careers from stock market analysis to environmental monitoring.

## Minor in Physics

The department offers a minor in physics.

The program of studies for a minor in physics consists of at least 22 hours of physics courses (16 hours of required physics courses and at least six hours of elective physics courses) and three hours of required mathematics (MATH 325).

Prior to enrolling in this minor, students are required to complete Calculus 1, 2 and 3 (Math 211, Math 252, and Math 273 respectively).

### Required courses: 16 credit hours

- Phys 291: Calculus Physics 1 (5)
- Phys 292: Calculus Physics 2 (5)
- Phys 361: Modern Physics and Relativity (3)
- Math 325: Applied Ordinary Differential Equations (3)

#### Electives: 6-8 credit hours

Choose two courses from the following list:

- Phys 300 Astrophysics (4)
- Phys 311 Mechanics (3)
- Phys 402 Statistical Mechanics (3)
- Phys 421 Electricity & Magnetism 1 (4)
- Phys 422 Electricity & Magnetism 2 (4)
- Phys 461 Quantum Mechanics 1 (4)
- Phys 462 Quantum Mechanics 2 (4)
- Phys 468 Solid State Physics

### Minor Total: 22 - 24

# Minor in Cognitive Science

Cognitive science is an interdisciplinary field concerned with the nature of the mind. Drawing on the resources of mathematics, philosophy, psychology, computer science, linguistics, and other disciplines, students of cognitive science study such phenomena as consciousness, the relation of the mind to the body, and the nature and limits of computation. This discipline addresses long-standing questions about the nature of thought, intelligence, perception, emotion, and other aspects of mental life by examining the way information is processed in computers, the nature of language, and the relation of cognition to the brain. Please refer to Interdepartmental Programs for more details regarding this minor.

### Minor in Combined Science

The combined science minor at Highlands University allows students to select courses in two or more of the science fields to include behavioral science, chemistry, computer science, math, biology, chemistry, and/or physics. Also, students are advised to remember that the university requires that all minors contain at least 12 credit hours of courses at the 300-400 level. A minor in combined science may be used to satisfy the university requirements for the bachelor of science degree of a minor in a science field.

Please refer to Interdepartmental Programs for more details regarding this minor.

# Major in General Science for Secondary School Teachers (Grades 7 - 12)

The purpose of the major is to provide future science teachers a fundamentally strong background in the basic sciences. Therefore, a greater pool of talent in the field of science education will be created, from which surrounding middle schools and high schools can draw. The program has been designed Undergraduate Catalog 117

to emphasize the fundamental understanding of both the physical and life sciences. Courses will be selected from such areas as forestry, biology, geology, chemistry, physics, mathematics and engineering. Please refer to Interdepartmental Programs for more details regarding this minor.

## Major in Math and Computer Science for Secondary School Teachers (Grades 7-12)

This major requires a core of courses from mathematics and computer science. Graduates of the program will be equipped to teach both mathematics and computer science in secondary schools. The purpose of the major is to provide secondary school teachers in training with a fundamentally strong background in mathematics and computer science.

This will create a greater pool of talent in math and computer science education, from which middle and high school teachers can be drawn.

The program has been designed to emphasize the fundamental understanding of both mathematics and computer science.

The objectives of the math and computer science major are to:

- Provide secondary teachers training in a program that will adequately prepare and encourage them to teach the expected mathematics and computing courses to students in middle and high school math and computer science programs.
- Train math teachers to develop each of the competencies required by the State Board of Education for licensure in math education.
- Broaden the scope of mathematics and computing to secondary school teachers in training, allowing
  them to develop methods in which to relay the content material to their students, so the students can
  fully understand what is being taught.
- Provide secondary teachers in training with the background so they can assume responsibility for managing the computing facilities at their school.

## Prerequisite courses: 6 credit hours

- Math 140: College Algebra (3)
- Math 150: Trigonometry (3)

#### Required courses: 40 credit hours

- CS 144: Intro to Comp Sci (3)
- CS 145: Intro to Obj Or Prg (3)
- CS 245: Adv Comp Prog (3)
- CS 430: Comp Tech in the Classroom (3)
- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Math 273: Calculus 3 (4)
- Math 320: Linear Algebra (3)
- Math 345: Math Stats (3)
- Math 406: College Geometry (3)
- Math 421: Appld Abstract Algb (3)
- Math 430: Math Prob Solving (4)

### Electives: 11 credit hours

Choose one course from the following:

- Math 317: Discrete Math (3)
- Any 400-level math course approved by adviser.

Choose two courses from the following:

- CS 325: Comp Hardware Install & Maint (1)
- CS 326: Comp Software Installation (1)
- CS 327: Hands on UNIX (1)

• CS 332: Adv Internet (1)

Choose two courses from the following:

- CS 350: Prog Seminar 1 (3)
- CS 351: Sys Des & Analy 1 (3)
- CS 456: Internet Services (3)
- CS 457: Comp Networks (3)
- CS 463: Web Programming (3)
- Other approved three-credit senior level courses in computer science.

### Major Total: 51 credit hours

## Minor in Math and Computer Science for Elementary School Teachers (Grades K-8)

The purpose of this minor is to provide elementary school teachers in training with a fundamentally strong background in mathematics and computer science.

The objectives of the math and computer science minor are to:

- Provide elementary teachers training in a program that will adequately prepare and encourage them
  to teach the fundamental concepts of mathematics and computing to students at the elementary level.
- Broaden the scope of mathematics and computing to elementary school teachers in training, allowing
  them to develop methods in which to relay the content material to their students, so that the students
  can fully understand what is being taught.
- Provide elementary teachers in training with the background so they can assume responsibility for managing the computing facilities at their school.

### Prerequisites: 9 credit hours

- Math 115: Math for Elementary Teachers 1 (3)
- Math 130: Math for Elementary Teachers 2 (3)
- CS 101: Living with Comp (3)

#### Required courses: 15 credit hours

- Math 140: College Algebra (3)
- Math 150: Trigonometry (3)
- CS 144: Intro to Comp Sci (3)
- CS 145: Intro to Obj Or Prg (3)
- CS 245: Adv Comp Prog (3)

#### Electives: 12 credit hours

Choose two courses from the following:

- Math 317: Discrete Math (3)
- Math 345: Math Statistics 1 (3)
- Math 406: College Geometry (3)
- Any 300- or 400-level math course approved by adviser.

### Choose three courses from the following:

- CS 325: Comp Hardware Install & Maint (1)
- CS 326: Comp Software Installation (1)
- CS 327: Hands on UNIX (1)
- CS 332: Advanced Internet (1)
- Any 300- or 400-level computer science course approved by adviser.

#### Choose one course from the following:

- CS 456: Internet Services (3)
- CS 457: Comp Networks (3)
- CS 463 Web Programming (3)

#### Minor Total: 27 credit hours

## Computer Science

The Computer Science Department offers a degree in computer science with three areas of concentration: software/hardware systems, information systems, and an individualized program of study. Two minors are also offered. These are designed so students may convert readily to the computer science major.

The Computer Science Program at Highlands may be a five-year curriculum depending on the student's academic preparation prior to enrollment at Highlands. Some students will need five years to complete the program, however, if an entering freshman has a solid foundation in mathematics, English, and science, the student can enter the computer science curriculum at an advanced level and complete the program within four years.

# Major in Computer Science (B.S./B.A.)

## Required core: 22 credit hours

- CS 144: Intro to Comp Sci (3)
- CS 145: Intro to Obj Or Prog (3)
- CS 245: Adv Comp Prog (3)
- CS 350: Prog Sem 1 (3)
- CS 431: Database Mgmt (3)
- CS 451: Software Engr (3)
- CS 481: Sr. Project Design (1)
- CS 482: Sr. Proj Implem (3)

#### Core Total: 22 credit hours

### Required concentration:

Choose from the software and hardware systems, information systems, or individualized software/hardware systems concentration (BS).

### Concentration in Software/Hardware Systems (B.S.)

Students of computer science concentrating in software/hardware systems follow a program of study designed in line with the guidelines established by the Association for Computing Machinery. Students study computer programming systems for a wide variety of applications in professional, scientific, engineering, and technical settings. Thorough exposure, with plenty of hands-on laboratory work, is given in computer science basics, one or more computer languages, and such topics as data and file structures, database management, algorithms, machine organization, assembly language, and operating systems. A solid foundation is acquired in mathematics; computer science students complete mathematics courses through introductory calculus, applied linear algebra, and introductory statistics.

The program at Highlands stresses not only solid technical and theoretical knowledge, but also the real-world skills of written and oral communication, planning, and organization of tasks. Students completing the major should be prepared to work in industry or go on to graduate school. Minor students may readily convert to major status.

### Required courses: 19 credit hours

- CS 341: Mach Arch and Assemb Lang Prog (3)
- CS 345: Data & File Struc (4)
- CS 421: Adv Data Struct and Algorithm Dev (3)
- CS 443: Operating Systems (3)
- CS 450: Prog Sem 2 (3)
- CS 461: Prog Lang (3)

#### Electives: 9 credit hours

Choose one course from the following list:

- CS 314: The C++ Programming Language (3)
- CS 316: Prog in Lisp & Prolog (3)
- CS 328: C and Unix (3)
- CS 418: Multimedia Progrm (3)

- CS 463: Web Programming (3)
- CS 471: Artificial Intel (3)

Also choose at least six credits in courses at the 300 or 400 level in computer science, mathematics, or an appropriate science, selected with the approval of the major adviser.

### Additional required courses: 24 credits

- Engl 367: Tech Writing (3)
- Engr 384: Microprocessor Design (3)
- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Math 317: Discrete Math (4)
- Math 320: Linear Algebra (3)
- Math 345: Math Statistics 1 (3)

### Major Total: 74 credit hours

## Minor in Computer Science with Concentration in Software/Hardware Systems Required courses: 10 credit hours

- CS 144: Intro to Comp Sci (3)
- CS 145: Intro to Obj Or Prog (3)
- CS 245: Adv Comp Prog (3)
- CS 327: Hands-On UNIX (1)

#### Electives: 9 credit hours

Choose one programming course from the following list:

- CS 314: The C++ Programming Language (3)
- CS 316: Prog in Lisp & Prolog (3)
- CS 328: C and Unix (3)
- CS 418: Multimedia Programming (3)
- CS 463: Web Programming (3)
- CS 471: Artificial Intel (3)

Choose at least six credits in courses at the 300 or 400 level in computer science.

## Additional required courses: 4

• Math 317: Discrete Math (4)

#### Minor Total: 23 credit hours

# Concentration in Information Systems (BA)

Students within this concentration learn to apply skills and knowledge in programming and systems design to the world of business. A special selection of courses from the School of Business is offered in conjunction with intensive courses in contemporary computer science and information systems. Minor students may readily convert to major status.

Computer science students with a concentration in information systems find work in diverse business settings, either managing or designing computer systems.

The program at Highlands stresses a solid foundation in programming involving data and file structures and gives students practical experience in hardware, operating systems, and networks. In addition, specific application to the world of business systems is provided by courses in business data processing, software design, and systems analysis.

### Required courses: 14 credit hours

(In addition to the computer science core)

• CS 211: Intro to Obj Oriented COBOL for Bus Data Proc (3)

OR

- CS 318: Business Apps Prog (3)
- CS 331: Decision Supp Sys (3)
- CS 351: Sys Des & Analysis (3)
- CS 457: Comp Networks (3)
- CS 483: Senior Proj Pres (2)

#### Electives: 9 credit hours

Choose three credits from the following list:

- CS 131: A Gentle Intro to Internet (1)
- CS 325: Comp Hardware Install and Maint (1)
- CS 326: Comp Software Installation (1)
- CS 327: Hands-On UNIX (1)
- CS 335: Select Topics (1)

Also choose at least six credits in courses at the 300 or 400 level in computer science, mathematics, business, or an appropriate discipline, selected with the approval of the major adviser.

### Additional required courses: 16 credits

- Acct 287: Prin of Fin Acct (3)
- Math 317: Discrete Math (4)

#### OR

- Math 345: Math Statistics 1 (3)
- Engl 367: Tech Writing (3)
- Mgmt 303: Prin of Mgmt (3)
- Mgmt 386: Hum Res Mgmt 1 (3)

### Major Total: 61 credit hours

# Minor in Computer Science with Concentration in Information Systems

# Required courses: 18 credit hours

- CS 144: Intro to Comp Sci (3)
- CS 145: Intro to Obj Or Prog (3)
- CS 245: Advanced Computer Programming (3)
- CS 351: Sys Design and Analysis (3)
- Math 317: Discrete Math (4)
- CS 211: Intro to Obj Oriented COBOL for Bus Data Proc (3)

#### OR

• CS 318: Business Apps Prog (3)

### Electives: 5 credit hours

Choose one course from the following list:

- CS 331: Decision Support System (3)
- CS 431: Database Mgmt (3)
- CS 451: Software Engr (3)

Choose two courses from the following list:

- CS 325: Comp Hardware Install and Maint (1)
- CS 326: Comp Software Installation (1)
- CS 327: Hands-On UNIX (1)

#### OR

• CS 1/335: Sel Topics in Comp Sci (1-4)

#### Minor Total: 23 credit hours

## Major in Computer Science with an Individualized Concentration (B.S./B.A.)

The Computer Science Program offers a major leading to a bachelor of arts or bachelor of science de-

gree, which permits students to develop their own computer science-related course of study.

Programs under this option must consist of a coherent sequence of courses and must be approved by a faculty member from the related field. Possible programs of study include scientific computing, communication technology, networking, computer engineering, artificial intelligence, graphics, or advanced multimedia and web programming studies to prepare students for graduate work. Students are strongly encouraged to seek approval prior to completing courses to fulfill this requirement.

### Required courses: 3 credit hours

(In addition to the computer science core)

• CS 443: Operating Sys (3)

#### Electives: 12 credit hours

• Choose at least 12 credits in computer science selected with the approval of the major adviser.

### Additional required courses: 30

- Engl 367: Tech Writing (3)
- Choose at least 12 credits in one or more related fields with the approval of the major adviser.
- Choose at least nine credits in courses at the 300 or 400 level in computer science or in one or more
  related fields with the approval of the major adviser.
- Choose at least six credits in mathematics starting with Math 140 or above.

### Major Total: 67 credit hours

### Courses in Computer Science (CS)

## 101. Living with Computers (3); 2,2; All

This course is an introductory survey covering the theory and practice of using computers. Besides learning the fundamental concepts of computer operations, students will study the use of computers as a tool in solving problems and obtaining information. The course will also look at the impact of computers on society. No prior knowledge of computing is assumed.

#### 131. A Gentle Introduction to Internet (1)

This course is an introduction to Internet, exploring the global electronic superhighway. Prerequisite: Proficiency in Windows\*.

#### 135-435. Selected Topics in Computer Science (1 - 4 VC)

Course in a topic or topics in computer science. May be repeated with change of content.

#### 140. Introduction to Problem Solving and Computers (3); 2,2

This course presents methods of analyzing and strategies for solving problems of all types. Introduces a programming language while presenting a model of how a computer works as a problem-solving machine.

### 144. Introduction to Computer Science (3);2,2; Fa, Sp

This course is an introduction to computer science and its subfields including the operating systems, hardware, networking, databases, and artificial intelligence. Prerequisite: Math 120 with a minimum grade of C, or permission of instructor.

### 145. Introduction to Object-Oriented Programming (3); 2,2; Fa, Sp

This course is an introduction to object-oriented programming with software engineering emphasis. Major emphasis is placed on object-oriented programming techniques with focus on encapsulation and simple data structures implemented with classes and arrays. Prerequisite: Math 120 with a minimum grade of C, or an ACT score of 24, or permission of instructor.

#### 190-490. Independent Study (1 - 4 VC); All

Independent study arranged with an instructor. Prerequisite: Permission of instructor.

### 211. Introduction to Object-Oriented COBOL for Business Data Processing (3)

This course is an introduction to object-oriented COBOL with business applications. Students apply an object-oriented program development process that features a series of steps involving understanding of a problem, formal problem definition, object-oriented and visual design methodologies. Prerequisite: CS 145 with a minimum grade of C for computer science majors and minors; Bus 110 for business majors and minors.

nors, or permission of instructor.

## 245. Advanced Computer Programming (3); Fa, Sp

Topics include the principles of software engineering, debugging and testing, string processing, internal searching and sorting, simple data structures, such as stacks, queues and lists, recursion, and object-oriented programming. Prerequisite: CS 144 and CS 145 with a minimum grade of C.

### 311. Advanced Business Data Processing with COBOL (3)

This course explores advanced business applications programming, report generation, file manipulation, building user interfaces, database manipulation through application programs, and use of operating system cells. Prerequisite: MIS 233 or CS 211 or CS 318 with minimum grades of C.

### 312. Advanced Fortran Programming (3); 2,2

This course is an advanced treatment of the Fortran programming language. Emphasis will be on advanced techniques for numerical analysis and on the specialized input-output facilities of the language. Prerequisite: Permission of instructor.

## 314. The C++ Programming Language (3); 2,2

This course is an in-depth study of the C++ programming language. The significant features of the language will be discussed with a special emphasis on those that relate to object-oriented programming. Prerequisite: None; however, C++ is not considered a good introduction to programming.

### 315. Introduction to Java Programming Language (3); 2,2; Fa

This course is an introduction to object-oriented programming using Java programming language. Numerous programs will be written to exercise the material covered. Prerequisite: Permission of instructor.

### 316. Programming in Lisp and Prolog (3)

This course is an in-depth study of Lisp and Prolog, the most popular computer programming languages for artificial intelligence applications. Numerous programs will be written to exercise the material covered. Prerequisite: CS 245 or permission of instructor.

## 318. Business Applications Programming (3); Sp

This course is an introduction to business applications programming in a visual programming environment using a visual programming language to solve business application problems.

#### 324. UNIX Operating System (3); 2,2

This course is an introduction to the UNIX operating system and its interfaces, including the file system, editors, pipes, and filters, input/output system, shell programming, program development, and document preparation. Prerequisites: Any programming language or permission of instructor.

### 325. Computer Hardware Installation and Maintenance (1); 0,2; Fa, Sp

This course is a practical investigation of the processes involved in the installation and debugging of complex computer hardware systems including disk controllers, sounds and graphic boards, communication hardware, and various peripherals. Students will work on their own and in teams to build computer systems.

### 326. Computer Software Installation (1);0,2; Fa, Sp

This course is a practical investigation of the processes involved in the installation of complex computer software including operating systems, communication packages, and Windows\*-based programs. Students will work on their own and in teams to both prepare computers for installation and actually install a wide range of computer software. Prerequisite: CS 325 or permission of the instructor.

#### 327. Hands on UNIX (1); 0,2; Fa

This course teaches C programming language and system programming on UNIX and LINUX™ operating systems. Prerequisite: CS 145 or permission of instructor.

### 328. C and UNIX (3); 3,0; Fa

This course teaches C programming language and system programming on UNIX and LINUX<sup>™</sup> operating systems. Prerequisite: CS 327 or permission of instructor.

### 331. Decision Support Systems (3); Sp

This course is a study of the theory and several practical techniques of computer-based support systems, including linear programming, simulation, and decision theory. Prerequisite: CS 245, BUS 210 and knowledge of spreadsheets or permission of instructor. Cross-listed as: MIS 331.

#### 332. Advanced Internet (1)

This course is a continuation of A Gentle Introduction to the Internet, focusing on advanced search techniques and methodologies for creating complex web pages. Prerequisite: CS 131 or knowledge of Windows\*, the Internet, and simple HTML.

### 341. Machine Architecture and Assembly Language Programming (3); Alt Sp

This course is an introductory course in computer systems architecture and assembly language programming. Prerequisite: Grade of at least C in CS 245 or permission of instructor.

### 345. Data and File Structures (4); 3,2; Alt Fa

This class explores methods of organizing data in memory and on peripheral devices and of accessing this information in an efficient manner. The course gives students experience with searching and sorting, trees, binary search trees, graphs, sequential files, merging files, and file update procedures. Prerequisite: CS 245 with a minimum grade of C.

## 350. Programming Seminar I (3); 2,2; Fa

This course is the study of advanced programming techniques and technologies involving complex data structures and algorithms, graphical user interfaces, and object-based programming. Emphasis will be placed on the use of sophisticated software development and debugging tools. Prerequisite: CS 245 with a minimum grade of C.

### 351. Systems Design and Analysis (3); Fa

This class teaches design and analysis of information systems, emphasizing the object approach but including elements of traditional analysis and design modeling. Software development life cycles requirements gathering, decomposition, and formal modeling will be covered. Cross-listed as: MIS 370.

### 380. Computer Modeling and Simulations (3)

This course introduces computer-based simulation and its applications to engineering and the sciences. The primary goals of this course are to increase students' ability to design useful models of real-world situations and to implement those models so that they can be executed on computers to answer questions about the real world. Prerequisites: CS 245, Math 252.

#### 418. Multimedia Programming (3); 2,2; Sp

This course is an introduction to programming multimedia applications. Numerous programs will be written to exercise the material covered. Prerequisite: CS 315 or CS 245 with a minimum grade of C and permission of instructor.

#### 421. Advanced Data Structures and Algorithm Development (3); Alt Sp

This course is an investigation of computer data structures with an emphasis on the design and development of efficient algorithms for solving a wide variety of common computing problems. The course also covers the analysis and measurement of the performance of algorithms. Prerequisite: CS 345 and Math 317 with minimum grades of C.

#### 430. Computer Technology in the Classroom (3);

This course acts as the culminating experience for the computer science portion of the major in math and computer science for the secondary school teachers. Students will develop their own principles for the proper use of computer-based technology in the classroom and then work on their own project to explore some state-of-the-art hardware or software in terms of its relevance to the classroom setting. Students register once for the class, should complete the project by the end of the semester, and will be given an F if not completed within three years.

#### 431. Database Management (3); Fa

This course explores the development of the major types of database systems, providing the framework for some experience with at least one database model. Assignments will include accessing, updating, and organizing a database. The use of a relational model will be emphasized along with various database inquiry systems, including natural language-like systems. Prerequisite: CS 245 with a minimum grade of C.

#### 432. Advanced Database Management (3); Alt Sp

This course is an investigation of advanced topics in information management and retrieval. The focus of this course may be changed from year to year. Some example topics that might be taught include multimedia databases, building digital libraries, relational or object oriented database implementation,

building database-driven websites, text and informational retrieval, and data mining. Prerequisite: CS 431 with a minimum grade of C, or permission of instructor.

### 436. Human-Computer Interaction (3); Alt Fa

This course investigates theory and practice in human-computer interaction. Students will study the impact of human perception and cognition on user interface design and learn to use tools for building graphical use interface (GUIs) and speech interfaces. In addition, each student will design and implement a user interface. Prerequisite: CS 245 or CS 315 with a minimum grade of C.

### 442. Computer Systems Architecture (3)

This class acquaints the student with the way a computer works internally. Topics to be covered include basic logic design, data coding, parity generation and detection, number representation and arithmetic, and computer architecture. Prerequisite: CS 341 with a minimum grade of C.

## 443. Operating Systems (3); Alt Fa

This course is a study of the concepts associated with the modern operating system. Topics will include supervisors, command processors, device drivers, interrupt handlers, queue managers, resource managers, memory allocation schemes, process activation and control, and timesharing or multitask control. Prerequisite: CS 341 with minimum, grade of C.

### 450. Programming Seminar 2 (3); 2,2; Sp

This course is a continuation of the study of algorithms important in software development, providing students with experience in designing and building large programs. There will be an emphasis on group projects. Prerequisite: CS 350.

### 451. Software Engineering (3); Alt Sp

A study of the concepts and techniques of software engineering. Emphasis will be on object-oriented design principles, the integration of systems analysis methodologies into software engineering and topics such as formal specifications and proof of program correctness. Prerequisite: CS 350 for hardware/software majors and minors with minimum grade of C; CS 351 for computer information system majors and minors with minimum grade of C; MIS 370 for business majors and minors with minimum grade of C.

### 455. Introduction to Computer Graphics (3)

This course is an introduction to the applications and basic techniques involved in the general field of computer graphics. The course will be a combination of surveying the different hardware and software used in graphic systems and of implementing some basic graphic algorithms. Students will have access to SGI computers. Prerequisite: CS 245 or CS 314 or permission of instructor.

#### 456. Internet Services (3): 2,2: Fa

This course is an introduction to telecommunications and the Internet. This course introduces the use of Internet for both research and problem solving. Students will be expected to develop tools for enhancing and accessing the Internet.

#### 457. Computer Networks (3); Fa

This course is a study of the major concepts of computer networking. Topics discussed will include the Open System Interconnection (OSI) model, data communication networking, computer communications architectures and protocols as well as applications including local area networks (LAN) and Integrated Services Digital Network (ISDN). Cross-listed as: MIS 420.

#### 458. Network Management (3); Alt Sp

This course examines the application of networking concepts related to the management of local area networks. Includes topics related to repair, setup, management, and maintenance of local area networks. Prerequisite: CS 457, MIS 420, or permission of instructor.

#### 459. Network Security (3); Alt Sp

This course addresses security issues for TCP/IP-based and NT networks. Access control and communications security issues will be covered as well as Internet and intranet security. Prerequisite: CS 457, MIS 420, or permission of instructor.

#### 460. Wide Area Networks (3)

This course examines the application of networking concepts related to the wide area networks. It

includes topics related to the nature and use of wide area networks, including topologies, software and hardware. Special emphasis on the TCP/IP Suite of Protocols. Prerequisite: CS 457, MIS 420, or permission of the instructor.

### 461. Programming Languages (3); Alt Fa

This course is a comparative study of programming languages and their features. The course develops an understanding of the organization of programming languages, especially the run-time behavior of programs. Students will gain experience with a variety of languages. Prerequisite: CS 245 and one other programming language course.

### 462. Compiler Design (3)

This course examines the formal treatment of programming language interpreter, translator, and compiler design concepts. Topics include lexical analysis, parsing, code generation, and code optimization. Emphasis will be on the theoretical aspects of parsing context-free languages, translation specifications, and machine-independent code improvement. Programming projects that demonstrate various concepts will be assigned. Prerequisite: CS 461.

### 463. Web Programming (3); Sp

This course is an introduction to programming on the Internet. Prerequisite: CS 131 and CS 145, equivalent, or permission of instructor.

### 464. Network Programming (3)

This course extends the students' knowledge and practice in analysis, design, and programming of computer networks. Prerequisites: CS 245 and 328.

### 471. Artificial Intelligence (3); Alt Sp

This course is a general introduction to the theories and problems involved in the development of computer-based intelligence systems. The focus is on artificial intelligence research that provides information for the understanding of human intelligence and on application research in areas such as expert systems, natural language systems, and intelligent computer-aided instruction.

#### 472. Cognitive Science (3)

This course is an interdisciplinary investigation of the foundations of human knowledge and understanding, the functioning of the human mind, and how these impact recent computer technologies. Cross-listed as: Psy 472 and Phil 472.

#### 473. Artificial Neural Networks (3); Fa, Sp

This course examines basic neurobiology, neural networks, single-neuron models, single-layer perceptrons, multi-layer perceptrons; radial basis function networks; committee machines, the Kohonen network and applications of neural networks. Prerequisites: CS 245 and Math 273.

### 474. Machine Learning Algorithms (3); Fa, Sp

This course studies different machine learning techniques and paradigms, including decision trees, neural networks, genetic algorithms, Bayesian learning, rule learning, and reinforcement learning. The applications of these techniques to problems in data analysis, knowledge discovery and data mining are discussed. Prerequisites: CS 245, Math 320, Math 345 recommended.

#### 475. Image Processing (3); Fa, Sp

The course provides mathematical foundations and practical techniques for digital manipulation of images, preprocessing, segmentation, Fourier domain processing, and compression. Prerequisites: CS 245, Math 320.

## 476. Animation and Visualization (3) Fa, Sp

After briefly surveying the use of visualization in scientific communities, this course pursues an indepth investigation of its theoretical underpinnings, from the three diverse perspectives; the cognitive perspective, the social perspective, and the cultural perspective. Computer-based graphical representations, or visualizations, or scientific processes and phenomena have become commonplace in scientific communities. For example, geologists like to visualize plate tectonics, meteorologists like to visualize weather systems, and computer scientists like to visualize algorithms. Prerequisites: CS 245, Math 320.

### 477. Parallel and Distributed Programming (3); Fa, Sp

This course introduces algorithms and techniques for programming highly parallel computers. Topics covered include trends in parallel and distributed computing; shared address space and message passing architectures; design issues for parallel algorithms; converting sequential algorithms into equivalent parallel algorithms; synchronization and data sharing; improving performance of parallel algorithms; interconnection network topologies, routing, and flow control; and latency limits on speedup of algorithms by parallel implementations. Design, coding, performance analysis, debugging and other aspects of parallel algorithm development will be covered. Prerequisites: CS 245, CS 421.

### 481. Senior Project Design (1); Fa, Sp

The project proposal phase of an integrated senior-year course that combines each student's previous course work into a complete system design project. Prerequisite: CS 350, senior status or permission of discipline.

### 482. Senior Project Implementation (3); Fa, Sp

The implementation and presentation phase of an integrated senior-year course that combines each student's previous coursework into a complete system design project. Students will sign up for the course once and be given credit upon completion. If the project has not been completed by the end of the semester, the student may be given a PR. If not completed within three years, an F will be given. Prerequisite: CS 481.

#### 483. Senior Project Presentation (2); Fa

Students will write a paper on a topic in computer science and submit it to an appropriate publication or conference. Papers not accepted for publication or presentation will be presented formally on campus. Students will sign up for the course once and be given credit and a grade upon completion. If it is not completed at the end of the semester, students may be given a PR. If not completed within two years, an F will be given.

### 499. Independent Research (1 - 4 VC); All

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

## Courses in Engineering (Engr)

### 115. Introduction to Engineering (1); 1; Fall, Spring

This is a seminar course to introduce students to the engineering profession and its various disciplines. Emphasis will be on engineering problem solving technical methods, systems analysis and social responsibilities.

### 220. Circuit Theory (3); 2,2,1

Almost all disciplines of engineering must be familiar with the basic concepts of circuit analysis and design. Topics covered in this course are circuit principles, network theorems, natural and forced responses of first and second linear order. Computer modeling using SPICE and lab design experiments support this class. Prerequisites: Math 252 and Phys 292.

#### 237. Vector Mechanics/Statics (3); 2, 2, 1; Sp

This is a lecture/laboratory course concerning the application of laws of Newtonian mechanics to stationary systems and rigid bodies. Topics included are fundamental concepts, review of vector operations, types of forces, systems of forces and moments, objects and structures in equilibrium, centroids and center of mass, moments of inertia, friction, internal forces and moments. Prerequisite: Math 252 and Phys 291.

#### 245. Programming for Engineers and Scientists (3); 2,2

This course is an introductory lecture/laboratory course concerned with the application of a high-level computer language to solve engineering and scientific problems. Topics to be covered include data types, operators, and functions, control flow, programming methods, arrays, introduction to numerical methods, and external device/port programming. Prerequisites: Math 211, Engr 115 with a grade of C or better or permission of instructor.

### 241. Strength of Materials (3); 2, 2, 1; Fa

This is a lecture/laboratory course analyzing the response of static systems composed of various materials to the application of loading forces. Topics included are tension, compression, and shear; axially

loaded members, torsion of circular shafts, shear and bending moments in beams, stresses in beams, deflection of beams, columns and analysis of stress and strain. Prerequisite: Engr 237.

### 251. Digital Systems Modeling Analysis, Simulation and Design (3); 2, 3; Fa

This course will introduce the principles and practice of digital logic design and simulation. Contemporary computer simulation and hardware design tools such as hardware description language (VHDL) and field programmable gate array (FPGA) will be used. Basics of Boolean algebra, combinatorial and sequential circuits will be covered. Prerequisite: Math 211 or permission of instructor.

### 288. Vector Mechanics / Dynamics (3); 2, 2; Fa

This course is a lecture/laboratory course concerned with the application of Newtonian mechanics to the motions of particles, systems of particles, and rigid bodies. Topics to be covered include the following: review of dynamic systems and MATHLAB programming, Newton's law, energy methods, momentum methods, kinematics of particles, kinetics of particles, kinematics of rigid bodies and kinetics of rigid bodies. Prerequisite: Grade of C or better in Engr 237.

### 298. Thermodynamics (3); 2, 2, 1; Sp

This is a lecture/laboratory course concerning the application of classical thermodynamics to engineering systems. Topics included are properties of a pure substance, work and heat, the first law of thermodynamics, first law of analysis for a control volume, and second law analysis for control volume, and power and refrigeration cycles. Prerequisite: Chem 211, Phys 192, and Math 273.

## Courses in Mathematics (Math)

### 070. Fundamentals of Arithmetic (3)

This course is an intensive review of the properties of arithmetic and signed numbers. Note: This course does not count toward the 128-hour credit requirement for graduation.

### 100. Introduction to Algebra (3)

This course is a review of the arithmetic of integers and rationals, a study of linear equations and inequalities in one variable with applications, integer exponents, scientific notation, the equation of the line, ratio, proportion, and percent. Prerequisite: Math 070 or the appropriate compass test score. Note: This course does not count towards the 128-hour credit requirement for graduation.

### 115. Mathematics for Elementary Teachers 1 (3); 2,2; Fa, Sp

This course is designed to provide the prospective elementary teacher with a conceptual framework for mastering K-8 mathematics. It is the first of a two-course mathematics requirement for elementary education majors. Prerequisite: Math 100 with a minimum grade of C, or ACT score of 17 or above.

### 120. Intermediate Algebra (3)

This course is a study of linear equations and inequalities in one variable with applications, integer and rational exponents, the equation of the line, polynomials and rational expressions. Prerequisite: Math 100 with a minimum grade of C or ACT of 17 or above.

### 130. Mathematics for Elementary Teachers 2 (3); 2,2; Fa, Sp

The course is designed to provide the prospective elementary teacher with a conceptual framework for mastering K-8 mathematics. It is the second of a two-course mathematics requirement for elementary education majors. Prerequisite: Math 115 with a minimum grade of C.

#### 140. College Algebra (3)

This course is a study of rational exponents and radicals, complex numbers, quadratic equations, functions including polynomial, rational, exponential and logarithmic functions, systems of equations, matrices and determinants. Prerequisite: Math 120 with a minimum grade of C, or ACT score of 23 or better. NM Common Course Number: Math 1113

### 145. Introduction to Statistics (3)

This course is an introduction to the fundamentals of descriptive and inferential statistics. Topics include basic elements of probability, the binominal and the normal distributions, the central limit theorem, construction of confidence intervals, hypothesis testing, and least-squares regression. Applications of these concepts will be discussed.

### 150. Trigonometry (3); Fa, Sp

This course is a study of the trigonometric functions, the inverse trigonometry, polar coordinates, and conic sections. Prerequisite: Math 140 with a minimum grade of C. NM Common Course Number: Math 1213

#### 153. Quantitative Methods of Business (3)

This course is an introduction to the application of mathematics to business and economics problems. Topics include a review of linear, quadratic, exponential and logarithmic functions, applications involving simple and compound interest, present and future values of an annuity, demand and supply curves, cost, revenue and profit functions, and an introduction to differential calculus with applications. Prerequisite: Math 140. Cross-listed as Bus 110.

## 155. Applied Calculus 1 (3); Fa

This course is a short introduction to calculus not requiring trigonometry and including a review of logarithm and exponential functions. Both the derivative and the integral are introduced. Numerous applications are included. Prerequisite: Math 140 with a minimum grade of C. NM Common Course Number: Math 1213

### 158. Introduction to Business Statistics (3)

This course is an introduction to probability and statistics along with their application to the resolution of business problems. Topics include descriptive statistics, sampling methods, confidence intervals, hypothesis testing, analysis of variance and correlation, and regression analysis. Prerequisite: Math 140. Cross-listed as Bus 210.

### 160. Precalculus (5); 4,2; Fa,Sp

This course is an study of the algebra and trigonometry necessary to thoroughly prepare a student for calculus. Topics include rational exponents, complex numbers, quadratic equations, functions including polynomial, rational, exponential, logarithmic, trigonometric and inverse trigonometric functions, trigonometric equations, linear systems of equations, trigonometric identities, vectors, polar coordinates, applications of algebra and trigonometry, and an introduction to limits. Prerequisite: Math 140 a grade of C or better.

### 205. Applied Calculus 2 (3); Sp

This course is a continuation of Math 155. Topics include partial derivatives, max and min problems, Lagrange multipliers, brief trigonometry, techniques of integration, differential equations and probability. Prerequisite: Math 155 with a minimum grade of C.

### 211. Calculus 1 (4); 4,2;Fa, Sp

This course is a study of differential and integral calculus of functions of one variable. Topics include limits, the product, quotient, and chain rule for differentiation, related rates, Newton's methods, the mean values theorem, optimization, antiderivatives and the definite integral, the fundamental theorem of calculus, integration by substitution, and numerical methods of integration. Prerequisite: Math 160 with a grade of C or better. *NM Common Course Number: Math 1613* 

#### 235-435. Selected Topic in Mathematics (1 – 4 VC)

This is a course in a topic or topics in mathematics. May be repeated with change of content.

#### 252. Calculus 2 (4); Fa, Sp

This is a continuation of Math 211 Calculus 1. Topics include numerical methods of integration, integration techniques, L'Hopital's rule, improper integrals, applications of integration, sequences, and series. Prerequisite: Math 211 with a C or better. NM Common Course Number: Math 1624

#### 273. Calculus 3 (4); Fa, Sp

This course is a study of differential and integral calculus or functions of several variables. Topics include partial derivatives, tangent planes, the chain rule, the gradient, extremes of functions of two variables, Lagrange multipliers, double integration in rectangular and polar coordinates, triple integration in rectangular, cylindrical, and spherical coordinates. Prerequisite: Math 252 with a C or better. NM Common Course Number: Math 2614

### 290-490. Independent Study (1 – 4 VC)

Independent study arranged with an instructor. Prerequisite: Permission of instructor.

### 301. Intro to Mathematical Proofs (3); Fa

This course is an introduction to reading and writing mathematical proofs. Techniques of proof writing (constructive, contradiction, contrapositive, etc.) will be emphasized over a wide variety of settings (number theory, set theory, introductory analysis, e.g.). Prerequisite: Math 252 with a minimum grade of C or permission of instructor.

## 317. Discrete Mathematics (4); Fa, Sp

This course examines algorithm-based treatment of sets, matrices, functions, graphs, and relations along with a study of modular arithmetic, enumeration, induction, recursion, algorithm efficiency, Boolean algebra, tees, and graphs. Prerequisite: Math 140 or Math 150 with a grade of C or better.

## 320. Linear Algebra (3); Fa, Sp

This course is an introduction to solutions of linear systems of equations, properties of matrices, nonsingular matrices, determinants, eigenvalues and eigenvectors, similar matrices and Euclidean vector spaces. Prerequisite: Math 211 with a minimum grade of C.

## 325. Applied Ordinary Differential Equations (3); Fa

This course is an introduction to ordinary differential equations. Topics include linear and separable first-order equations, linear second-order equations with constant coefficients, applications of first-order and second-order equations, and Laplace transform methods. Prerequisite: Math 252 with a minimum grade of C. NM Common Course Number: Math 2813

### 345. Mathematical Statistics 1 (3); Fa

This course is a calculus-based introductory course in statistics including probability, discrete and continuous distributions, confidence intervals, p-values and the analysis of decision rules. Prerequisite: Math 205 or Math 211 with a minimum grade of C. NM Common Course Number: Math 2113

### 401. Discrete Chaos and Fractals (3); Fa, Sp

This course is an introduction to fractal geometry and discrete dynamics in one dimension. Topics include stability of one-dimensional maps, periodic points, bifurcations, period three orbits, Sharkovsky's theorem, Schwarzian derivative, chaos in one dimension, metric spaces, transitivity, conjugacy, fractals, fractal dimension, Julia and Mandelbrot sets. Prerequisite: Math 317 and Math 273 with a minimum grade of C or permission of instructor.

#### 402. Discrete Dynamical Systems and Chaos (3); Fa, Sp

This course is a continuation of Math 401 in higher dimensions. Topics include discrete linear dynamical systems, orbits, stability, spectral decomposition theorem, affine systems, nonlinear dynamical systems, bounded invariance, global stability of fixed points, sinks, repellers and saddles, bifurcation, attractors, Li-Yorke chaos, and more on fractal dimension. Prerequisite: Math 320 and Math 401 with a minimum grade of C.

#### 404. Introduction to Numerical Analysis (3); Alt Fa

This course is an introduction to numerical methods for determining the roots of nonlinear equations, numerical interpolation and integration, and numerical methods for approximating solutions to ordinary differential equations. Prerequisite: Math 320 and Math 325 with a minimum grade of C.

#### 406. College Geometry (4); 3,2; Fa, Sp

This course is a rigorous treatment of the elements of Euclidean geometry. Prerequisite: Math 317 with a grade of C or better.

#### 407. Mathematical Models (3)

An overview of model construction with many different examples. The course includes differential equations, Markov chains, linear programming, zero sum games, graphs, and queues. Prerequisite: Math 320 and Math 325 with a minimum grade of C.

### 410. Optimization Techniques (3)

The study of unconstrained and constrained optimization computational algorithms, including both linear and nonlinear methods. Prerequisite: Math 320 and Math 273 with a minimum grade of C.

## 415. Introduction to Cryptography (3); Alt Fa

This is an introductory course on the mathematics of cryptography. Topics include column transposi-

tion, monoalphabetic and polyalphabetic ciphers, the one-time pad, and the Hill cipher. Prerequisite: Math 317 with a grade of C or better.

### 417. Mathematical Statistics 2 (3)

This course is a continuation of Math 345 covering the topics of contingency tables, multiple regression, analysis of variance, and other special topics in mathematical statistics. Prerequisite: Math 345 with a minimum grade of C.

## 419. Modern Methods of Cryptography (3)

This course is a study of modern methods of cryptography and their applications. Topics include the Data Encryption Standard, the RSA public key cryptosystem, and digital signatures. Prerequisite: Math 317-415 with a grade of C or better.

## 421. Applied Abstract Algebra (3); Fa, Sp

An introduction to abstract algebra and its applications to error-correction codes, cryptography, polynomial algorithms and fast Fourier transforms. Prerequisite: Math 317 and Math 320.

### 425. Introduction to Real Analysis (3); Fa

This course gives students a solid background in theoretical undergraduate analysis, stressing the theory and deeper understanding of calculus. Students are introduced to proofs that motivate them toward clear thought and understanding of limits, continuity, differentiation, and series. This provides a rigorous training in mathematical thinking. Prerequisite: Math 301, Math 320, and Math 273 with a minimum grade of C.

## 426. Introduction to Complex Variable (3); Fa, Sp

This course is an introduction to the properties of analytic functions. Topics include mappings, limits, continuity, differentiation, Cauchy-Riemann equations, harmonic functions, multivalued functions and branch points, definite integrals and the Cauchy-Goursat theorem, Cauchy integral formula, maximum modulus theorem, Liouville's theorem, fundamental theorem of algebra, Taylor and Laurent series, residues and poles. Prerequisite: Math 425 with a minimum grade of C.

### 430. Mathematical Problem Solving (4); 3,2; Fa, Sp

This course is a study of problem-solving techniques and the applications of such techniques to challenging problems in mathematics. In addition, students will be required to demonstrate mastery of the fundamentals of undergraduate mathematics by passing a series of examinations on college algebra, trigonometry, calculus, and linear algebra. Prerequisite: Math 273 and Math 320 with a grade of C or better.

## 444. Matrix Theory with Applications (3); 3; Fa, Sp

A study of advanced topics in linear algebra and the theory of matrices with emphasis on computer-based applications. Similarity, characteristic and minimal polynomials, diagonalizable matrices and symmetric matrices, Jordan canonical form, vector and matrix norms, spectral radius, stable matrices, functions of matrices, nonnegative matrices and Perron-Frobenius theory, differential equations, stability, location of eigenvalues, Rayleigh quotient and Gersgorin's theorem. Prerequisite: Math 317, Math 320 and Math 325 with a minimum grade of C.

#### 450. Seminar in Mathematics (1-- 4 VC)

Seminar course in a topic or topics in mathematics.

#### 460. Applied Multivariate Statistics 1 (3)

Introductory matrix analysis for statistics, multivariate distributions, multiple regression, multiple analysis of variance and covariance, principal component analysis, and canonical correlations. Prerequisite: Math 320 with a minimum grade of C.

### 461. Applied Multivariate Statistics 2 (3)

This course is a continuation of Math 460, including discriminant analysis, factor analysis, categorical techniques, distance concepts, and cluster analysis. Prerequisite: Math 460 with a minimum grade of C.

## 499. Independent Research (1 - 4 VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

## Courses in Physics (Phys)

## 105. Elementary Physics (4); 3,2

This course is a survey of physics for technical and general education students. Prerequisite: Math 100.

## 110. Survey of Astronomy (4); 3,2

This course is a course designed to introduce the student to the concepts of modern-day astronomy. Topics to be investigated include the sun, planets, meteors, asteroids, comets, stars and star formation, galaxies and galaxy formation, black holes and quasars, cosmology, and cosmogony. NM Common Course Number: Astr 1114

## 151. Algebra Physics 1 (4); 3,3,1 recitation; Fa

This course is a non-calculus-based introduction to physics. It does not apply toward credit in degree requirements for engineering or chemistry majors. Corequisite: Math 140. NM Common Course Number: Phys 1114

### 152. Algebra Physics 2 (4); 3,3,1 recitation; Sp

This course is a continuation of Phys 151. Phys 151 and Phys 152 together provide a unit of introductory physics that is particularly suitable for biology and pre-medical students. Prerequisite: Phys 151. NM Common Course Number: Phys 1124

### 235 - 435. Selected Topic in Physics (1 – 4 VC)

Course in topic or topics in physics. May be repeated with change of content.

### 291. Calculus Physics 1 (5); 4,3,1 recitation; Fa

This is the calculus-based introductory physics course for physics, chemistry, and engineering majors. The course covers kinematics, classical dynamics, and thermodynamics. Corequisite: Math 211. NM Common Course Number: Phys 1214

## 292. Calculus Physics 2 (5); 4,3,1 recitation; Sp

This is the second semester of introductory physics course for physics, chemistry, and engineering majors. The course covers electricity and magnetism, simple circuits, optics and introduction to relativity theory. Prerequisite: Phys 291. Corequisite: Math 252. NM Common Course Number: Phys 1224

#### 300. Astrophysics (4); 3,3

This course is a study of celestial mechanics; the earth moon system; the sun, planets and satellites, asteroids, stars and galaxies. Prerequisite: Phys 292.

#### 305. Intro to Computational Physics (4); 3,3

This course is an introduction to numerical techniques for solving physics problems. It includes an introduction to programming and computer graphics. Prerequisite: Phys 292, Math 252. CS 145 is strongly recommended.

#### 311. Mechanics (3); 3,1 recitation

This course is a review of Newtonian mechanics of point particle systems, including linear and coupled Oscillators, central force motion, rigid body motion, and Lagrange's equations. Prerequisite: Phys 292. Corequisite: Math 325.

#### 337. Mathematical Methods in Physics (4)

This course examines vector analysis, matrices, calculus of variations, complex variables, orthogonal functions and Fourier series, and ordinary and partial differential equations with applications to physical problems. Prerequisite: Math 325.

### 361. Modern Phys & Relativity (3); 3,3 recitation

This course is an introduction to post-Newtonian physics. Through examples from atomic physics, particle scattering and black-body radiation, the student is introduced to concepts from quantum mechanics such as wave-particle duality and energy quantization. The student continues the study of post-Newtonian physics with special relativistic dynamics and kinematics. Prerequisite: Phys 292. Corequisite: Math 273.

### 380. Advanced Laboratory 1 (4); 2,4

This course is quantitative laboratory experiments in topics associated with classical and modern physics. Prerequisite: Phys 292.

#### 381. Advanced Laboratory 2 (3), 1,4

This course is a continuation of Phys 380 and includes quantitative laboratory experiments in topics associated with classical and modern physics. Prerequisite: Phys 380.

#### 390 - 490. Independent Study (1 – 4 VC)

Independent study arranged with an instructor. Prerequisite: Permission of instructor.

### 402. Statistical Mechanics (3)

This course explores mechanical theory of the thermodynamics of gases, including ensembles and distributions and connection between statistical and thermodynamic quantities. Prerequisite: Phys 292 and Math 325.

### 421. Electricity and Magnetism 1 (4); Fa

This course explores electrostatics, dielectrics, boundary value problems, magnetism and Maxwell's equations. Prerequisite: Phys 292 and Math 325.

### 422. Electricity and Magnetism 2 (3); Sp

This course is a continuation of Phys 421, with an emphasis on applications. Prerequisite: Phys 421.

## 430. Computational Fluid Dynamics (5)

This course presents a review of numerical methods, introduces the basic equations of fluid dynamics, explores computational methods for and limitations of these solutions, and provides an opportunity to computationally solve fluid dynamical problems having applications in science and engineering. Prerequisites: Phys 337.

### 450. Seminar in Physics (1 – 4 VC)

Seminar course in a topic or topics in physics.

## 453. Optics and Modern Optics (4)

This course is offered to students in the physical sciences and engineering who will be exposed to optics in such diverse areas as optical imaging, communications, spectroscopy and light. Prerequisite: Phys 292.

### 455. Physics Research Seminar (1)

Upper-division students participating in a physics research project will present one or two 30-minute presentations on their project to faculty members and other undergraduate students registered in the course. In addition, the students will participate in the discussion evolving from other student presentations. Cross-listed as: Chem 455.

### 461. Quantum Mechanics 1 (4); Fa

This course explores the algebra of quantum mechanics; the Hamiltonian; examples in a finite basis; the Schroedinger equation; examples in one and three dimensions. Prerequisite: Phys 361 and Math 325.

#### 462. Quantum Mechanics 2 (3); Sp

This course is a continuation of Phys 461, with an emphasis on applications. Prerequisite: Phys 461.

### 468. Solid State Physics (4)

This course examines mechanical and thermal properties of solids, the electron theory of metals, and band theory. Prerequisite: Phys 461.

### 499. Senior Project (1 – 3 VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

## **Environmental Geology**

#### Geology Concentration

#### Required Geology Core: 46 credit hours

- Geol 101: Survey of Earth Sci (4)
- Geol 202: Earth History (4)
- Geol 301: Environ Geology (4)
- Geol 317: Depositional Environ (4)
- Geol 325: Earth Materials (4)
- Geol 330: Structural Geology (3)
- For 340: Quantitative Methods (3)
- Geol 375: Field Geology (4)

- For 412: Surveying and GIS (4)
- Geol 421: Environ Ground Water Hydrology (4)
- Geol 424: Environ Geophysics (4)
- Geol 425: Geomorphology (3)
- Geol495: Senior Geol Applic (1)

## Additional requirements: 26-28 credits

- Math 160: Pre-Calculus (5)
- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Phys 151: Algebra Physics 1 (4)

#### OR

- Phys 291: Calculus Physics 1 (5)
- Phys 152: Algebra Physics 2 (4)

#### OR

• Phys 292: Calculus Physics 2 (5)

#### OR

- Geol 492: Geomorphology (4)
- Chem 211: General Chemistry 1 (3)
- Chem 215: Chemistry Lab 1 (2)

#### Electives: 12-16 credit hours

With the advice and consent of an adviser, students must take an additional four classes (12-16 credit hours) in geology, math, or an approved science discipline.

### Major totals: 84-90 credit hours

# Watershed Management Concentration

# Required Geology Core: 23 credit hours

- Geol 101: Survey of Earth Sci (4)
- Biol 211: General Biology 1 (4)
- Geol 301: Environmental Geol (4)
- For 333: Water Science (4)
- For 340: Quantitative Methods (3)
- For 400: Surface Hydrology (3)
- •For 408: Limnology (4)
- For 412: Survey and Geographic Info Sys (4)
- For 417: Watershed Mgmt (4)
- Geol 418: Remote Sensing (4)
- Geol 421: Environmental Ground Water Hydrology (4)
- Geol 425: Geomorphology (4)
- Geol 432: Environ Geochemistry (3)
- For 453: Toxicology in Life Sci (4)
- Geol 495: Senior Geol Applic (1)

### Additional requirements: 22-23 credit hours

- Math 160: Pre-Calculus (5)
- Math 211: Calculus 1 (4)
- Math 252: Calculus 2 (4)
- Phys 151: Algebra Physics 1 (4)

OR

- Phys 291: Calculus Physics 1 (5)
- Chem 211: General Chemistry 1 (3)
- Chem 215: Chemistry Lab 1 (2)

#### Electives: 9-12 credit hours

With the advice and consent of an adviser, students are required to take an additional three classes in geology, math or an approved science discipline.

### Major totals: 85-89 credit hours

## Minor in Geology

### Required courses: 20 credit hours

- Geol 101: Survey of Earth Sci (4)
- Geol 202: Earth History (4)
- Geol 301: Environmental Geol (4)
- Geol 317: Depositional Environ (4)
- Geol 325: Earth Materials (4)

#### Electives: 6-8 credit hours

Choose at least two additional geology courses at the 300 or 400 level for which you have satisfied the course prerequisites.

#### Minor totals: 26-28 credit hours

## GIS Minor Required courses: 21-22 credit hours

• Geol 101: Survey of Earth Sci (4)\*

#### OR

• For 105: Ecosystems & Humans (4)

#### OR

• Pols 151: Amer Nat'l Gov't (3)

#### OR

- Anth 102: Intro to Soc Anth (3)
- For 412: Intro to GIS Surveying (4)
- Geol 418: Advanced GIS (4)
- Geol 415: Remote Sensing & Analysis (4)
- Geol 493: Directed Study: Capstone Seminar (2)

\*For 105, Pols 151, or Anth 102 may be substituted for Geol 101.

#### Minor Total: 21-22 credit hours

#### GIS Certificate Program Required Courses: 17-18 credit hours

• Geol 101: Survey of Earth Sci (4)\*

#### OR

• For 105: Ecosystems & Humans (4)

#### OR

• Pols 151: Amer Nat'l Gov't (3)

#### OR

- Anth 102: Intro to Soc Anth (3)
- For 412: Intro to GIS Surveying (4)
- Geol 418: Advanced GIS (4)
- Geol 415: Remote Sensing & Analysis (4)
- Geol 490: Capstone Seminar (2)

\*For 105, Pols 151, or Anth 102 may be substituted for Geol 101.

#### Certificate Total: 17-18 credit hours

## Forestry Management Concentration Required Courses: 55 credit hours

- For 105: Ecosystems & Humans (4)
- For 200: Forestry Field Pract (4)
- For 305: Natural Resources Economics (3)
- For 340: Quantitative Methods (3)
- For 402: Silviculture (3)
- For 405: Wildland Fire Mgmt (3)
- For 411: Mensuration& Biometrics (4)
- For 412: Surveying and Geographic Information Systems (4)
- For 415: Dendrology (3)
- For 416: Soil Science (4)
- For 420: Wildlife Habitat Mgmt (3)
- For 422: Forest Pathology (3)
- For 425: Field Safety Practices (1)
- For 426: Professional Ethics (1)
- For 428: Forest Entomology (3)
- For 430: Terrestrial Ecology (4)
- For 440: Senior Project (1)

#### Additional Requirements: 24-26 credits

- Biol 212: General Biology 2 (4)
- Biol 303: Plant Structure and Function (4)
- Chem 211: General Chemistry 1 (3)
- Chem 215: Chemistry Lab 1 (2)
- Geol 101: Survey of Earth Sci (4)
- Math 155: Applied Calculus 1 (3)

#### OR

- Math 211: Calculus 1 (4)
- Phys 151: Algebra Physics 1 (4)

#### OR

• Phys 291: Calculus Physics 1 (5)

#### Electives: 7-9 credit hours

Electives are selected by students, with advice and consent of their major adviser, to complete a program of 128 credit hours.

## Major Concentration Total: 88-83 credits

#### Wildland Fire Concentration

### Required Courses: 60-61 credit hours

- For 105: Ecosystems & Humans (4)
- For 200: Forestry Field Pract (4)
- For 305: Natural Resources Economics (3)
- For 340: Quantitative Methods (3)
- For 402: Silviculture (3)
- For 405: Wildland Fire Mgmt (3)
- For 411: Mensuration & Biometrics (4)
- For 412: Surveying and Geographic Information Systems (4)
- For 415: Dendrology (3)
- For 416: Soil Science (4)
- For 420: Wildlife Habitat Management (3)
- For 425: Field Safety Practices (1)
- For 426: Professional Ethics (1)

- For 428: Forest Entomology (3)\
- For 430: Terrestrial Ecology (4)

#### OR

- For 450: Fire Ecology (3)
- For 451: Project Fires & Post-Fires Rehabilitation (3)
- For 452: Prescribed Fire Practices (4)
- For 454: Landscape Ecology & Wildfires (3)
- For 461: Atmospheric Science (3)
- For 440: Senior Project (1)

### Additional Requirements: 24-26 credits

- Biol 212: General Biology 2 (4)
- Biol 303: Plant Structure and Function (4)
- Chem 211: General Chemistry 1 (3)
- Chem 215: Chemistry Lab 1 (2)
- Geol 101: Survey of Earth Sci (4)
- Math 155: Applied Calculus 1 (3)

#### OR

- Math 211: Calculus 1 (4)
- Phys 151: Algebra Physics 1 (4)

#### OR

• Phys 291: Calculus Physics 1 (5)

#### Electives: 7-9 credit hours

Electives are selected by students with advice and consent of their major adviser, to complete a program of at least 128 credit hours.

## Major Concentration Total: 84-87 hours

## **Environmental Science Minor**

#### Required Courses: 21 credit hours

- For 413: Environmental & Ecological Monitoring (3)
- For 416: Soil Science (4)
- For 421: Environmental Groundwater Hydrology (4)
- For 434: Water Science (4)
- For 453: Toxicology in Life Sci (3)
- For 461: Atmospheric Science (3)

### Minor total: 21 credit hours

## Courses in Environmental Geology (Geol)

### 101. Survey of Earth Science (4); 3, 2 Fa, Sp

This course is an introduction to the broad spectrum of modern earth sciences, including astronomy, meteorology, oceanography, and physical geology for the science and nonscience major. Volcanoes, earthquakes, continental drift, glaciers, wind action, groundwater, rivers, and landslides are some of the topics discussed. NM Common Course Number: Geol 1114

#### 105. The Planets (4): 3, 2

This course is designed to give the student a basic understanding of the planets in our solar system, with an emphasis on geologic and atmospheric processes. Topics include the study of faults and tectonic features, impact craters, evolution and internal structures, atmospheres, meteorites, comets, asteroids, and analysis of spacecraft images.

### 202. Earth History (4); 3, 2; Sp

A study of the 4.5-billion-year history of the earth based on information derived from rocks, minerals, and fossils. Trilobites, dinosaurs, saber tooth tigers are but a few of the organisms to be investigated. Prerequisite: Geol 101. NM Common Course Number: Geol 1214

#### 235-435. Selected Topic in Geology (1-4 VC)

Course in topic or topics in geology. May be repeated with a change in content.

### 290-490. Independent Study (1-4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

### 301. Environmental Geology (4); 3, 2; Alt Sp odd yrs

This is a course designed to instruct students in the geological principles that can be utilized to both prevent and ameliorate environmental problems.

### 317. Depositional Environments (4); 3, 2; Alt Fa even yrs

This course surveys sedimentary rock types, principles of description and classification, sediment genesis and transport, distribution and origin of sedimentary deposits. Includes paleoenvironmental determinations from analysis of modern marine, transitional, and continental environments with the information applied to problems in environmental geology. The course includes an investigation of evolution of life on a dynamic Earth. The course investigates stratigraphic and paleontologic principles to aid in paleoenvironmental interpretation and evolutionary studies. Students will gain an appreciation of the dynamic nature of the Earth and the importance of scientific thought processes. Laboratory portion of the course emphasizes lecture topics through hands-on laboratory experiences, including several field trips. Prerequisites: Geol 101 and 202.

### 320. Mineralogy (4); 3, 2

The course is a study of the fundamental aspects of mineralogy, including crystal symmetry, crystal structures, crystal chemistry, and the physical properties of minerals. Students will practice hand specimen identification, optical mineralogy, and powder X-ray diffractometry towards the study of elected mineral groups. Prerequisite: Geol 101 or permission of instructor.

### 321. Petrology (4); 3, 2

This course is an introduction to the fundamentals of igneous and metamorphic rocks. The lecture will focus on the experimental and field evidence for interpreting rock associations and the interplay between igneous and metamorphic rock formation and the plate tectonic model. Topics include textures, structures, microscopic identification, geochemistry, and rock classification as a background for discussing rock origins. Prerequisites: Geol 101, 320 or permission of instructor.

#### 325. Earth Materials (3); Alt Fa even yrs

This course is a study of the origin, identification, and significance of geologic materials and processes. The course blends basic descriptive aspects with theory and quantitative analysis. Course objectives include the recognition of major rock-forming minerals and other selected minerals in hand specimen and thin section; the mastery of hand specimen and petrographic microscope analyses for mineral identification and rock interpretation; and the ability to relate crystal chemistry, crystallographic alignment, and physical attributes of a mineral to its identification as well as rock petrogenesis. Prerequisite: Geol 101.

#### 330. Structural Geology (3); Alt Fa odd yrs

This course is a detailed study of the forces acting on the Earth's crust and a resolution of these forces in terms of joints, faults, folds, uplifts, and related phenomena. Prerequisites: Geol 101, Math 120, Phys 151 or 291, or by permission of instructor.

#### 350. Seminar in Geology (3)

Seminar course in topic or topics in geology.

#### 375. Field Geology (4); 0, 12, Summer

This course discusses the principles of geologic mapping, including the use of a Brunton compass, barometer, hand level, plane table, and other instruments. The course also includes the solution of actual field problems and preparation of reports. Prerequisites: Geol 315, 322, 330 or permission of instructor.

### 412. Geologic Resources, Laws, and Environmental Policies (3); Alt Sp even yr

This course is designed to raise the student's awareness of the policies in place to protect public and private lands and rural communities in New Mexico from hard-rock mining impacts. The course will briefly cover the nature and origin of the Earth's rock and mineral resources, methods of resource extraction, and impacts on the environment. The course will thoroughly cover the major types of regional and federal environmental policies, discuss the roles of the major players in the public policy process,

and consider how to use science to inform the debate and remediate or lessen mining impacts. The class will study the 1872 Mining Law, which grants fee and open occupation, exploration, and purchase of public lands to U.S. citizens. We will also study the 1993 New Mexico Mining Act that improved regulation of mining at the state level. Selected hard-rock mining cases and issues relevant to the Southwest will also be reviewed. Prerequisite: Geol 101 or an introductory physical science laboratory course.

## 415. Remote Sensing and Analysis (4);3, 2 Even Yr Fa

Remote sensing is a technique used to collect data about the Earth without taking a physical sample of the its surface. A sensor is used to measure the energy reflected from the earth. This information can be displayed as a digital image or as a photograph. This class will provide students with an understanding of remote-sensing theory, applications, and case studies, conceptual and working knowledge of airborne and satellite remote sensing and image processing. Students will be able to acquire data, process the images, create appropriate data, analyze the accuracy of the results, and utilize the data for specific applications. Prerequisites: For 412, Math 140 with at least a C or better or permission of instructor.

## 418. Advanced Geographic Information Systems (4);3, 2 Odd Yr Sp

A geographic information system (GIS) is a scheme of hardware, software, and procedures designed to support the capture, management, manipulation, analysis, modeling and display of spatially referenced data for solving complex planning and management problems. GIS applications are both spatial information (maps) and databases to perform analytical studies. The course will build upon knowledge and experience in GIS gained in the introductory course to provide students with an understanding of cartographic and geodetic concepts impacting GIS analysis, filed data collection techniques with global positioning systems and handheld computer mapping software, effective map design, and modeling topographic and statistical surfaces.

### 421. Environmental Groundwater Hydrology (4); 3, 2; Alt Sp odd yr

This course studies the origin, movement, method of entrapment, and removal of subsurface waters. The course includes extensive discussion of problems associated with groundwater pollution, and remediation. Prerequisites: Geol 101 and 301

#### 422. Genesis and Environmental Impact of Earth's Resources (3); Alt Sp even yr

Study of the distribution, mineralogy, classification, modes of occurrence and economic implications to industry and world affairs of mineral deposits. Prerequisites: Geol 101, 301, and 322.

### 424. Environmental Geophysics (4); 3, 2; Alt Fa odd yr

Environmental Geophysics provides students with an understanding of the geophysical tools, processes and concepts applied in environmental geology. Processes (e.g., volcanism, plate tectonics, mountain building, and climates) are discussed in the context of the Earth and other planets. Prerequisites: Geol 101, Phys 151 or permission of instructor.

#### 425. Geomorphology (3); Alt Sp odd yr

This course is an introduction to the description of landforms and landscapes on Earth's surface. Emphasis is placed on the basic processes that govern landform evolution, human impact on land surfaces, and on the history of geomorphic study. Several field trips are required. Prerequisites: Senior standing.

### 432. Environmental Geochemistry (3); Alt Sp even yr

This course is a study of the chemistry of the Earth, including mineral mobility, cosmochemistry, chemical weathering, diagenesis, igneous and metamorphic chemistry, stable isotopes, pollution, and the thermodynamics and kinetics associated with these systems. Prerequisites: Chem 211 and 215, Geol 101 and 301 or instructor's permission.

#### 490. IS: Capstone Seminar (2)

Individual, directed research study arranged with an instructor. Students will conduct an independent research project involving GIS and/or remote-sensing analysis applied to a subject of study associated with their discipline. Each student will present a written report and applied GIS project to their mentor. All students will be responsible for demonstrating how GIS technology has enabled them to address a spatial problem more effectively. Prerequisites: For 412, GEOL 415 Remote Sensing and Analysis, and GEOL 418 Advanced GIS.

## 495. Senior Geology Applications (1)

This is a required class for all graduating seniors. The purpose of the course will be to assess the student's understanding of environmental geology, critical thinking, and applications to geology and research methods. Assessment will consist of oral and written examinations and problem solving. Prerequisite: Permission of instructor.

## 499. Independent Research (1-4 VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

## Courses in Forestry (For)

### 105. Ecosystems and Humans (4); 3, 2; Fa,Sp;

This course is a survey of environmental and ecological sciences with an introduction to the ways humans interact with and change ecosystems. The course introduces students to ecological and environmental concepts that bear on environmental issues, the current practices and management strategies utilized to preserve and sustain ecosystems, and, examples of solutions to environmental and natural resources problems.

### 200. Forestry Field Practices (4); 1,6; Fa

This course is an intensive summer experience in which various forest types in New Mexico are visited. Forest management practices, harvest systems, and natural catastrophes will be assessed by students for their ecological repercussions. Measurement methods used in forestry will be introduced throughout the session. This is a required introductory course that students must take prior to declaring a major in forestry.

### 235-435. Selected Topic in Forestry (1 – 4 VC)

Course in a topic or topics in forestry. May be repeated with a change in course content.

#### 305. Natural Resources Econ (3); Alt Fa

This course will provide an overview of the market economy in development and allocation of scarce resources, and the economic impacts of policy measures used in natural resource systems, and achieving environmental goals.

## 340. Quantitative Methods (3) Sp

Quantitative methods are the techniques used to numerically and statistically analyze observational and experimental data. Students will gain first-hand experience with data analysis of biological, geological, and natural resources data sets. Prerequisite: Math 140 or permission of instructor.

### 400. Surface Hydrology (3) Alt Sp

This course is designed for upper-division undergraduate students in earth sciences and natural resources management. The course combines a qualitative conceptual understanding of hydrologic process, an introduction to the quantitative representation of those processes, and an understanding of approaches to hydrological measurements and the uncertainties involved in those measurements. Prerequisite: Geol 101, or permission of instructor.

#### 402. Silviculture (3); Alt Fa

Silviculture is the set of practices to grow and manage trees in stands. The course focuses on the factors affecting tree growth, tree stand dynamics and health, and the impact of management on ecosystem values. The ecological practices to sustainably produce forest products are emphasized. Prerequisite: For 318, or permission of instructor.

## 405. Wildland Fire Management (3) Alt Fa

This is a course on the behavior of wildfires in forest and range communities. Methods of prescribed fire use are discussed. The course reviews methods for fuel load estimation, fire weather prediction, and fire suppression. Prerequisites: For 315 and 318 or permission of instructor.

### 408. Limnology (4); 3, 2 Alt Fa

Limnology is the study of the interrelationships among plants, animals and environmental factors in aquatic ecosystems. The course is field oriented and concentrates on the development of sampling techniques and the analysis of biotic and abiotic components of nearby lakes and streams. Prerequisites: Biol. 389, or 333 or permission of instructor.

### 410. Forest Management (3); Sp

This course focuses on the economic and scientific decisions for large tracts of land and multiple types of

forest stands over landscapes. The elements of planning management activities to create the least costs and greatest benefits for a landowner are explored. Prerequisite: FOR 310 and Math 155 or 211 or permission of instructor.

### 411. Mensuration and Biometrics (4); 3,2

Mensuration in the practice of measuring lengths and angles. Biometrics is the set of techniques for measurement and analysis of biological phenomena. Together, these topics provide a comprehensive overview of measurement and analysis techniques used in life science and allied disciplines. Prerequisites: Biol 212, Chem 211, and Math 140.

### 412. Surveying and Geographic Information Systems (4); 3, 2; Fa

Surveying is the determination of boundaries and positions on the Earth's surface. Geographic information systems (GIS) are geospatially referenced databases that relate positions of points or areas to data and properties. The course will explore the applications of these technologies to environmental and natural resources problems. Prerequisites: For 318, Math 140 with at least a C or permission of instructor.

### 413. Ecological and Environmental Monitoring (3)

Monitoring is the observation of treatment effects or the condition of natural and human systems over time. Many systems are monitored for pollutants and regulatory compliance, adverse outcomes of environmental management practices, and to determine trends in animal and plant populations. The course explores roles of monitoring in environmental management and ecology, considerations in designing monitoring programs, sampling methodologies for soil conditions, water quality, animal and plant populations, and responses to treatments, and uses of monitoring results. Prerequisites: Biol 212, Chem 212, and Math 140.

### 415. Dendrology (3); 2, 2; Alt Fa

Dendrology studies the biology of trees and woody vegetation. This course explores tree and shrub identification with associated botanical nomenclature as well as the structure and function of shrub and tree morphology. A collection of local trees and shrubs is a requirement for the course. Prerequisite: For 318 or permission of instructor.

#### 416. Soil Science (4):3,2

This course provides students with basic soil science concepts. The physical, chemical, and ecological properties of soils are applied to soil classification, genesis, fertility, productivity, irrigation and erosion. Prerequisites: Biol 212, Chem 211, and Math 140.

### 417. Watershed Management (3); 3, 0: Alt Sp

This course will emphasize the interdisciplinary characteristics of watershed management. The need to incorporate ecological and socioeconomic factors when planning and implementing programs to achieve sustainable, socially viable natural resource development is emphasized. Biol 212, Chem 211, Math 140, For 105, or permission of instructor.

#### 418. Aquatic Ecology (4); 3,2

This course examines the biological, chemical and physical features of aquatic environments and relates them to general ecological concepts and environmental concerns. The course focuses on the physiological adaptations of species to the aquatic environment as well as invertebrate and fish community structure. Additionally, this course examines both the negative and positive impacts that anthropogenic activities have on the ecology of aquatic systems. Prerequisites: Biol 212, Chem 211 and Math 140.

### 420. Wildlife Habitat Management (3); 2, 2 Alt Sp

This course examines the principles and practice of wildlife management with an emphasis on habitats, distribution, abundance and legal considerations.

#### 422. Forestry Pathology (3); 2,2

This course surveys the beneficial and pathogenic microorganisms found in forests. Particular focus will be on pathogens that reduce commodity value and stand productivity as well as microorganisms that have beneficial effects in forested ecosystems. Methods of detection and response to pathogen infestations will be examined. Prerequisites: Biol 212, Chem 211 and Math 140.

#### 426. Professional Ethics (1)

Natural and environmental resources professionals may work for public agencies, wood products corporations, consulting firms, or as private contractors. Professional ethics is the set of decision guidelines for

dealing with various landowners, the conduct of professional and business activities, and the conservation of resources for future generations. This course explores common ethical issues for natural resources professionals.

### 428. Forest Entomology (3);2,2

This course is a survey of the arthropods and insects found in forest and range communities. Particular focus will be on insects that reduce commodity value, threaten human and animal health, or have beneficial effects in ecosystems. Methods to manipulate arthropod populations to achieve management goals are discussed. Prerequisites: Biol 212, Chem 211, and Math 140.

### 431. Terrestrial Ecology (4); 3,2

The ecology of natural and artificial groups of terrestrial organisms used in the production of goods and services is the focus of this course. Course topics include biological productivity, vegetation dynamics, biodiversity, range ecosystems, forest ecosystems and pest populations.

### 433. Water Science (4);3,2

This is a course focused on the standard methods of water analysis and interpretation of results for surface and ground waters, water-supply systems, and wastewater discharges. The course will focus on coliform bacteria, nutrients, organic matter, heavy metals, pesticides and water quality standards. Prerequisites: Biol 212, Chem 211. and Math 140.

### 440. Senior Project (1); Fa, Sp

This is a capstone course that requires students to integrate information from across the forestry major's courses in the production of a professional management plan. Prerequisite: Senior standing.

### 425. Field Safety Practices (1); Alt Sp

This course provides training to students in the Occupational Safety and Health Administration's heavy equipment and field operations regulations, safe practices for field workers, and risk management and liability issues surrounding field work by various types of personnel.

## 450. Fire Ecology (3) Alt Fa

This class investigates the ecology of fire in a variety of ecosystems and includes the effects of fire on plants, animals, soils, water, and air. The course emphasizes the prediction and characterization of fire effects over time and space as well as the role of fire in restoration ecology. Case studies of restoration projects using fire in prairies, ponderosa pine and white bark forests will be examined. Prerequisites: Biol 389, For 315 or permission of instructor.

#### 451. Project Fires and Post-Fire Rehabilitation (3) Alt FA

This class is designed to investigate the potential problems resulting from fires including erosion on slopes and in stream channels, sediment and debris jams in streams, weed infestations, loss of vegetation and forest cover, hazards from fire-killed trees, and potential damage from post-fire activities like salvage logging.

### 452. Prescribed Fire Practices (4); 3, 2; Alt Fa

Prescribed fires are used to meet management objectives of fuel reduction and ecosystem restoration. This course explores the design, planning, conduct and monitoring in prescribed fire utilization. The course includes two mandatory Saturday field trips and participation in a prescribed fire. Prerequisites: For 105, For 318 or permission of instructor.

#### 453. Toxicology in Life Sciences (3); Alt Sp

Students will develop an understanding of the general process of conducting release, contamination and risk assessments. Furthermore, students will be able to understand and work with federal and state guidelines and regulations that bear on the conduct of environmental public health investigations. The ultimate goal is to equip students with knowledge and skills that are utilized to assess the general impact of substances on human health. Prerequisites: Biol 212, Chem 212 or permission of instructor.

## 454. Landscape Ecology and Wildfires (3) Alt Sp

Wildfire behavior depends on vegetation and fuel loading over landscapes. Fires that burn through landscape mosaics of habitat types have variable effects on wildlife, vegetation, and surface hydrology. This creates impacts to water quality and yield, wildlife production, and plant distributions that persist for decades. This course investigates landscape features of wildfires, and, modeling tools to predict landscape-level fire behavior and impacts. Prerequisites: For 405, or permission of instructor.

### 461. Atmospheric Science (3);3,0

The physical structure and dynamics of the atmosphere are explored in this course. Air pollutant movement, dissipation, and chemistry will be discussed. Weather phenomena and local ventilation patterns will be discussed in terms of smoke and air pollutant dispersion, fire behavior, and pesticide sprays. Prerequisites: Biol 212, Chem 211, and Math 140.

### 490. Independent Study (1-6 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permissions of instructor.

### 499. Independent Research (1-6 VC)

Study of a special topic in natural resource management in an individual, directed research-based project, arranged with an instructor.

## Major in Sociology and Anthropology (BA)

## Required core: 22 credit hours

- Soc 152: Intro to Sociology (3)
- Anth 102: Intro to Sociocultural Anthropology (3)

#### OK

- Anth 103: Intro to Phy Anth/Archaeology (3)
- Soc/Anth 300: Socio-Cult Theory (3)
- Soc/Anth 330: Res Meth Soc Rel (4)
- Soc/Anth 4XX: 400 Level Elective (3)

Choose one course from the following:

- Anth 274: Indian Cult N.A. (3)
- Anth 374: Indian Cultures of Central America (3)
- Anth 424: Socio/Cult Dyn in the SW (3)
- Anth 474: Contemp Indian Issues (3)
- Anth 476: Indians of the SW (3)
- Anth 477: The Hispanic SW (3)

Choose one course from the following:

- Soc 323: Deviant Beh (3)
- Soc 429: Gender, Society, & Culture (3)
- Soc 412: Social Strat (3)
- Soc 427: Criminology (3)
- Soc 431: Political Sociology (3)
- Soc 493: Race & Ethnic Rel (3)

### Core Total: 22 credit hours

## Sociology Emphasis

#### Required courses: 13 credit hours

- Soc 283: Social Problems (3)
- Soc 412: Social Strat (3))
- Soc 430: Applied Soc Res & Data Analysis (4)
- Soc 439: Classical Soc Theories (3)

**Electives: 9 credit hours (**Select in consultation with your adviser.)

#### Emphasis Total: 22 credit hours

### Major Total: 44 credit hours

#### Criminology Emphasis

#### Required courses: 25 credit hours

- Soc 231: Crim Justice Sys (3)
- Soc 427: Criminology (3)
- Soc 428: Comp Legal Sys (3)

- Soc 430: Applied Soc Res & Data Analysis (4)
- Soc 498: Field Experience (1-4)

Select two courses in consultation with your adviser:

- Soc 283: Social Problems (3)
- Soc 323: Deviant Behavior (3)
- Soc 327: Juv Del & Justice (3)
- Soc 329: Inst Corrections (3)
- PolS XXX: Law Elective (3)

Select one course in consultation with your adviser:

- Anth 442: Forensic Anth (3)
- Anth 461: Comm & Culture (3)

#### Emphasis Total: 25 credit hours

Major Total: 47 credit hours

**Anthropology Emphasis** 

Required courses: 9 credit hours

Select one course from each of the following categories:

Physical Anthropology/Archaeology

- Anth 103: Intro to Phy Anth and Archaeology (3)
- Anth 410: Archaeology (3)

Social Cultural Anthropology

- Anth 102: Intro to Sociocultural Anthropology (3)
- Anth 415: Dev & Socio-Cult Change (3)

#### OR

• Anth 422: Rel & Culture (3)

OR

- Anth 461: Comm and Culture (3) Applied Anthropology
- Anth 442: Forensic Anth (3)
- Anth 480: Issues App Anth (3)
- Anth 481: Cult Res Mgmt (3)
- Soc/Anth: 456 U.S.-Mexico Immigration: Border Issues (3)

*Electives: 12 credit hours* (Select in consultation with your adviser.)

Emphasis Total: 21 credit hours

Major Total: 43 credit hours

American Indian Emphasis

Required courses: 12 credit hours

- Anth 274: Indian Cult N.A. (3)
- Anth 374: Indian Cultures of Central America (3)
- Anth 474: Contemp Indian Issues (3)
- Anth 476: Indians of the SW (3)

*Electives: 9 credit hours* (Select in consultation with your adviser.)

Emphasis Total: 21 credit hours

Major Total: 43 credit hours

Minor in Anthropology

#### Required courses: 9 credit hours

- Soc 152: Intro to Sociology (3)
- Anth 102: Intro to Sociocultural Anthropology (3)
- Soc/Anth 300: Socio-Cult Theory (3)

*Electives: 12* (Select in consultation with your adviser.)

#### Minor Total: 21 credit hours

### Minor in Sociology

#### Required courses: 9 credit hours

- Soc 152: Intro to Sociology (3)
- Anth 102: Intro to Sociocultural Anthropology (3)
- Soc/Anth: 300 Socio-Cult Theory (3)

*Electives: 12 credit hours* (Select in consultation with your adviser.)

### Minor Total: 21 credit hours

### Minor in Sociology and Anthropology (Secondary Education Certificate)

Complete at least 24 credits in sociology and anthropology or a combination of 12 credits in each in consultation with your minor adviser.

#### Minor Total: 24 credit hours

### Major in Criminal Justice Studies (B.A.)

#### Required courses: 18 credit hours

- Soc 152: Intro to Sociology (3)
- Soc/CJS 231: The Criminal Justice System (3)
- Soc 327: Juv Del and Just (3)
- Soc/CJS 329: Inst Corrections (3)
- Soc 427: Criminology (3)
- Soc 493: Race & Ethnic Rel (3)
- Psy 301: Psychological Research Methods \*(4)

#### OR

• SW 330: Research Methods 1\* (3)

#### OR

- Soc/Ant 330: Research Methods in Social Relations (4)
- Psy 302: Statistics for the Behavioral Science (4)\*

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• SW 430: Research Methods 2\* (3)

#### OR

- Soc/Anth 430: Appld Social Research & Data Analysis (4)
- Soc 300: Socio-Cultural Theory (3)

#### OR

• Soc 439: Appl, Res & Data Analysis (3)

#### **Elective Courses: 18 Credits**

- CJS 310: Process & Procedure of Criminal Law (3)
- PolS 314: Intro to the Law (3)
- CJS 315: Issues in the CJS (3)
- CJS 460: Appr to Dispute Resolution (3)
- Psy 408: Drugs & Behavior (3)
- Psy/CJS 409: Domestic & Sexual Violence (3)
- Soc/CJS 428: Compar Legal Sys (3)
- Anth 442: Forensic Anthropology (3)
- CJS 301: Policing (3)
- CJS 382: Terrorism (3)
- SW 432: Field Practicum\* (4)

#### OR

• Soc 498: Field Experience (1-4)

\*Can only be substituted at NMHU Centers.

### Major Total: 51-54 credit hours

### Major in Psychology (BA)

All transfer students majoring in psychology must complete a minor approved by their major adviser.

#### Required courses: 11 credit hours

- Psy 101: Psych & Society (3)
- Psy 301: Psychological Research Methods (4)
- Psy 302: Statistics for the Behavioral Science (4)

#### Other Requirements: 19 credit hours

Choose courses as indicated below in consultation with your major adviser:

Choose at least one course from each of groups A, B, C, and D below, including one laboratory or techniques/methods courses. Take both courses in Group E:

- A) Social
- Psy 321: Soc Psych: Theories & Research (3)
- Psy 405: Positive Psychology (3)
- B) Personality
- Psy 324: Abnormal Psy (3)
- Psy 328: Theories of Person (3)
- C) Learning and Cognitive Processes
- Psy 317: Lrng: Basic Proc (3)
- Psy 318: Exp Tech in Lrng (1) (Corequisite: Psy 317)
- Psy 319: Memory & Cog Proc (3)
- Psy 320: Research in Memory and Cognition (1)
- D) Psychobiological
- Psy 408: Drugs & Behavior (3)
- Psy 410: Physiological Psych (3)
- Psy 411: Tech in Phys Psych (1) (Corequisite: Psy 410)
- E) Other Required Courses
- Psy 340: Develop Psych (3)
- Psy 433: History of Psych (3)

#### Electives: 6 credit hours

In addition, the student may select two other elective psychology courses to complete the 36 credits for a psychology major.

Additional requirements for this major (not counted toward the 36-credit minimum):

In the core curriculum, select the courses Soc 152 and Anth 103 (or 102), or substitutes approved by the major adviser. For computer proficiency, select CS 101 or an equivalent approved by the discipline. Completion of Math 120, 140, 150, and 211 is also recommended.

#### Major Total: 36 credit hours

### Major in Psychology (B.S.)

For the bachelor of science in psychology, complete the bachelor of arts program described above, with the following changes:

- 1. Complete 3 credits of Psy 499.
- 2. Select within the science options of the core curriculum either one year of biology or chemistry.
- 3. Complete Math 140, 150, and 211, and select an academic minor in one of the science fields.

Major Total: 36 credit hours

### Minor in Psychology

### Required courses: 3 credit hours

• Psy 101: Psych & Society (3)

#### Electives: 21 credit hours

Choose courses as indicated below in consultation with your minor adviser.

Choose at least one course from three of the four groups of courses listed above for the major in psychology (BA), including at least one laboratory or techniques/methods course.

In addition, the student may select one other elective psychology course to complete the 24 credits for a psychology minor.

### Minor Total: 24 credit hours

### Courses in Anthropology (Anth)

### 102. Introduction to Sociocultural Anthropology (3)

This course is a study of the concepts of culture and its application in the analysis of human group behavior. NM Common Course Number: Anth 2113

### 103. Introduction to Physical Anthropology and Archaeology (3); Fa, Sp

This course is an introduction to the subdisciplines of physical anthropology and archaeology in the investigation of the origin, distribution, adaptation and evolution of early humans up to the rise of civilization in the Old and New World. *NM Common Course Number: Anth* 1113

#### 235 - 435. Selected Topic in Anthropology (I - 4 VC)

Course in a topic or topics in anthropology. May be repeated with change of content.

#### 274. Indian Cultures of North America (3); Sp

This course is an introduction of native people and cultures of North America, including Mexico at the time of first European contact, employing culture-area concept. Prerequisite: Permission of instructor.

### 300. Sociocultural Theory (3); Fa

This course is a survey of the principal developments of sociocultural theory that have contributed to the emergence, development, and consolidation of the disciplines of anthropology and sociology. Prerequisite: One introductory course in anthropology or sociology.

#### 303. Anthropological Theory (3)

This course is a survey of the major directions in contemporary American and Western European anthropology. Prerequisite: One introductory course in sociology or anthropology.

#### 330. Research Methods in Social Relations (4); Fa

This course is the first in the series of methodology courses offered by sociology. The course examines the ways in which the social scientist investigates society and social phenomena. Students will be led through some of the same reasoning that researchers use whey they think about doing their work in a professional setting. In this course, students will learn how to survey and identify major research issues and methods using both quantitative and qualitative studies. The main objective of this course is to develop an interest among students to challenge ideas that are presented as fact and be able to ask questions related to the research process (including design, sampling, data gathering and generalization issues). Students are expected to be able to apply their understanding of the research process to answer questions they find interesting by adopting appropriate methodology. Communicating their findings from various projects is essential. Topics covered include research design, measurement, sampling techniques, surveys, experiments, field research, unobtrusive research measure, applied research, and an introduction to data analysis and report writing.

#### 352. Laboratory Research (I - 3 VC)

Research experience in the anthropology laboratory. May be repeated.

#### 374. Indian Cultures of Central America (3); Sp

This course is a study of the native people, cultures and culture areas of Central America. Prerequisite: One introductory course in sociology or anthropology.

#### 398. Anthropological Field Studies (2 - 4 VC)

This course examines the ethnological and/or archaeological field studies in selected sites. The destination

and time in the field vary and are announced at the time of offering. A preparation session before departure is required.

#### 410. Archaeology (3); 2,2; Fa

This course explores the purpose, techniques, methods and theory of archaeology in the study of the human past and in the context of modern science. Prerequisite: Anth 221 and 241 or permission of instructor.

### 411. Paleoethnobotany (3)

The question of subsistence is central to every archaeological inquiry. The specialized field of paleoethno-botany allows researchers to infer dietary habits from charred plant remains recovered during archaeological excavations. The purpose of this course is to familiarize students with field methods employed in the recovery of botanical remains (samplings, flotation, capture, and drying) and lab methods used to identify and interpret them. Special emphasis will be placed on identifying wild and domestic plants used by prehistoric people of northeastern New Mexico.

### 412. Lithic Technology and Analysis (3)

The purpose of this course is to familiarize students with the study of stone tools in archaeological contexts. We wish to learn from which materials these tools were made, the techniques that were employed to make them and how they came to be discarded to become part of the archaeological record. We also wish to know from where the materials came and what properties caused them to be selected for the purpose or purposes for which they were chosen. Accordingly, the course is broken into four general areas: geology, technology, analysis, and interpretation.

#### 413. Archaeology of the Southwest (3); 2,2; Sp

This course is a study of prehistoric cultures, before 1500, of Northern New Mexico and the greater Southwest. Prerequisite: One introductory course in sociology or anthropology.

### 414. Field Methods In Archaeology (2 - 6 VC); Su

Instruction in archaeology field and laboratory techniques and methods. Prerequisite: Anth 410 or Permission of instructor.

#### 415. Development and Sociocultural Change (3); Sp

This course concerns the nature and consequences of development and culture change. The focus is on contemporary issues and the many ways in which anthropology is used outside its purely academic context: how anthropology is applied to contemporary human issues, how it benefits society, and how it advances theoretical knowledge. Prerequisite: One introductory course in anthropology or sociology. Cross-listed as: Soc 415.

#### 420. Anthropology Goes to the Movies (3) Alt Sp

The course features ethnographic films that explore cross-cultural themes about identities (race-ethnicity, nationality, political organization, religion, gender, class, sexuality, etc.) primarily through film and secondarily through ethnographic texts. Course readings, films, class lectures and discussions will examine the themes of cinematic (visual and auditory) manipulation of audience's perceptions and interpretations, research and ethics and accountabilities, and the politics of ethnographic representation. Students will learn about film in anthropology by viewing and discussing films that reflect various anthropological principles.

#### 421. Ethnology (3); Fa

This course is an advanced study of the development of the discipline and close examination of selected ethnological texts. Prerequisite: Permission of instructor.

#### 422. Religion and Culture (3); Fa

The course addresses the origins, elements, forms, and symbolism of religion, provides a comparative survey of religious beliefs, myths, practices and symbolism. It focuses on religion in the context of culture and teaches the appreciation of religious differences. Prerequisite: One introductory course in sociology or anthropology. Cross-listed as: Soc 422.

#### 424. Social/Cultural Dynamics in the Southwest (3); Fa

This course is an investigation of the interrelationships among the current major cultural groups living in Northern New Mexico and the greater Southwest.

#### 428. Comparative Legal Systems (3); Fa

This course is a sociological and anthropological analysis of social control and law in a variety of social and cultural contexts.

#### 429. Gender, Culture, and Society (3); Fa

This course provides a foundation for understanding gender as expressed within and influenced by society. Cross culturally, men and women are perceived as different; often as opposites. This perception can affect the quality of life, both on a structural level (in terms of wages earned, jobs held) and on an interpersonal level (in terms of expression of self/autonomy). Various theoretical perspectives are explored in order to understand why this perception of difference exists, how it translates into inequality and how it is learned.

#### 442. Forensic Anthropology (3); 2,2; Sp

This course is a presentation and application of biological anthropology techniques in the identification of humans from skeletal remains.

#### 451. Senior Seminar (3); Sp

This is a capstone course designed to synthesize and integrate knowledge in anthropology and sociology. Cross-listed as: Soc 451.

#### 454. Women and Globalization (3) Sp

This course examines how women's lives are shaped by globalization through the feminization of labor and migration, environmental degradation, diaspora, sexuality, cultural displacement, and militarization. It explores the ways women have confronted these conditions as well as the possibilities and challenges of cross-border feminist coalitions.

### 456. U.S.-Mexico Immigration: Border Issues (3); Sp

Socially and culturally, economically and demographically, no international process has affected everyday life in the United States more than Mexican immigration. The course will examine the evolution, expansion and maintenance of processes and structures that have come to institutionalize the unspoken immigration agreements between these two nations.

#### 461. Communication and Culture (3); Fa

This course examines anthropological linguistics, focusing on investigations of the relationships between language and culture. Prerequisite: One introductory course in sociology or anthropology.

### 474. Contemporary Indian Issues (3); Sp

This course is an examination of emerging social and cultural issues in today's American Indian society.

#### 476. Indians of the Greater Southwest (3); Sp

This course is a survey of the Native American cultures in the greater Southwest since 1500, including both Pueblo and non-Pueblo cultures. Prerequisite: One introductory course in sociology or anthropology.

#### 477. The Hispanic Southwest (3); Fa

An ethnohistorical and socioanthropological examination of Spanish-speaking people in the Southwest from their establishment to contemporary times.

### 480. Issues in Applied Anthropology (3); Sp

This course focuses on what applied anthropology is, how it is done, how it benefits society, and how it advances anthropology's theoretical knowledge of culture and society. It is also for students who are interested in learning about the various ways in which anthropology is used outside the academia.

#### 481. Cultural Resource Management (3); Fa

This course provides students with the foundations for conducting cultural resource management. It addresses laws, regulations, agencies, and techniques needed for conducting work and practical experience. Prerequisite: One culture-area course.

#### 490. Independent Study (I - 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

### 496. Ethnographic Fieldwork (I - 4 VC)

This course examines the training and practice in the traditional ethnographic methods such as map-

ping, census taking, participant observation, informal interviewing, formation of projects, and data analysis. Prerequisite: One introductory course in sociology or anthropology.

### 499. Independent Research (I - 4 VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

### Courses in Criminal Justice (CJS)

#### 235 - 435. Selected Topic in Criminal Justice (3)

Course in a topic or topics in criminal justice. May be repeated with a change of content.

#### 310. Process and Procedures of Criminal Law (3)

This course examines processes and procedures of the American legal system. The primary focus is on the American adversarial system of criminal law and alternatives to these systems of law and justice. The adversarial system will be compared with the inquisitorial criminal and civil codes of continental Europe. NM Common Course Number: CRJI 2503

### 315. Issues in the Criminal Justice System (3)

This course provides an advanced exploration of issues currently impacting law enforcement, models of adult and juvenile corrections, and the judicial system. The course is designed to provide students with in-depth knowledge of the interdependence of the components of the criminal justice system continuum. The type and effectiveness of rehabilitative efforts and constitutional requirements for mental and medical health care will be examined.

#### 409. Domestic and Sexual Violence (3)

This course will focus on physical, sexual, and emotional abuse that occurs within families. A particular emphasis will be a focus on the psychological consequences of exposure to physical and sexual trauma and neglect. Victim and offender characteristics will be discussed in the context of family dynamics. Typical and potential criminal justice system responses will be explored.

### 460. Approaches to Dispute Resolution (3)

This course provides a theoretical and practical understanding of dispute resolution processes in use in the private and public sectors. The course examines how and why dispute resolution processes function in particular environments, and critiques the strengths and weaknesses of each process. Prerequisite: Introductory course in psychology or introductory course in sociology.

### Courses in Psychology (Psy)

#### 101. Psychology and Society (3); Fa

This course is a survey of the major concepts of modern psychology and their application to some of the issues in modern society. Two lecture hours per week are scheduled along with a weekly small-group discussion, which supplements the lectures by means of discussion, films, and demonstrations. *NM Common Course Number*: Psyc 1113

### 201. Cognition and Life Processes (3)

This course is a presentation of the fundamentals of human cognition, critical thinking skills, and the application of these skills to everyday life processes. Topics will include reasoning, judgment, problem-solving, and decision making.

#### 235 - 435. Selected Topic in Psychology (1 - 4 VC)

Course in a topic or topics in psychology. May be repeated with a change of content.

#### 240. Life-Span Human Development (3)

This course is a systematic study of individual growth and development from conception through old age. The course is appropriate for students other than psychology majors, including such disciplines as education, social work, and nursing. Prerequisite: Psy 101.

#### 301. Psychological Research Methods (4); 3,2; Fa

The purpose of this class is to give students a basic understanding of the types of research methods that apply to psychology. Students will be introduced to experimental, quasi-experimental, and correlational designs, among others. Majors will be required to conduct their own research project in psychology during the year in conjunction with the Psy 302 course.

#### 302. Statistics for the Behavioral Science (4); 3,2; Sp

The first purpose of the course is to reduce the fear of statistics by using examples that make sense to everyone. The second purpose of the course is to teach basic statistics. Students will be deriving answers with hand calculations to give a good basic overview of simple statistics including descriptives, correlations, t-test, and ANOVAS. Majors will be finishing the research project they began in Psy 301 by analyzing their data with the statistical techniques they learn in the class.

### 317. Learning: Basic Processes (3)

This course is a review of the primary phenomena associated with instrumental and classical conditioning. Some attention is given to adaptations of conditioning principles to behavior modification. Prerequisite: Psy 101 or permission of instructor. Corequisite: Psy 318.

### 318. Experimental Techniques in Learning (1)

Laboratory experimental work demonstrating basic phenomena in animal learning and memory. Corequisite: Psy 317.

#### 319. Memory and Cognitive Processes (3)

A review of human processes involved in encoding, storing, and retrieving information. Recommended: Psy 301 and Psy 302.

#### 321. Social Psychology: Theories and Research (3)

This course is a review of the major social-psychological theories and research. Topics include person perception, attributional processes, attitudes, stereotyping, group processes, aggression, interpersonal attraction, and altruism. Prerequisite: Psy 101 or permission of instructor. Corequisite: Psy 322.

#### 320. Research in Memory & Cognition (1) 0; 2 Sp

This course is an exercise in critical thinking directed at one's own mind. The aim of this course is to familiarize students with key cognitive psychological studies by means of practical experimental demonstrations and critical analysis of research articles. The course will cover topics such as selective attention, automatic versus conscious processing, reconstructive memory processing and semantic integration, forms of learning, and the role of generic knowledge and heuristics in everyday thinking. This course compliments Psy 319.

#### 322. Social Psychology Research (1) Sp

This course is strongly recommended as a discussion course to accompany Psychology 321. In this class, students will be discuss modern and classic research in the area of social psychology. Students will read primary source material covering relationships, prejudice, aggression, helping, and related areas of social psychology. Corequisite: Psy 321.

#### 324. Abnormal Psychology (3)

This course is an analysis of each of the major syndromes of psychopathology in terms of basic psychological processes. Special attention is given to the clinical observation and experimental research underlying the delineation of each syndrome. Prerequisite: Psy 101 or permission of instructor.

#### 328. Theories of Personality (3)

This course is a review of the major theories of personality such as those developed by Freud, Jung, Horney and Erickson. A sampling of non-Western approaches to this topic is also addressed, including Hindu, Buddhist, and Islamic perspectives. Prerequisite: Psy 101 or permission of instructor. Corequisite: Psy 329.

#### 340. Developmental Psychology (3); Fa

This course is an in-depth coverage of developmental theory and research with emphasis alternating among child, adolescent and adult development. Prerequisite: Psy 101. Cross-listed as: EcEd 302.

#### 377. Environmental Psychology (2)

An examination of environmental factors affecting behavior and sociopsychological functioning, including such topics as physical/architectural factors, crowding, and personal space.

#### 405. Positive Psychology (3)

This course provides an overview of the dynamic field of positive psychology. What does this mean? Positive psychology is oriented to the study of optimal human performance, quality relationships, well-

being, and flourishing. How can we be happy? How can we enhance our own lives and the lives of others? How can we be creative, productive, satisfied, and live meaningful lives? These are a few of the questions we would like to tackle in this course.

#### 408. Drugs and Behavior (3); Fa, Su

Psychological and pharmacological study of alcoholism, drug abuse, and drug use, including tranquilizers and nonprescription drugs, throughout society.

#### 409. Domestic and Sexual Violence (3), Su

This course focuses on physical, sexual, and emotional abuse that occurs within families. A particular emphasis will be a focus on the psychological consequences of exposure to physical and sexual trauma and neglect. Victim and offender characteristics will be discussed in the context of family dynamics. Typical and potential criminal justice system responses will be explored.

### 410. Physiological Psychology (3)

This course is an overview of the neuroanatomical and neurophysiological processes underlying behavior. Topics include neurological disorders, brain organization, sensory systems, and applied human neuropsychology. Corequisite: Psy 411.

#### 411. Techniques in Physiological Psychology (1)

This course explores laboratory work designed to develop skills needed to collect data in physiological psychology. Exercises include brain dissection techniques and the use of the following instruments: centrifuge, balance, spectrophotometer, and high-performance liquid chromatography (HPLC). Corequisite: Psy 410.

#### 416. Motivation and Emotion (3)

This course is a review of the major phenomena and theories that relate to motivation and emotion. Prerequisite: Psy 301 and Psy 302, or permission of instructor.

#### 419. Introduction to Behavior Therapy (3)

This course is an introduction to and survey of behavior therapy procedures and their application to child and adult populations in a variety of settings including homes, schools, prisons, and hospitals.

#### 422. Human Sexuality (3)

This course is a review of contemporary, sociopsychological issues relating to human sexuality. Topics include sexual anatomy, sexually transmitted diseases, sexual dysfunctions, sexual attitudes and mores.

#### 425. Introduction to Group Psychotherapy (3)

This course is an overview of group therapy, theory and techniques. The course includes an experiential component designed to provide experience with group process and group leadership. Prerequisite: Permission of instructor.

#### 430. Gender Roles (3)

This course is an examination of gender roles and role theory in understanding the behavior of women and men. Topics include development, stereotyping, sex differences in personality, abilities, achievement, and status. Attention is given to implications of changing female and male roles in society.

#### 433. History of Psychology (3)

This course is a review of the major figures associated with the development of psychology as a science from Plato's time to the present, with special emphasis on the 19th and 20th centuries. Prerequisite: Psy 301 and Psy 302 or permission of instructor.

#### 445. Behavior Disorders in Children (3)

This course explores etiology and treatment of behavioral problems in children in a variety of settings, including home and school environments. An eclectic coverage of the major theories, approaches, and research is provided. Prerequisite: Psy 240 or 340 or permission of instructor.

#### 450. Seminar in Psychology (I - 4 VC)

Seminar course in a topic or topics in psychology. May be repeated with a change in content.

#### 464. Organizational Behavior (3)

This course is an analysis of formal organizations and informal relationships among individuals and small groups. Study of business organizations as a system of authority and status, control and commu-

nication, decision-making centers, and leadership positions. Use is made of cases and research studies.

#### 471. Psychological Testing (3); 2,2

This course presents the principles underlying psychological testing and measurement. Major areas of psychological testing are surveyed, and special attention is given to social and ethical aspects of psychological testing. Prerequisite: Psy 301 and Psy 302 or permission of instructor.

### 472. Cognitive Science (3)

This course is an interdisciplinary investigation of the foundations of human knowledge, representation and understanding, the functioning of the human mind, and how these impact on recent computer technologies. Cross-listed as: Phil 472 and CS 472.

### 475. Abnormal Psychology and Literature (3)

This course analyzes literary characters in terms of psychopathology. Various theories of abnormality will be utilized. Prerequisite: Permission of instructor.

#### 477. Culture and Mental Illness (3)

This course examines current descriptions and explanations of mental disorders in a sample of countries from all major regions of the world. Historical, technical, ethical, and pragmatic aspects of international research in the realm of psychology/psychiatry are also addressed. Prerequisite: Psy 101, Psy 324 or permission of instructor.

#### 479. Psychology of Religion (3)

This course is an examination of the relationship between the discipline of psychology and mysticism. Perspectives addressed include the historical, cultural, philosophic, psychoanalytic, and scientific. Prerequisite: Psy 101.

### 480. Community Psychology (3)

This course is an introduction to community psychology with emphasis on theories and research regarding prevention and consultation. Prerequisite: Psy 101 or permission of instructor.

#### 490. Independent Study (I -4 VC)

Individual, directed readings and library research arranged with an instructor on a topic of mutual interest to the student and instructor. Prerequisite: Permission of instructor.

#### 498. Field Experience (1 - 4 VC)

A field placement in a local service agency providing opportunity for observation and learning under staff supervision. May be taken twice for credit. Prerequisite: Senior status in psychology and permission of instructor.

#### 499. Independent Research (I - 4 VC)

An individual, directed research investigation arranged with an instructor on a topic of mutual interest to the student and the instructor. Projects require a final written report that includes a presentation of the problem, review of the literature, description of procedures, data analysis, and interpretation of results. Prerequisite: Permission of instructor.

### Courses in Sociology (SOC)

### 152. Introduction to Sociology (3)

This course is a broad survey of the basic concepts and principles that sociology uses to understand the development of the human social environment and its phenomena. NM Common Course Number: Soci 1113

### 212. Marriage and the Family (3)

This course explores marriage, family life, and the family as a social institution. NM Common Course Number: Soci 2213

### 231. Criminal Justice System (3); Fa

This course is a sociological analysis of the criminal justice process in the United States with special emphasis on law enforcements and the courts. NM Common Course Number: Crji 1113

#### 235 - 435. Selected Topic in Sociology (I - 4 VC)

Course in a topic or topics in sociology. May be repeated with change of content.

#### 283. Social Problems (3)

This course is a study of specific social problems that are significant at the present time. NM Common Course Number: Soci 2113

#### 300. Sociocultural Theory (3); Fa

This course is a survey of the principal developments of sociocultural theory that has contributed to the emergence, development and consolidation of the disciplines of anthropology and sociology.

### 323. Deviant Behavior (3)

This course is an analysis, using specific sociological theory and method, of behavior that deviates from institutionalized expectations.

#### 327. Juvenile Delinquency and Justice (3)

This course is an overview of definitions and social theories of delinquency and an analysis of the legal system for processing juvenile offenders in the United States with special consideration of juvenile justice in New Mexico. NM Common Course Number: Crji 2603

#### 329. Institutional Corrections (3)

This course is a sociological analysis of the role of jails and prisons in the criminal justice system and larger society in the United States. Emphasis is on operation of adult correctional facilities, from perspective of both staff and inmates with special consideration of institutional corrections in New Mexico.

### 330. Research Methods in Social Relations (4); Fa

This course explores the social context, structure of inquiry, and modes of observation in research of social and cultural phenomena. Prerequisite: One introductory course in sociology or anthropology. Cross-listed as: Anth 330.

#### 411. The Community (3)

This course is an analysis of human communities in terms of social structure, social class, participation in formal and informal associations, power structure and intergroup conflict.

### 412. Social Stratification (3); Sp

This course explores differentiation, status, social mobility, class, and caste in selected societies. Prerequisite: One introductory course in sociology or anthropology.

#### 415. Development and Sociocultural Change (3)

This course concerns the nature and consequences of development and culture change as understood by social scientists. The course will address theoretical orientations, consequences of development, and case studies. Prerequisite: One introductory course in sociology or anthropology. Cross-listed as: Anth 415.

#### 422. Religion and Culture (3)

This course explores the origins, elements, forms, and symbolism of religion, including a comparative survey of religious beliefs, myths, practices, and symbolism. The course focuses on religion in the context of culture with an emphasis on appreciating religious differences. Prerequisite: One introductory course in sociology or anthropology. Cross-listed as: Anth 422.

#### 424. Social/Cultural Dynamics in the Greater Southwest (3)

This course in an investigation of the interrelationships among today's major cultural groups living in the greater Southwest.

#### 427. Criminology (3); Sp

This course in an overview of definitions and types of crime, social theories of crime causation, special issues related to crime, crime control, and crime prevention.

#### 428. Comparative Legal Systems (3); Fa

This course is a sociological and anthropological analysis of social control and law in a variety of social and cultural contexts.

#### 429. Gender, Culture, and Society (3)

This course provides a foundation for understanding gender as expressed within and influenced by society. Cross culturally, men and women are perceived as different; often as opposites. This perception

can affect the quality of life, both on a structural level (in terms of wages earned, jobs held) and on an interpersonal level (in terms of expression of self/autonomy). Various theoretical perspectives are explored to understand why this perception of difference exists, how it translates into inequality and how it is learned.

### 430. Applied Social Research and Data Analysis (4) 3, 2; Sp

This course provides instruction in and application of techniques used in the analysis of quantitative and qualitative social science research data. Prerequisite: Soc 330 or permission of instructor.

#### 431. Political Sociology (3)

This course explores sociological theory and research as applied to the study of political behavior, including such topics as the social bases of power (class, occupation, religion, cultural values), decision making, leadership and communications.

### 439. Classical Sociological Theories (3); Sp

This course will explore contemporary sociological theories and their application to social phenomena. The student will gain an understanding of important theoretical constructs and issues in critically understanding society and sociology. In addition, the student will emerge with the ability to apply these theoretical constructs to current social phenomena and problems.

### 450. Seminar in Sociology (1-4 VC)

Seminar course in a topic or topics in sociology. May be repeated with change of content.

### 454. Women and Globalization (3)

This course examines how women's lives are shaped by globalization through the feminization of labor and migration, environmental degradation, diaspora, sexuality, cultural displacement, and militarization. It explores the ways women have confronted these conditions as well as the possibilities and challenges of cross-border feminist coalitions.

#### 490. Independent Study (I -4 VC)

Independent, directed study arranged with an instructor. Prerequisite: Permission of instructor.

#### 493. Race and Ethnic Relations (3)

This course explores the basic processes operating in the present day interrelations of ethnic groups.

#### 498. Field Experience (1-3 VC); Sp

A field placement in an institution or agency providing opportunity for observation and limited exposure to the use of professional techniques under staff supervision. Prerequisite: Permission of instructor.

#### 498. Field Experience (1 - 3 VC)

A field placement in a local service agency providing opportunity for observation and learning under staff supervision. May be taken twice for credit. Prerequisite: Senior status in psychology and permission of instructor.

#### 499. Independent Research (I - 4 VC)

An individual, directed research investigation arranged with an instructor on a topic of mutual interest to the student and the instructor. Projects require a final written report that includes a presentation of the problem, review of the literature, description of procedures, data analysis, and interpretation of results. Prerequisite: Permission of instructor. One introductory course in sociology or anthropology.

### BBA Degree with concentrations, minors

### University Core: 3 credit hours

• Econ 216: Macroeconomics (3)

### **Business Education Core: 45**

- Acct 287: Prin of Fin Acct (3)
- Acct 288: Prin of Mgr Acct (3)
- BLaw 360: Business Law & Ethics (3)
- Bus 110: Bus Analys Meth (3)

OR

- Math 153: Quant Meth for Bus (3)
- Bus 210: Stat Analys for Bus (3)

#### OR

- Math 158: Intro to Business Stat (3)
- Econ 217: Prin of Microecon (3)
- Engl 367: Tech Writing (3)
- Fin 340: Personal Finance (3)
- Fin 341: Financial Mgmt 1 (3)
- Mgmt 303: Prin of Management (3)
- Mgmt 325: Oper Resrch 1 (3)
- Mgmt 489: Strategic Mgmt (3)
- Mktg 302: Prin of Marketing (3)
- Mktg 411: Marketing Rsrch (3)
- MIS 145: Microcomp Appl in Bus (3)

#### Core Total: 45 credit hours

### Concentration in Accounting (BBA)

The following categories reflect the philosophy of the American Institute of Certified Public Accountants and the standard for educational components of the ACBSP accrediting body.

#### Required courses: 27 credit hours

- Acct 301: Cost Accounting (3)
- Acct 387: Intermed Acct 1 (3)
- Acct 388: Intermed Acct 2 (3)
- Acct 392: Intermed Acct 3 (3)
- Acct 321: Individual Taxation (3)
- Acct 481: Accounting Sys (3)
- Acct 485: Financial Statement Analysis (3)
- Acct 487: Adv Acct Topics (3)
- Acct 492: Auditing (3)

#### Electives: 6 credit hours

Choose two courses from the following list:

- Acct 401: Budgeting (3)
- Acct 410: Accounting Tech (3)
- Acct 422: Corp, Partnership, & Estate Taxation (3)
- Acct 482: Int'l Accounting (3)
- Acct 489: Govt Accounting (3)

#### Concentration Total: 33 credit hours

### Minor in Accounting for Non-Business Majors

Students must take Bus 110 (or Math 153) and MIS 145 before enrolling in this minor.

#### Required courses: 15 credit hours

- Acct 287 Prin of Fin Acct (3)
- Acct 288 Prin of Mgr Acct (3)
- Acct 301 Cost Accounting (3)
- Acct 387 Intermed Acct 1 (3)
- Acct 388 Intermed Acct 2 (3)

#### Electives: 9 credit hours

Choose three upper-division courses from the following list in consultation with an adviser.

• Acct 392: Intermed Acct 3 (3)

- Acct 401: Budgeting (3)
- Acct 408: Tax Planning (3)

#### OR

- Acct 321: Individual Taxation (3)
- Acct 422: Corp, Partnership, & Estate Taxation (3)
- Acct 481: Accounting Sys (3)
- Acct 482: Int'l Accounting (3)
- Acct 485: Financial Statement Analysis (3)
- Acct 487: Adv Acct Topics (3)
- Acct 489: Govt Accounting (3)
- Acct 492: Auditing (3)

#### Minor Total: 24 credit hours

### Minor in Accounting for Business Majors

#### Required courses: 9 credit hours

- Acct 301: Cost Accounting (3)
- Acct 387: Intermed Acct 1 (3)
- Acct 388: Intermed Acct 2 (3)

### Electives: 12 credit hours

Choose four courses from the following list:

- Acct 392: Intermediate Acct 3 (3)
- Acct 401: Budgeting (3)
- Acct 321: Individual Taxation (3)

#### OR

- Acct 408: Tax Planning (3)
- Acct 410: Accounting Tech (3)
- Acct 422: Corp, Partnership, & Estate Taxation (3)
- Acct 481: Accounting Sys (3)
- Acct 482: Int'l Accounting (3)
- Acct 485: Financial Statement Analysis (3)
- Acct 487: Adv Acct Topics (3)
- Acct 489: Govt Accounting (3)
- Acct 492: Auditing (3)

### Minor Total: 21 credit hours

### Concentration in Finance-Managerial Finance Track (BBA)

### Required courses: 18 credit hours

- Fin 332: Money & Banking (3)
- Fin 342: Financial Mgmt 2 (3)
- Fin 409: Investment Planning (3)
- Fin 410: Real Estate Investments (3)
- •Fin 460: Portfolio Analysis (3)
- Fin 475: Int'l Fin Mgmt (3)

### Electives: 12 credit hours

Choose four upper-division courses in consultation with an adviser.

#### Concentration Total: 30 credit hours

### Minor in Finance for Non-Business Majors- Managerial Finance Track

Students must take Bus 110 (or Math 153) and Fin 341 before enrolling in this minor.

#### Required courses: 21 credit hours

- Acct 287: Prin of Fin Acct (3)
- Fin 332: Money & Banking (3)
- Fin 340: Personal Finance (3)
- Fin 409: Investment Planning (3)
- Fin 410: Real Estate Investments(3)
- Fin 460: Portfolio Analysis (3)
- Fin 475: Int'l Fin Mgmt (3)

#### Minor Total: 21 credit hours

### Minor in Finance for Business Majors Required courses: 18 credit hours

- Fin 332: Money & Banking (3)
- Fin 342: Financial Mgmt 2 (3)
- Fin 409: Investment Planning (3)
- Fin 410: Real Estate Investments (3)
- Fin 460: Portfolio Analysis (3)
- Fin 475: Int'l Fin Mgmt (3)

#### Electives: 3 credit hours

#### Minor Total: 21 credit hours

### Concentration in Finance-Personal Finance Planning Track (BBA) Required courses: 21 credit hours

- Fin 407: Risk and Insurance Planning (3)
- Acct 408: Tax Planning (3)
- Fin 409: Investment Planning (3)
- Fin 411: Retirement Planning and Employee Benefits (3)
- Fin 412: Estate Planning (3)
- Fin 413: Financial Planning Capstone (3)

### Electives: Choose nine hours from the following list:

- Fin 332: Money & Banking (3)
- Fin 342: Financial Mgmt 2 (3)
- Fin 410: Real Estate Investments (3)
- Fin 460: Portfolio Analysis (3)
- Acct 485: Financial Statement Analysis (3)

#### Concentration Total: 30 credit hours

### Minor in Finance for Non-Business Majors - Personal Financial Planning Track

Students must take Bus 110 (or Math 153) before enrolling in this minor.

#### Required courses: 27 credit hours

- Acct 287: Prin of Fin Acct (3)
- Fin 340: Personal Finance (3)
- Fin 341: Financial Mgmt 1 (3)
- Fin 407: Risk and Insurance Planning (3)
- Acct 408: Tax Planning (3)
- Fin 409: Investment Planning (3)
- Fin 411: Retirement Planning and Employee Benefits (3)
- Fin 412: Estate Planning (3)
- Fin 413: Financial Planning Capstone (3)

#### Minor Total: 27 credit hours

# Minor in Finance for Business Majors-Personal Financial Planning Track Required courses: 21 credit hours

- Fin 407: Risk and Insurance Planning (3)
- Acct 408: Tax Planning (3)
- Fin 409: Investment Planning (3)
- Fin 411: Retirement Planning and Employee Benefits (3)
- Fin 412: Estate Planning (3)
- Fin 413: Financial Planning Capstone (3)
- Acct 485: Fin Statement Anal (3)

#### Minor Total: 21 credit hours

### Concentration in International Business (BBA)

### Required courses: 25 credit hours

- Span 201: Intermediate Span (4)
- Span 310: Advanced Conversation (3)
- IntB 440: Intl Business (3)
- Mgmt 440: International Human Resource Management (3)
- Mktg 474: International Mktg (3)
- IntB 480: Doing Business in the Spanish-Speaking World (3)
- Fin 475: Intl Financial Mgmt (3)
- Mktg 430: Intl Negotiations (3)

#### Electives: 6 credits required.

Choose two IntB upper-division courses offered by the School of Business.

- IntB 420: Intl Economics (3)
- IntB 430: International Law (3)
- IntB 454: Residency in Hispano America (6)
- Acct 482: Int'l Accounting (3)

#### Concentration total: 31 credit hours

### Concentration in Management

### Required courses: 21 credit hours

- Mgmt 364: Organizational Theory (3)
- Mgmt 386: HR Management (3)
- Mgmt 440: Int'l HR Mgmt (3)
- Mgmt 453: Org Leadership (3)
- Mgmt 465: Personnel Pract & the Law (3)
- MIS 480: Project Mgmt (3)
- Econ 408: Intermediate Microeconomics (3)

Note: Students must choose nine hours of electives in consultation with your adviser.

#### Concentration Total: 30 credit hours

### Minor in Management for Non-Business Majors

Student must take Bus 110 (or Math 153) and Bus 210 (or Math 158) before enrolling in this minor.

#### Required courses: 18 credit hours

- Acct 287: Prin of Fin Acct (3)
- Mgmt 303: Prin of Mgmt (3)
- Mgmt 325: Oper Research I (3)
- Mgmt 364: Org Behavior (3)
- Mgmt 386: HR Management (3)
- MIS 145: Microcomp App in Bus (3)

#### Electives: 6 credit hours

Choose two upper-division courses in consultation with an adviser (at least one must be a management course).

#### Minor Total: 24 credit hours

### Minor in Management for Business Majors

#### Required courses: 15 credit hours

- Mgmt 364: Org Behavior (3)
- Mgmt 386: Human Resource Mgmt (3)
- Mgmt 440: Int'l HR Mgmt (3)
- Mgmt 465: Personnel Pract & Law (3)
- Mgmt 487: Adv Oper Rsch & Sci Mgmt (3)

#### Electives: 6 credit hours

Choose three upper-division courses in consultation with an adviser (at least one must be a management course).

#### Minor Total: 21 credit hours

### Concentration in Management Information Systems (BBA)

#### Required courses: 26 credit hours

- SSD 210: Programming Structure & Arch (3)
- SSD 310: Development Tools & IDEs (3)
- SSD 315: Iterative, Incremental Dev (2)
- SSD 330: Systems, General & Complex (2)
- SSD 340: OO Language (1)
- SSD 345: Programming Language Ecology (1)
- SSD 355: OO Analysis & Design (3)
- SSD 365: Patterns & Pattern Language (1)
- SSD 370: Tech & Culture Change (1)
- SSD 380: Coaching & Team Leadership (1)
- SSD 382: Agile Project Mgmt (1)
- SSD 385: Data Modeling (2)
- SSD 410: Data Persistence & Integrity (2)
- SSD 420: Software & Systems Security (1)
- SSD 425: Information Science (1)
- SSD 449: Innovation & Change Mgmt (1)

#### Electives: 6 credit hours

Topics courses will be 1-3 credits. Students must take different topics, totaling six credit hours.

SSD 435 Special Topics

#### Concentration Total: 32 credit hours

### Minor in Management Information Systems for Non-Business Majors

Required courses: 21 credit hours

- SSD 210 Programming Structure & Arch (3)
- BUS 304 Bus & Mgmt for Software Prof (3)
- SSD 310 Dev Tools & IDEs (2)
- SSD 315 Iterative, Incremental Dev (2)
- SSD 330 Systems, General & Complex (2)
- SSD 340 OO Language (1)

#### OR

SSD 345 Programming Language Ecology (1)

- SSD 355 OO Analysis & Design (3)
- SSD 370 Tech & Culture Change (1)
- SSD 385 Data Modeling (2)
- SSD 410 Data Persistence & Integrity (2)

#### Elective: 3 credit hours.

Students must choose three hours of special topics such as:

- SSD 335: Special Topics
- SSD 435: Special Topics

Elective may also be chosen from computer science or media arts

#### Minor Total: 24 credit hours

### Minor in Management Information Systems for Business Majors Required courses: 18 credit hours

- SSD 210: Programming Structure & Arch (3)
- SSD 310: Dev Tools & IDEs (2)
- SSD 315: Iterative, Incremental Dev (2)
- SSD 330: Systems, General & Complex (2)
- SSD 340: OO Language (1)
- SSD 345: Programming Language Ecology (1)
- SSD 355: OO Analysis & Design (3)
- SSD 370: Tech & Culture Change (1)
- SSD 385: Data Modeling (2)
- SSD 410: Data Persistence & Integrity (2)

#### Elective: 3 credit hours

Students must choose three hours of special topics such as:

- SSD 335: Special Topics
- SSD 435: Special Topics

Elective may also be chosen from computer science or media arts.

#### Minor Total: 21 credit hours

### Concentration in Marketing

Required courses: 15 credit hours

- Mktg 320: Professional Sales (3)
- Mktg 373: Advertising (3)
- Mktg 415: Consumer Behav (3)
- Mktg 474: Int'l Marketing (3)
- Mktg 484: Mktg Management (3)

#### Electives: 15 credit hours

Choose five upper-division courses in consultation with an adviser (at least two must be a marketing courses).

#### Concentration Total: 30 credit hours

### Concentration in Media Marketing (BBA)

The optional media marketing emphasis integrates traditional marketing knowledge with tools from the creative side of marketing. Students learn design fundamentals and applications to plan and implement marketing campaigns in media such as digital film, Internet advertising and traditional print media.

Required courses: 24 credit hours

- Mktg 373: Advertising (3)
- Mktg 415: Consumer Behavior (3)

- Mktg 445: E-Commerce (3)
- Mktg 451: Internet Mktg Strategy (3)
- Mktg 484: Mktg Management (3)

#### Media Emphasis:

- MArt 121: Visual Concepts (3)
- MArt 317: Publication Design (3)
- MArt 327: Web Production Workshop (3)

#### Electives: 6 credit hours

Choose two additional courses from media arts with approval of advisers in marketing and media arts.

### Concentration Total: 30 credit hours

### Minor in Marketing for Non-Business Majors

Students must take Bus 110 (or Math 153) and Mktg 302 before enrolling in this minor.

#### Required courses: 12

- Mktg 320: Professional Sales (3)
- Mktg 415: Consumer Behav (3)
- Mktg 373: Advertising (3)
- Mktg 484: Marketing Mgmt (3)

#### Electives: 9

Choose three upper-division courses in consultation with an adviser (at least two must be marketing courses).

#### Minor Total: 21 credit hours

### Minor in Marketing for Business Majors

Required courses: 15 credit hours

- Mktg 320: Professional Sales (3)
- Mktg 415: Consumer Behav (3)
- Mktg 373: Advertising (3)
- Mktg 474: Int'l Marketing (3)
- Mktg 484: Marketing Mgmt (3)

### Electives: 6 credit hours

Choose two upper-division courses in consultation with an adviser (at least one must be a marketing course).

#### Minor Total: 21 credit hours

#### Concentration in General Business (BBA)

Part One: Courses Completed at a Community College Associate of Applied Science

#### Minimum Requirements: 88 credit hours

A. Open to students with an associate degree with a concentration in a functional business area.

B. Completion of general education core and statistics and microeconomics.

Part Two: Business courses to be completed at Highlands University

#### Reauired courses: 51 credit hours

- Econ 408: Intermed Econ (3)
- Fin 341: Fin Mgmt 1 (3)
- Fin 342: Fin Mgmt 2 (3)
- Mgmt 325: Oper Research 1 (3)
- Mgmt 364: Org Behavior (3)
- Mgmt 489: Strategic Mgmt (3)
- Mktg 302: Prin of Marketing (3)

- Mktg 411: Marketing Rsch (3)
- Social Sciences 300/400 (9)
- Upper-division business electives (18)

### Concentration Total: 139 credit hours

### Minor in Business

#### 24 credit hours

- Bus 181: Intro to Business (3)
- Acct 287: Prin of Fin Acct (3)
- BLaw 360: Business Law & Ethics (3)
- Econ 217: Prin of Microecon (3)
- Fin 341: Financial Mgmt I (3)
- Mgmt 303: Prin of Management (3)
- Mktg 302: Prin of Marketing (3)
- Mktg 411: Marketing Rsrch (3)
- MIS 145: Microcomp Appl in Bus (3)

#### Minor Total: 24 credit hours

### Major in Software Driven Systems Design (BSSD)

#### Total hours required: 70 credit hours

\*Students must choose six hours of electives in consultation with an adviser. All business majors must complete Economics 216 with the general education core.

- SSD 134: Practicum (2)
- SSD 234: Practicum (4)
- SSD 334: Practicum (4)
- SSD 434: Practicum (8)\*

#### Foundation Level One

- SSD 210: Programming Struct, & Arch (3)
- SSD 215: Phil & Hist of comp Tech & Practice (3)
- SSD 220: Software Dev Best Practices (3)

#### Total Foundation Level One Taken: 9 credit hours

Concurrently with SSD 134 Practicum

Foundation Level Two

- SSD 310: Dev Tools & IDE's (2)
- SSD 315: Iterative Incremental Dev (2)
- BUS 304: Bus & Mgmt for Software Prof (3)

#### Total Foundation Level Two Taken: 7 credit hours

Concurrently with SSD 234 Practicum

#### Subtotal Practicum and Foundations: 34 credit hours

#### Subtotal Required: 40 credit hours

#### Total BSSD

\*Student must choose six hours of electives in consultation with an adviser. All business majors must complete Economics 216 with the general education core.

#### SSD Required Courses: 35 credit hours

- SSD 320: Formal Solutions (6)\*
- \*Sequence of 1- credit courses with varying content
  - SSD 325: Sci & Metaphoric Reasoning (2)

<sup>\*</sup>Must be taken over two semesters

- SSD 330: Systems, General & Complex (2)
- SSD 355: OO Analysis & Design (3)
- SSD 340: OO Language (1)
- SSD 342: Markup Language (1)
- SSD 344: Scripting Language (1)
- SSD 346: Procedural Language (1)
- SSD 348: Functional Language (1)
- SSD 349: Declarative Language (1)
- SSD 345: Programming Language Ecol. (1)
- SSD 360: Frameworks & Visual Prog (1)
- SSD 365: Patterns & Pattern Lang (1)
- SSD 370: Tech & Culture Change (1)
- SSD 375: Systems Mod & Design Visual (1)
- SSD 380: Coaching & Team Leadership (1)
- SSD 382: Agile Proj Management (1)
- SSD 385: Data Modeling (2)
- SSD 410: Data Persistence & Integrity (2)
- SSD 420: Software & Systems Security (1)
- SSD 425: Network, Cloud, Mobile Security (1)
- SSD 440: Information Science (1)
- BUS 429: Entrepreneurial Essentials (1)
- BUS 449: Innovation & Change Mgmt (1)

#### Total Required courses: 35 credit hours

• SSD 435: Special Topics\* (5)

#### Total BA required and elective courses: 40 credit hours.

### Courses in Accounting (Acct)

#### 287. Principles of Financial Accounting (3)

This course is a study of the fundamentals of financial record keeping and basic accounting principles. NM Common Course Number: Acct 2113

#### 288. Principles of Managerial Account (3)

This course is an introduction to management accounting and application of accounting to business decisions. Prerequisite: Acct 287, MIS 145 or permission of instructor. NM Common Course Number: Acct 2123

#### 290 - 390. Independent Study (1 - 4 VC)

Independent study arranged with an instructor. Prerequisite: Permission of instructor.

#### 301. Cost Accounting (3)

This course is a study of the job order, process, and standard cost system. Prerequisite: Acct 288, Bus 110 or Math 153 or permission of instructor.

#### 321. Individual Taxation (3)

This course is a study of federal tax legislation as applied to individual incomes with some study of taxation on business. Recommended for non-business majors. Prerequisite: Acct 287 or instructor permission.

#### 387. Intermediate Accounting 1 (3)

This course is a critical study of standards for asset valuation and income determination. Prerequisite: Acct 287, Bus 110 (or Math 153) or permission of instructor. NM Common Course Number: Acct 2133

#### 388. Intermediate Accounting 2 (3)

This course is a continuation of Acct 387. It is a study of liabilities recognition and measurement and

<sup>\*</sup>Special topic courses will be 1-3 credits, must take different instances of topics, totaling 5 credit hours.

stockholder's equity. Prerequisite: Acct 387 or permission of instructor.

#### 392. Intermediate Accounting 3 (3)

This course is a continuation of Acct 388. It examines preparation and analysis of financial statements and issues related to income measurement. Prerequisite: Acct 388 or permission of instructor.

#### 401. Budgeting (3)

This course is a study of comprehensive profit planning and control. Prerequisite: Acct 288 or permission of instructor.

### 408. Tax Planning (3)

This course is a study of income tax principles and law applied to the financial-planning process. The course focuses on how income taxes impact financial planning for individuals and families. Prerequisite: Acct 287 or permission of instructor.

#### 410. Accounting Technology (3)

This course is a study of computerized financial accounting technology using integrated accounting systems. Prerequisite: Acct 287.

### 422. Corporate, Partnership, and Estate Taxation (3)

This course is a continuation of Acct 321 with an emphasis on corporation tax, estate tax, and partnership and gift tax. Prerequisite: Acct 321 or permission of instructor.

#### 481. Accounting Systems (3)

This course examines the formal accounting-information system with emphasis on the application of general theory of information to the problem of efficient economic operations. Prerequisite: Acct 387 or permission of instructor.

#### 482. International Accounting (3)

This course is a study of the differences in reporting procedures between U.S. GAAP and IFRS, the convergence agreement between the Financial Accounting Standards Board and the International Accounting Standards Board, and their importance to business. Prerequisite: Acct 392.

#### 485. Financial Statement Analysis (3)

This course provides a foundation for reading and interpreting a firm's financial statements. The course focuses on the firm's 10-K fillings with the Securities and Exchange Commission. The course will analyze various components of the firm's filings including financial statements, management discussion and analysis, footnotes and auditor's opinion on financial statements and footnotes. The course covers both the practical interpretation from reading the firm's 10-K and the underlying accounting theory. Prerequisite: Acct 392 and Fin 341.

#### 487. Advanced Accounting Topics (3)

This course explores advanced topics in accounting, with emphasis on consolidated financial statements. Prerequisite: Acct 301 and Acct 392 or permission of the instructor.

#### 489. Governmental Accounting (3)

This course covers accounting principles and procedures for governmental and institutional units and fiduciaries. In addition, the course provides a foundation for not-for-profit accounting.

#### 490. Independent Study (1-4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

#### 492. Auditing (3)

Techniques of auditing procedures. Prerequisite: Acct 387 or permission of instructor.

#### 495. CPA Review (3); Alt Su

This course provides the CPA candidate an effective way to prepare for the CPA examination. The class will help students focus on specific weak areas. Prerequisites: Acct 321, 422, 489, 483, 392, 492, and Econ 216, Fin 342 or permission of instructor.

### Courses in Business Law (BLaw)

#### 360. Business Law 1 (3)

This course is an introduction to legal institutions, nature and sources of law, the ethical foundations

underlying the law, and in-depth study of the law of contracts. NM Common Course Number: BLaw 2113

#### 361. Business Law 2 (3)

This course is an overview of the history and nature of laws with specific regard to the business community. Specific areas of concentration will be the Uniform Commercial Code, commercial paper, warranties, governmental regulations, personal property and real property. NM Common Course Number: BLaw 2123

### Courses in General Business (Bus)

#### 110. Business Analysis Methods (3)

This course explores the principles of algebra along with an introduction to the use of functions as mathematical representation of practical business situations. Students create an understanding on the application of mathematics to business economic and finance solutions. Prerequisite: Math 140 or permission of instructor. Cross listed Math 153.

#### 181. Introduction to Business (3)

This course is an introduction to business and explains the relationship between business and the rest of society. It describes various business ownership forms and applies stakeholder analysis to issues of accountability, ethics and social responsibility. The course also explores various aspects of the business environment including politics, culture, law the economy and the environment. The course introduces fundamental business concepts in the areas of accounting, finance, management and marketing. *NM Common Course Number: BUSA 1113* 

#### 210. Statistical Analysis for Business (3)

This course is an introduction to statistics that will create an understanding of the basic principles of statistics along with the application of probability theory to the resolution of business problems. It develops skills in the application of statistics and the use of spreadsheet models and statistical software programs to practical business problems and situations. Prerequisite: Math 140 or permission of instructor. Cross listed Math 158.

#### 235 - 335. Selected Topics in Business (1 - 4 VC)

Course in a topic or topics in business. May be repeated with a change in content.

#### 434. Practicum (1 - 4 VC)

Work placement with specific responsibilities over a sustained period of time. Prerequisite: Permission of instructor.

#### Courses in Economics (Econ)

#### 216. Principles of Macroeconomics (3)

The course emphasizes fundamental macroeconomic concepts and models: opportunity costs, comparative advantage, gains from trade, gross domestic product, unemployment and inflation. The course introduces monetary policy and fiscal policy and explains how the government uses policies to influence macroeconomic performance. Prerequisite: Math 140 or permission of instructor. NM Common Course Number: Econ 2113

#### 217. Principles of Microeconomics (3)

The course emphasizes fundamental microeconomic concepts and models: opportunity costs, the laws of supply and demand, price and income elasticities, consumer and producer surplus and various market structures, including perfect competition, monopoly, monopolistic competition and oligopoly. The course also explains how government interventions impact markets. Prerequisite: Math 140 or permission of instructor. NM Common Course Number: Econ 2123

#### 305. Public Economics (3)

This course studies government's effect on the economy. It explains why government behaves as it does, how government behavior influences the behavior of private firms and households, and the welfare effects of government intervention on the allocation and distribution of an economy's resources. Prerequisite: Econ 217.

#### 405. Financial Markets and Public Institutions (3)

This course focuses on the use of financial markets by the private and public sectors and the facilitating role played by intermediary agents. The course relies on the basic tools of micro and macroeconomic theory in the study of private and public financial behavior and the problems posed for public policy. Prerequisite: Econ 217.

#### 408. Intermediate Microeconomics (3)

This course explores applied theory of the firm with emphasis on allocation of resources, marginal analysis, cost analysis, market structures and information. The course emphasizes the application of microeconomic theory to business management and strategy. Prerequisite: Econ 217.

### 410. Human Resource Economics (3)

This is a course in human-resource economics, a relatively new field of study. Human-resource economics employs the tools of economic analysis to common personnel issues. Major course topics include employee recruitment, hiring, salary and benefits, turnover, evaluations, training and empowering workers.

### Courses in Finance (Fin)

#### 332. Money and Banking (3)

This course examines monetary theory, the role of financial intermediaries, and the mechanics of central banking. Prerequisite: Econ 216, 217 and Fin 341 or permission of instructor.

#### 340. Personal Finance (3)

The course is an introduction to personal financial decision making. The topics include personal financial planning, budgeting, tax planning, and consumer credit. Strategies used in buying and selling cars, homes and other major consumer items will be explored. In addition, investments in financial instruments including bonds, stocks and mutual funds will be addressed. The relation of these investments to 401(k) and other retirement plans are discussed. Financial tools dealing with the time value of money are introduced.

#### 341. Financial Management 1 (3)

Financial Management I addresses corporate financial planning. The topics include ratio analysis, forecasted income statements, cash budgets and balance sheets, breakeven analysis, and other tools used to maximize the value or minimize the costs to a firm or organization. The calculation of short-term interest rates for periods less than one year and installment loans will be introduced. The time value of money concept will be utilized. The course focuses on using these tools to solve specific problems encountered by most organizations, both profit and nonprofit. Prerequisite: Acct 287. NM Common Course Number: BFin 2113

### 342. Financial Management 2 (3)

Financial Management II deals with long-term financial needs to the corporation. The time value of money techniques will be applied to valuation and rates of return for the firm, the cost of capital to the firm and the capital budgeting process. Long-term debt and lease financing, common and preferred stock financing, and the use of other financial instruments including convertible securities and warrants will be discussed. Finally, external growth through mergers will be addressed. Prerequisite: Acct 287.

#### 407. Risk and Insurance Planning (3)

This course introduces students to risk management and insurance within the personal financial planning process. Topics include insurance for life, health, disability, property, liability, long-term care, group insurance and annuities.

#### 409. Investment Planning (3)

This course provides students with an understanding of investment theory and practices and the various types of securities traded in financial markets. It focuses on investment strategies and portfolio construction and management.

#### 410. Real Estate Investments (3)

This course provides the framework to understand real estate as an investment vehicle. Value will be addressed from the aspect of the investor and the lender. The three approaches used by real estate appraisers to value, including the cost, market and income approach, will be defined. The use of ratios, direct capitalization, net present value and discounted cash flow models will be applied in the valuation process. The legal foundation, the mortgage function, the role of real estate brokerage, and tax implications will be discussed.

#### 411. Retirement Planning & Employee Benefits (3)

This course provides students with an understanding of public and private retirement plans and programs. It describes such public programs as Social Security, Medicare and Medicaid and how they relate to retirement and benefits planning. The course also compares and contrasts the workings and

regulation of defined benefit and defined contribution retirement plans.

#### 412. Estate Planning (3)

Estate planning focuses on the efficient conversion and transfer of wealth. The course explores the legal, tax and financial aspects of estate planning and covers such topics as trusts, wills, probate, advanced directives, charitable giving, wealth transfers and taxes.

#### 413. Financial Planning Capstone (3)

This course requires students to use various financial management tools to analyze and evaluate various personal finance situations and to develop and communicate financial plans to the client. Prerequisite: Permission of the instructor.

### 452. Mutual Fund Investing (3)

This course introduces the student to mutual funds in the context of today's financial environment. Students will generate a portfolio of mutual funds to meet their needs. Prerequisite: Fin 341.

### 460. Portfolio Analysis (3)

This course introduces the student to the financial analysis of common stock in the context of today's financial environment. Student will generate a portfolio of stocks to meet their needs. Prerequisite: Fin 341.

#### 475. International Financial Management (3)

This course is an overview of the workings of trade and finance in an international setting. Particular attention is given to handling problems associated with exchange rate movements, sources of funds for overseas operations and investments, and criteria to judge foreign investment opportunities. Prerequisite: Fin 341.

#### 490. Independent Study (1 – 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of the instructor.

### Courses in International Business (IntB)

#### 420. International Economics (3)

International Economics uses the fundamentals of economics analysis to study international trade and investments flow among nations. Key themes of the course include the gains from trade, the pattern of trade, protectionism, the balance of payments, exchange rate determination, international policy coordination and the international capital market. Prerequisite: Econ 216 and Econ 217.

#### 430. International Law (3)

This course shows how firms doing business in other countries are governed and regulated by various legal frameworks. Several legal systems are reviewed and the role of international organizations, treaties, laws and conventions are explored.

#### 440. International Business (3)

This course surveys key elements of international business, focusing on factors influencing management decision making in an international setting. The course explores how managers respond to economic, political, cultural and social factors facing business. Prerequisites: Econ 216 and 217 or permission of the instructor.

#### 454. Residency in Hispano America (6)

The goal of this course is to allow the student to have an international experience. The student will register in two courses offered at a participating institution. Supervision from the major adviser is required. The courses are most likely to be taught in Spanish, reinforcing the language component for the student. Additionally, visits to local firms and living in a different cultural environment will provide first-hand knowledge and experience.

#### 480. Doing Business in the Spanish Speaking World (3)

This course exposes students to how business is conducted in different Spanish-speaking countries. The course requires students and their professor to visit numerous businesses as well as major cultural destinations in the country. The course exposes students to various kinds of business, but focuses on those involved in international commerce. Students are required to observe, describe and analyze major factors affecting business in the country and propose courses of actions that business should consider to compete in international markets.

### Courses in Management (Mgmt)

#### 304. Business & Management for Software Professionals (3)

Most software development is done in the context, and on behalf, of an enterprise (business, nonprofit, government). An understanding of this domain is essential for successful software development. This course will provide a survey of critical topics and concepts of use to software developers.

#### 303. Principles of Management (3)

This course is an introduction to management theory and practice with major emphasis on current management trends and issues. The course content is taught through the use of extensive reading and case studies.

#### 321. Business Ethics (3)

This course examines moral reasoning and issues in business with an emphasis on the application of ethical theories to practical business decision making.

### 325. Operations Research I (3)

This course prepares the student to apply analytical approaches to formulating and solving business and technical management problems including the use of linear programming for resource allocation, transportation problems, and forecasting. Prerequisite: Bus 110 (or Math 153), Bus 210 (or Math 158).

### 330. Entrepreneurship (3)

This course is a study of the problems encountered and special knowledge needed for successfully starting a new business. Particular attention is given to the development of the business concept and its implementation through the development of a business plan.

### 345. Principles of Quality Management (3)

This course covers the history of the quality movement, the paradigmatic shift to quality, and the concepts, principles, and basic tools needed to successfully implement and manage quality. Prerequisite: Mgmt 303.

#### 364. Organizational Behavior (3)

This course is an analysis of formal organizations and informal relationships among individuals and small groups. The course stresses the study of business organization as a system of authority and status, control and communication, decision-making centers, and leadership positions. Use is made of cases and research studies.

### 372. Management Communications (3)

This course is a study of basic human relations through effective communication, in business and commercial contexts.

#### 386. Human Resource Management (3)

This course examines theories, policies, practices, and problems underlying public and private programs for the development of human resources. Methods of management, such as total quality management, will be introduced.

#### 425. Casino Operations and Management (3)

The course exposes students to the unique operating conditions and management challenges associated with a hotel casino property. Its overview of gaming operations serves as a foundation for topics related to casino management.

### 429. Entrepreneurial Essentials (1)

Software is increasingly the foundation for creating new businesses and for introducing new lines of business within an organization. Freelance professionalism is also increasingly common. This course provides the business essentials necessary for success with such projects.

#### 431. Entrepreneurial Forum (3)

Ownership and operation of one's own business is an overwhelming drive for many people. This course explores starting a business, including understanding the right questions to ask about all aspects of business operations such as financing, buying, sales and marketing, cost considerations, cash conversion concepts, product and service delivery, customer service, personnel issues, pricing policies, accounting and financial record keeping and reporting for start-up purposes, and for planning for future success.

#### 435. Selected Topics (1 - 4 VC)

Course in a topic or topics in management. May be repeated with a change of content.

#### 440. International Human Resource Management (3)

This course explores the complex issues that exist in the international business environment. The topics of human resource planning, selection, appraisal, training, cross-cultural adaptation, motivation, and empowerment, and management will be studied.

### 449. Innovation and Change Management (1)

Of what value is an innovation if you cannot make use of it? This course covers issues like stimulating innovation, recognizing innovation, and exploiting innovation. The content of this course is equally distributed between technical and business/management material.

### 452. Technological Entrepreneurship (3)

This course explores the problems and issues facing a new firm, or a new product in an existing firm, based on an invention or technological advancement. Prerequisite: Mgmt 303 or permission of instructor.

### 453. Organizational Leadership (3)

This course addresses the fundamental aspects of leading and motivating people. Includes understanding and working with people on an individual basis as well as leading groups. Studies high-performing organizations and the challenges of leading change in organizations. Prerequisite: Mgmt 303.

#### 455. Management History (3)

This course examines the evolution of management theory from its earliest days to the present. The emphasis is on various significant contributors to the body of management knowledge and their ideas. The history of great ideas in management on motivations, job design, human resource management, ethics, social responsibility, leadership, production/operations management, business policy/strategy, and the management process are explored.

### 460. Training and Development of Human Resources (3)

This course covers the training cycle and the development of human resources, including needs assessment, training approaches and techniques, and evaluation of training effectiveness.

#### 465. Personnel Practices and the Law (3)

This course addresses the increasing intrusion of the law into personnel functions by familiarizing students with the Equal Employment Opportunity Commission and personnel law. Such topics as the Family Medical Leave Act and the Americans with Disabilities Act will be discussed as they relate to personnel practices. Prerequisite: Mgmt 303.

### 466. Performance Evaluation and Compensation (3)

This class examines the concepts and theories applicable to the design, development, implementation and maintenance of a pay system that treats all employees fairly. Benefits and work-life issues will be discussed. Special attention will be given to measuring and rewarding performance and contribution at the individual, group and organizational level.

#### 487. Operations Research II (3)

This course is a continuation of the introductory course, Mgmt 325. Linear programming will be extended to include multiple decision criteria and goal programming. The course also includes nonlinear programming, the application of probability distributions to business decision analysis, queuing analysis, and simulation. Students will be expected to solve a variety of business problems using a PC with Excel\* and add-ins. Prerequisite: Mgmt 325.

#### 489. Strategic Management (3)

This is the capstone business course. Strategic management and business policy is studied using various analytical tools and case studies. The outcome assessment test will be given to all students enrolled in this class. The test may be scheduled for a time other than the class meeting. Prerequisite: Completion of business core and senior standing, or permission of instructor.

#### 490. Independent Study (1 - 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of the instructor.

### Courses in Management Information Systems (MIS)

### 145. Microcomputer Applications in Business (3)

This course introduces the student to the practical application and use of Microsoft Office\* applica-

tions. The course focuses on two programs that are widely used in business: Excel® and PowerPoint®. Excel® spreadsheet models represent a powerful tool for data analysis. PowerPoint® is a powerful tool for business communication. Prerequisite: CS 101. NM Common Course Number: BCIS 1113

### 236. Introduction to Business and Information Systems (3)

This course is an introduction to business systems and the information technology that supports them. Topics include system theory, organization structure and culture, role of information systems and convergent engineering to model and re-engineer business systems.

#### 331. Decision Support Systems (3)

This course is a study of the theory and several practical techniques of computer-based support systems including linear programming, simulation, and decision theory. Prerequisite: CS 245, Bus 210, and knowledge of spreadsheets or permission of instructor. Cross-listed as: CS 331.

#### 335. Selected Topics in Information Systems (1 - 4 VC)

Course in a topic or topics in information systems. May be repeated with a change of content.

#### 370. System Design and Analysis (3)

This course explores the analysis and design of information systems emphasizing the object approach but including elements of traditional analysis and design modeling. Software development lifecycles, requirements gathering, decomposition, and formal modeling will be covered. Cross-listed as: CS 351.

### 371. Object-Oriented Programming (3)

Object programming is fundamentally different from procedural programming. This course will teach good object design, cover programming idioms, investigate the use of design patterns, and look at the strengths and limitations of various languages for object-oriented programming.

### 374. Information Systems Environments (3)

This course will cover the role of operating systems as support environments for business automation and stress the planning and design issues (security, user management, etc.) that precede selection and implementation of a modern multi-user operating system like Windows 2000° or Linux<sup>™</sup>.

### 376. Integrated Business Applications (3)

This course familiarizes students with standard business application software, especially integrated software suites. Sharing of data among applications and the extended capability of standard applications with macros is covered.

#### 380. Information Modeling and Databases (3)

This course focuses on how to identify and model information and knowledge requirements for a business organization. Additional topics include the formal modeling and specifications of data and the selection and use of appropriate database management systems.

#### 420. Networking in the Business Environment (3)

An introduction into the use and role of local area networks in the business environment. The course discusses the function of file servers in the LAN environment and provides hands-on experience. Prerequisite: MIS 145 Cross-listed as: CS 457.

#### 425. Information Systems: Management Issues and Techniques (3)

This is a capstone course addressing the management, education, and control issues associated with information systems. The course addresses the problem of staying technically current, total quality management issues, and systems selection processes. Prerequisite: MIS 370.

#### 445. Electronic Commerce (3)

This course provides an introduction to electronic commerce. The course focuses on the impact of electronic commerce on business, its current state of development, successful electronic business strategies and the future of electronic commerce. Prerequisite: Mktg 302, cross listed as Mktg 445.

### 451. Internet Marketing Strategies (3)

The course focuses on consumer behavior on the Internet, current Internet marketing practices, and the future of Internet marketing, Prerequisite: Mktg 451, cross listed as Mktg 302.

#### 480. Project Management (3)

This course illustrates important aspects of project management, an essential function in both for-

profit and not-for-profit organizations. Students will work in teams to study the importance of planning, resource allocation, metrics, tracking, and reporting project costs and schedules. State-of-the-art software will be used for an extensive project during the course of the semester.

### 485. Systems and Software Architecture (3)

This is a capstone course. Students will extend their understanding of the design of comprehensive systems that integrate business requirements, work flow, organization structure, and information processing. Students will also demonstrate with a practical application design, their understanding of management information system principles.

### 486. Web-Site Authoring and Management (3)

This course covers the basics of webpage design, including interactive and dynamic pages. Use of basic technology like HTML, XML, CGI programming and page creation tools is covered. Also stressed are site management and maintenance using dedicated web tools.

### 490. Independent Study (1-4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

### Courses in Marketing (Mktg)

### 302. Principles of Marketing (3)

This course is a study of the principles of marketing goods and services. NM Common Course Number: Mktg 2113

#### 320. Professional Sales (3)

The business-to-business sales function is examined from the viewpoint of the sales professional and the viewpoint of the buyer. This course stresses application through the use of role-play situations, analyzing customer needs and social styles. It focuses heavily on professional sales ethics. Prerequisite: Mktg 302.

#### 373. Advertising (3)

This course explores the management of advertising, including background, roles, planning, media strategy, message testing, research, evaluation, and administration of advertising. Prerequisite: Mktg 302.

### 375. Retail Management (3)

This course is an analysis of decisions in the areas of store location and layout, retail personnel management, merchandising policies and control, and marketing strategies. Prerequisite: Mktg 302.

#### 411. Marketing Research (3)

This course examines gathering, recording, and analyzing data about problems relating to the marketing of goods and services. Prerequisite: Mktg 302, Math 153 (or Bus 110), Math 156 (or Bus 210), and Engl 367.

#### 415. Consumer Behavior (3)

This course studies how and why consumers buy products and services. It focuses on the psychological, sociological, behavioral, and cultural aspects of the buying decision, and how firms can use this information to sell more effectively. Prerequisite: Mktg 302.

#### 420. Sales Management (3)

This course is an analysis of the sales management process from a decision-making perspective. It includes defining the strategic role of the sales function, designing the sales organization, sales force development and direction, and sales force performance evaluation. Prerequisite: Mktg 302.

### 430. International Negotiations (3)

This course studies the fundamentals of international negotiations and the effect of cultural differences among regions of the world in the negotiation processes.

#### 435. Selected Topics in Marketing (1 – 4 VC)

Course in a topic or topics in marketing. May be repeated with a change of content.

### 440. Marketing Channels and Marketing Logistics (3)

This course examines the principles, methods, and problems relating to wholesaling, retailing, and physical distribution. Prerequisite: Mktg 302 and Engl 367.

#### 445. Electronic Commerce (3)

This course provides an introduction to electronic commerce. The course will focus on the impact of electronic commerce on business, its current state of development, successful electronic business strategies, and the future of electronic commerce. Prerequisite: Mktg 302, cross listed as MIS 445.

#### 451. Internet Marketing Strategies (3)

The course focuses on consumer behavior on the Internet, current Internet marketing practices and the future of Internet marketing. Prerequisite: Mktg 302, cross listed as Mktg 451.

#### 474. International Marketing (3)

This course examines objectives, problems, and challenges facing those who engage in marketing operations in foreign countries. Foreign marketing organizations, cultural dynamics, trade channels, the legal environment and political considerations are examined. Prerequisite: Mktg 302.

#### 484. Marketing Management (3)

This course examines the approaches and problems of marketing decision making from the standpoint of the marketing manager. Prerequisite: Mktg 302, Engl 367, or permission of instructor.

### 490. Independent Study (1-4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

### Courses in Software Development Apprenticeship (SDA)

#### 134. **Practicum** (2)

Work placement with specific responsibilities over a sustained period of time.

#### 210. Programming, Structure and Architecture (3)

This course exposes the structural elements common to all program architectures (e.g. variable declaration, variable scope, control mechanisms, modularization), the properties of good programs, and how to balance design tradeoffs.

### 215. Philosophy and History of Computing Technology and Practice (3)

This course is a survey of the great ideas, fundamental technologies, and innovative practices that are the foundation of software development. Students will learn the connections between current practices and past insights as well as the forces that drove the evolution of the profession.

#### 220. Software Development Best Practices (3)

This course focuses on practice and methods, specifically those that have evolved in the profession as opposed to ideals promoted by academia. Best practice is a defined as a way of achieving a task or of working with others to do so. A method is an organized collection of practices.

#### 234. Practicum (4)

Work placement with specific responsibilities over a sustained period of time.

#### 310. Development Tools and Integrated Development Environments (2)

This course covers the evolution of programmer and developer support tools from simple code editors to fully integrated development environments (IDE). Students will learn the rationale behind these tools and how they increase programmer productivity. Experience using at least two current IDEs will be incorporated into the course.

#### 315. Iterative Incremental Development (2)

Very large, very complicated, and complex problems cannot be addressed in a linear fashion. An alternative approach, possessing the same rigor and discipline as traditional approaches but without the unnecessary formalism, is required. This course covers the conceptual foundations of iterative incremental development as well as the processes and techniques that provide effectiveness.

#### 320. Formal Solution to Computational Problems (1)

This course will introduce students to a wide range of formal mathematical, logical, algorithmic-solutions commonly encountered computational problems. Between five and 10 specific patterns comprise the content of each course instance. Each pattern will identify a problem in context, the courses shaping potential solutions, and known formal solutions. How each solution can be implemented in a computer program is also covered.

#### 325. Scientific and Metaphoric Reasoning and Method (2)

Metaphor is an essential tool for exploring the unknown. Understanding how to use metaphor to confirm or deny our emerging understanding is an essential skill. The ability to apply reason to problem solution is also essential. In both cases it is necessary to understand the nature of evidence, the role of hypothesis, and what is required to establish theory.

#### 330. Systems, General and Complex (2)

This course provides the foundation for the understanding of general systems theory and recent advances in the study of complex systems.

#### 334. Practicum (4)

Work placement with specific responsibilities over a sustained period of time.

### 340. Object-oriented Language, Syntax, Idiom, and Library (1)

This course covers syntax, variations on control structures, standards, conventions, and idioms in an object-oriented (e.g. Smalltalk) programming language.

### 342. Mark-up Language, Syntax, Idiom, and Library (1)

This course covers syntax, variations on control structures, standards, conventions, and idioms in mark-up languages (e.g. SGML, HTML, XML) programming language.

### 344. Scripting Language, Syntax, Idiom, and Library (1)

This course covers syntax, variations, on control structures, standards, conventions, and idioms in scripting (e.g. JavaScript, PHP) programming language.

#### 345. Programming Language Ecologies (1)

This course covers syntax, variations on control structures, standards, conventions, and idioms in a typical set of web development languages/tools (e.g. XHTML, CSS, JavaScript, PHP, MySQL). It will also cover the concept and examples of domain specific languages as ecologies.

#### 346. Procedural Language, Syntax, Idiom, and Library (1)

This course covers syntax, variations on control structures, standards, conventions, and idioms in a procedural (e.g. C++, Java) programming language.

#### 348. Functional Language, Syntax, Idiom, and Library (1)

This course covers syntax, variations on control structure, standards, conventions, and idioms in an functional (e.g. Scala) programming language.

#### 349. Declarative Language, Syntax, Idiom, and Library (1)

This course covers syntax, variations, on control structures, standards, conventions, and idioms in and declarative (e.g. Lisp) programming language.

#### 452. Proseminar: Analysis Design, & Implementation 1

This course provides the technical and programming foundation for students entering the graduate software program from noncomputing, MIS, or IT undergraduate majors. It is not offered for graduate credit.

#### 454. Proseminar: Analysis Design, & Implementation 2

This course provides the technical and programming foundation for students entering the graduate software program from noncomputing, MIS, or IT undergraduate majors. It is not offered for graduate credit. Prerequisite: SSD 452.

#### 355. Object-oriented Analysis and Design (3)

The concept of object-based development (OO programming, OO design, OO Analysis etc.) was first proposed in the 1970s and is the de facto standard for development today. This course will provide a deep understanding of the object concept and how it is used to facilitate decomposition of complex domains and the design of elegant and adaptive software components.

#### 360. Frameworks and Visual Programming Tools (1)

This course covers the concept of visual programming and the use of frameworks as a means of accelerating software development while promoting reuse and improving quality.

### 365. Patterns and Patterns Languages (1)

This course introduces the idea of a software pattern (design, analysis, organizational, etc.) and covers how to mine and document a pattern. The idea of a pattern language is explored along with techniques

for finding and utilizing existing patterns.

### 370. Technology and Culture Change (1)

This course explores the reciprocal influences arising from technology and culture and how these give rise to an understanding of the technology, how it is used, and how it affects values and worldviews. Strong emphasis is placed on ethical issues arising from this interplay.

### 375. Systems Modeling and Design Visualization (1)

This course covers the commonly used design modeling and visualization tools (e.g. UML, agile stories, object models), including syntax, use and value. Prototyping and other tools used to visualize and communication design solutions are covered.

### 380. Coaching and Team Leadership (1)

Coaching is a unique project role in agile development. A coach is not a manager. A coach is a resource acquisition person, a term coordinator, and an interface to management. Along the way the coach must be a "family counselor," capable of discerning, diagnosing, and correcting impediments to team performance. This course covers the necessary concepts and techniques to be an effective agile coach.

#### 382. Agile Project Management (1)

This course covers the production aspects of software development from an agile perspective. Story walls, burn-down and burn-up charts, test tracking, daily build processes, planning, and retrospective (process improvement) techniques and practices are covered.

### 385. Data Modeling (1)

The full range of alternative ways of defining and structuring data-from definition via Backus-Naur notation to flat-file organization and formats to relational and other database modeling schemes are learned, along with criteria for evaluating and selecting from among the alternatives.

### 410. Data Persistence and Integrity (2)

Problems of persistence, multiprogram access, and data integrity are explored along with the various solutions that have been posited over the years. How to select, adopt, and modify an approach appropriate to the software problem at hand is covered.

### 420. Software and Systems Security (1)

This course provides the foundation for understanding systems and software security. It will cover security threats (malware, viruses, espionage) and common approaches to countering those threats. The human dimension of security will also be addressed.

#### 425. Network, Cloud, and Mobile Security (1)

This course will extend the foundation for understanding systems and software security to cover the unique security issues posed by distributed (network and cloud) and mobile applications.

#### 440. Information Science (1)

This course covers the problems that arise from keeping track of multimedia information, problems of categorization, indexing, and storing that kind of information. The special problems arising from the size of digitized media, its transmittal and storage are addressed.

#### 434. Practicum (4)

Work placement with specific responsibilities over a sustained period of time.

#### 435. Special Topics (1)

This course provides an opportunity to respond to student interest and developing topics in the area of software development including new domains, new tools, and new methods.

#### 445. Search (1)

Effective and efficient search is one of the biggest problems facing software developers today and this course will cover the basic issues and the state of the practice ideas about resolving those issues.

### Associate of Arts in Elementary Education

### Required courses: 16 credit hours

- GnEd 201: Intro to Teaching (3)
- Elem 251: Field-Base 1 (1)

- Psy 340: Dev Psy (3)
- Engl 111: Freshman Comp 1 (3)
- Engl 112: Freshman Comp 2 (3)
- Math 115: Math for Elem Teachers 1 (3)

#### Supplemental courses in this program: 36

In consultation with the program adviser, select 36 credits in coursework. The courses may be selected as to reflect some specialization, such as early childhood, special education, bilingual education, mathematics, language arts, science, or social studies teaching.

#### Elective courses: 12 credit hours

Choose at least 12 additional credits in courses from the university's core curriculum, in consultation with the program adviser, to include exposure to science, social science, math, and communication arts.

### Program Total: 64 credit hours

Final placement of a student teacher in a school is decided by the School of Education, contingent upon the student being acceptable to the school.

To receive a degree in education, the student must also pass the New Mexico Teacher Assessment Competency Exam; submit summative supervisor and cooperating teacher ratings that indicate which IN-TASC Standards have been met; submit electronic portfolio and class and field dispositions. If needed, please meet with your adviser for interventions and advisement.

### **Majors and Minors**

A major and minor in general science for teachers is available. See College of Arts and Sciences for information.

### Early Childhood Multicultural Education Professional Education (45 hours)

- ECME 300: Professionalism (2)
- ECME 301: Health, Safety & Nutr (2)
- ECME 302: Child Growth, Development and Learning (3)
- ECME 303: Family & Community Collaboration (3)
- ECME 304: Curriculum Development & Implementation 1 (3)
- ECME 305: Guiding Yng Children (3)
- ECME 306: Curriculum Development & Implementation 2 (3)
- ECME 315: Intro to Reading & Literacy Development (3)
- ECME 328: Assessment of Children & Evaluation of Prog (3)
- ECME 403: Family & Community Collaboration 2 (2)
- ECME 411: Teaching Reading & Writing (3)
- ECME 420: Research in Child Growth & Development (3)
- ECME 424: Integrated Early Childhood Curriculum (3)
- ECME 426: Meth & Materials for the Early Primary Grades (3)
- ECME 428: Assessment & Eval 2 (3)
- GnEd 445: Knowledge of the Profession (3)
- Field Experience and Practicums (21 hours)
- ECME 332: Curriculum Develop & Implementation Lab 1 (2)
- ECME 334: Curriculum Develop & Implementation Lab 2 (2)
- ECME 412: Teaching Reading & Writing Practicum (1)
- ECME 425: Integrated Early Childhood Curriculum Lab (2)
- ECME 427: Methods & Materials for the Primary Care Pract (2)
- ECME 452: Early Childhood Educ Student Teaching (12)

#### Major Total: 66 credit hours

In addition to the above requirements, licensing for early childhood education teaching in the State

of New Mexico requires passing the New Mexico Teacher Assessment (NMTA) ECE content area examination mandated by the State of New Mexico Public Education Department. Students must have passed Basic Skills to be approved for student teaching.

## Minor in Early Childhood Multicultural Education

### Required courses: 26 credit hours

- ECME 300: Professionalism (2)
- ECME 302: Child Growth, Development and Learning (3)
- ECME 303: Family & Comm Collaboration (3)
- ECME 304: Curriculum Development & Implementation 1 (3)
- ECME 306: Curriculum Development & Implementation 2 (3)
- ECME 332 : Curriculum Development & Implementation Lab (2)
- ECME 334 : Curriculum Develop & Implementation Lab 2 (2)
- ECME 420: Research in Child Growth & Development (3)
- ECME 424: Integrated Early Childhood Curriculum (3)
- ECME 425: Integrated Early Chld Curr (2)

#### Minor Total: 26 credit hours

### Major in Elementary Education (BA)

### Required credits: 36 credit hours

- RdEd 315: Rdg & Child Lit (3)
- RdEd 411: Tch/Diag of Rdg (3)
- Elem 312: Tch Elem School Math (3)
- Elem 317: Multicultural Ed (3)
- Elem 361: Assessment and Eval of Students (3)
- Elem 417: Teaching Engl as Second Lang (3)
- Elem 442: Tch Elem School Sci & Soc Studies (3)
- Elem 451: Field-Base 3 Teacher Prep Exp: Elem (6)
- GnEd 251: Field-Base 1 Teacher Prep Exp (1)
- GnEd 351: Field-Base 2 Teacher Prep Exp (2)
- GnEd 444: Comp App in Ed (3)
- GnEd 445: Know of the Prof (3)\*

### Major Total: 36 credit hours

### Minor in Bilingual Education/TESOL

(Teaching of English to Speakers of Other Languages)

The minor in bilingual education/TESOL offers an undergraduate preparation to instruct pupils bilingually so as to improve their ability to succeed in the public school.

\*Spanish 111, 112, 211, (or 101, 102, 201) and Span 325 are prerequisites for Spanish 433, 441, and GnEd 437. Consult Spanish Department for test-out option of lower division courses. Courses listed above do not reflect the sequence in which they should be taken.

#### Required credits: 24 credit hours

• Anth 461: Comm & Cult (3)

#### OR

- Engl 443: Sociolinguistics (3)
- Elem 417: Teaching English as a Second Language (3)
- RdEd 416: Teaching Reading & Language Arts in the Bilingual Classroom (3)\*
- GnEd 412: Theories & Prin of Biling Ed (3)
- GnEd 437: Instr Meth for Use in Span-Biling Class (3)\*

<sup>\*</sup> GnEd 445 must be taken in conjunction with Elem 451.

- Span 325: Span for Written Comm (3)\*
- Span 433: NM & SW Civil & Culture (3)\*
- Span 441: Span for the Bilingual Classroom (3)\*
- \* Prerequisites: Span 111, 112, 211, 212 (or 101, 102, 201, 202) Corequisite: Span 325.

#### Minor Total: 24 credit hours

### Minor in English as a Second Language (ESL)

The ESL program meets the requirements of the Public Education Department for an endorsement in English as a second language. The program includes courses offered in the departments of education English and anthropology.

#### Required credits: 21 credit hours

Prerequisite/Corequisite: Minimum of two semesters of a second language or demonstrated proficiency.

- Engl 317: Intro to Modern Grammar (3)
- GnEd 320: Language Acquisition & Ling for Teachers (3)
- GnEd 412: Theories & Principles of Bilingual Educ (3)
- Engl 443: Sociolinguistics (3)

#### OR

- Anth 461: Communication and Culture (3)
- Elem 417: Teaching English as a Second Language (3)
- GnEd 420: Sheltered English for Content Area Inst (3)
- RdEd 315: Early Literacy (3)

#### OR

• RdEd 427: Reading in the Content Area (3)

#### Minor Totals: 21 credit hours

### Minor in Secondary Education

### Required courses: 28 credit hours

- GnEd 251: Field-Base I Tch Prep Exp (1)
- GnEd 302: Ed Psych (3)
- GnEd 318: Instruct Media (3)

#### OR

- RdEd 427: Rdg in the Content Area (3)
- GnEd 351: Field-Base II Tch Prep Exp (2)
- GnEd 410: Art & Sci of Tch in Sec Schools (4)
- GnEd 444: Comp Appl in Ed (3)
- GnEd 445: Know of the Prof (3)\*
- GnEd 451: Field-Base III Tch Prep Exp: Sec (6)
- GnEd 455: Classroom Mgmt (3)\*

#### Minor Total: 28 credit hours

### Major in Special Education (BA)

Education students may select a major in special education and elementary or secondary education. Students may select a major or a minor in special education. The major program meets requirements for special education licensure set by the New Mexico Public Education Department.

Special education students receive instruction in using evidence-based teaching approaches for students with exceptionalities. Field-based experiences are integrated into the instructional program.

Complete the requirements for entrance to Teacher Preparation Program.

- GnEd 201: Intro to Teaching (3)
- SpEd 214: Intro to Special Educ (3)

<sup>\*</sup> Taken in conjunction with GnEd 451 as a Field Base III block.

#### Required courses: 30 credit hours

- GnEd 251: Field Base I Teacher Prep Exp (1)
- GnEd 351: Field Base II Teacher Prep Exp (2)
- GnEd 444: Comp Appl in Ed (3)
- SpEd 455: Classroom Mgmt (3)\*
- SpEd 401: Diagnosis of the Exceptional Child (3)
- SpEd 410: Curr & Methods for Stud with Mild and Moderate Exceptionalities (3)
- SpEd 451: Field Base 3 Teacher Prep Exp: Spec Ed (6)
- SpEd 420: Curr & Meth for Stud with Severe Exceptionalities (3)
- RdEd 411: Teaching & Diagnosis of Reading (3)
- SpEd 430: Reading Instruct in Special Education (3)

\*SpEd 455 is taken in conjunction with SpEd 451 as Field Base III block.

### Major Total: 30 credit hours

### Minor in Special Education

The minor in special education is available to students completing a teacher preparation program (i.e. majoring in elementary education\*\* or minoring in secondary education\*). This minor satisfies university requirements, however, it does not satisfy New Mexico Public Education Department licensure requirements.

#### Prerequisite: 3 credit hours

• SpEd 214: Intro to Special Educ (3)

#### Required credits: 24 credit hours

- SpEd 2/434: Pract in Sp Ed (1-6)\*\*
- SpEd 401: Diag of the Except Child (3)
- SpEd 410: Curr & Methods for Stud with Mild and Moderate Exceptionalities (3)
- SpEd 451: Field-Base 3 Tch Prep Exp: Sp Ed (6)\*
- SpEd 420: Curr & Meth for Stud with Severe Exceptionalities (3)
- RdEd 411: Teaching & Diagnosis of Reading (3)
- SpEd 430: Reading Instruct in Special Education (3)
- SpEd 455: Classroom Mgmt (3)

#### Minor Total: 24 credit hours

### Courses in Early Childhood Multicultural Education (ECME)

#### 300. 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. NM Common Course Number: ECED 2152

#### 301. 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. NM Common Course Number: ECED 301

#### 302. Child Growth Development & Learning (3)

This basic course in the growth, development, and learning of young children (prebirth through age eight) provides students with the foundation for becoming competent early childhood professionals and knowledge of how young children grow, develop and learn. NM Common Course Number: ECED 1113

#### 303. Family and Community Collaboration 1 (3)

This course examines the involvement of families from diverse cultural and linguistic backgrounds in early childhood programs. NM Common Course Number: ECED 1133

#### 304. Curr Development & Implementation 1 (3)

This beginning curriculum course focuses on developmentally appropriate content in early childhood programs. It addresses content that is relevant for children from birth through age eight and develop-

mentally appropriate ways of integrating content into teaching and learning experiences. NM Common Course Number: ECED 2163

# 305. 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. NM Common Course Number: ECED 2183

## 306. Curr Development & Implementation 2 (3)

This basic course focuses on the learning environment of curriculum in early childhood programs. Students will use their knowledge of content, developmentally appropriate practices, and language and culture to design and implement experiences and environments that promote optimal development and learning for children from birth through age eight, including children with special needs. NM Common Course Number: ECED 2173

## 315. Introduction to Reading & 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. NM Common Course Number: READ 2113

# 328. Assessment of Children and Evaluation of Programs 1 (3)

This basic course familiarizes students with a variety of culturally appropriate assessment methods and instruments, including systematic observation. The course addresses the development and use of formative and summative program evaluation to ensure comprehensive quality of the total environment for children, families, and the community. NM Common Course Number: ECED 328

# 332. Curriculum Development and Implementation Practicum 1 (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. Corequisite: ECME 304. NM Common Course Number: ECED 2162

#### 334. Curriculum Development and Implementation Practicum 2 (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. Corequisite: ECME 306. NM Common Course Number: ECED 2172

#### 403. Family and Community Collaboration 2 (2)

This advanced course prepares prospective teachers for working effectively as partners with family and community members to facilitate the development and learning of children birth through age eight, including lifestyles, and linguistic, cultural and ethnic groups. The complexity and dynamics of families as systems will be included, and community resources to support families will be identified. Prerequisite: ECME 303.

#### 411. Teaching Reading and Writing (3)

This advanced course is designed to prepare early childhood professionals for teaching reading and writing in the early primary grades. The course focuses on reading as a complex, interactive, constructive process. Prerequisite: ECME 315. Corequisite: ECME 412.

#### 412. Teaching Reading & Writing Pract (1)

This advanced practicum provides opportunities for students to apply knowledge gained from the course Teaching Reading and Writing. In kindergarten through third-grade classrooms, students will develop skills in organizing a literature rich environment, planning effective reading and writing instruction and assessment, and implementing culturally, linguistically and developmentally appropriate literacy curricula. Corequisite: ECME 411.

#### 420. Research in Child Growth, Development, and Learning (3)

This advanced course in child growth, development, and learning builds upon the foundational mate-181

rial covered in the basic course in child growth, development, and learning. An integration of major theories of child development is provided by focusing on contemporary research in all aspects of development, including bio-ecological, social-affective, cognitive-learning, language-cultural, and methodological aspects of research in early childhood development and education.

# 424. Integrated Early Childhood Curriculum (3)

This advanced course focuses on developmentally appropriate content, learning environments, and curriculum implementation for children birth to age five. It emphasizes integration of content areas (the arts, literacy, math , health, science, social studies, adaptive learning) and the development of rich learning environments for infants, toddlers, and preschool children. Corequisite: ECME 425.

# 425. Integrated Early Childhood Curriculum Practicum (2)

This advanced course provides opportunities for students to apply knowledge gained from Integrated Early Childhood Curriculum and develop skills in planning and implementing developmentally appropriate learning experiences, integrated curriculum, and learning environments for children. Corequisite: ECME 424.

# 426. Methods and Materials for the Early Primary Grades (3)

This advanced course focuses on developmentally appropriate content, learning environments, and curriculum implementation for children in kindergarten to third grade. It emphasizes integration of content areas (the arts, literacy, math, health, science, and social studies) and the development of rich learning environments for the early primary grades. Corequisite: ECME 427.

## 427. Methods & Materials for the Primary Grades Practicum (2)

This advanced practicum provides opportunities for students to develop, implement, and evaluate developmentally appropriate and integrated learning experiences for children in kindergarten to third grade. Corequisite: ECME 426.

# 428. Assessment of Children and Evaluation of Programs 2 (3)

This advanced course builds upon student understanding of the connections among learning, teaching, and assessment and strategies for evaluation programs. Assessment, identification, and monitoring of typical and atypical development in the cognitive, motor, affective and social domains will be explored. Multiple and diverse assessment approaches, including, responsiveness to cultural and linguistic differences will be emphasized.

## 435. Selected Topic in Early Childhood Education (1 – 4 VC)

Course in topics in early childhood education. May be repeated with change of content.

## 452. Early Childhood Education Student Teaching (12)

The student teaching experience in early childhood education has two components: placement and assigned tasks in an early childhood classroom with a mentor teacher, and a weekly seminar in which students review and reflect on their own teaching practice, make connections between theory and practice, study particular topics of interest, conduct self-evaluations, and contribute to group discussions. Corequisite: GnEd 455.

# 482. Early Childhood Special Education (3)

This course develops skills for early childhood educators to develop and adapt curricula to work with families and to collaborate with professionals in meeting the needs of children with developmental variations. Cross-listed as: SpEd 482.

# 490. Independent Study (1 – 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

# Courses in Elementary Education (Elem)

# 234. Field-Based Paraprofessional Education Experience (2 – 3 VC)

Students in this course observe classroom environments to determine what classroom teachers and aides do. This course may be offered in sections with special emphasis for bilingual aides.

# 235–435. Selected Topic in Elementary Education (1 – 4 VC)

Course in topic or topics in elementary education. May be repeated with change of content.

#### 312. Teaching Elementary School Mathematics (3)

This course examines methods, materials, and curriculum of modern mathematics in the elementary school. Observation and laboratory periods are required. Prerequisite: Math 115 with a minimum grade of C.

#### 317. Multicultural Education (3)

This course is a study of educational trends, issues, and problems of students and the teaching methods and strategies necessary to teach respect and tolerance among people.

#### 361. Assessment and Evaluation of Students (3)

This course examines problems in the construction and use of teacher-made and standardized tests. The course also emphasizes the gathering and interpreting of data, reporting of test information, and development of a district-wide testing program.

#### 417. English as a Second Language (3)

This course is a study of English as a second language, conveying methods and procedures of teaching English to children and adults for whom English is not the native tongue. Students will be introduced to second language acquisition theories and basic elements of the sound system. Prerequisite: RdEd 315.

## 434. Practicum in Elementary Education (1 – 4 VC)

Field and/or lab experiences with specific responsibilities over a sustained period of time. Prerequisite: Permission of instructor.

# 442. Teaching Elementary School Science and Social Studies (3)

This course examines the development of teaching strategies appropriate to recent innovations in science and social science teaching for multicultural classrooms. This course incorporates project-based leaning.

#### 451. Field-Based 3 Teacher Preparation Experience: Elementary (6)

This course provides analysis and evaluation of the student's own performance in student teaching, based on knowledge of the profession and reflective observation. A special fee is charged. Prerequisite: Admission to student teaching. Corequisite: GnEd 445.

# 454. Field Based 3, Double Major (6)

This course provides analysis and evaluation of the student's own performance in student teaching, based on knowledge of the profession and reflective observation. Prerequisites: NMTA exam, 2.75 GPA, admission to student teaching. Corequisites: GnEd 445 and 455.

#### 490. Independent Study (1 – 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

# Courses in General and Secondary Education (GnEd)

# 201. Introduction to Teaching (3)

This course is an introduction to the historical, philosophical, and sociological foundations of education, especially as it relates to a multicultural environment. Students will use those foundations to develop strategies related to problems, issues, and responsibilities in the broad and specific educational arenas. Corequisite: GnEd 251.

#### 210. NMTA Preparation (3)

This two-credit course is designed to assist candidates for teaching licensure in the state of New Mexico, prepare for the New Mexico Teacher Assessment series of examinations. The primary intent of the course is to acquaint candidates with the structure, tone and format of the assessments with specific attention to content and accompanying competencies.

## 235 – 435. Selected Topic in General Education (1 – 4 VC)

Course in topic or topics in general education. May be repeated with change of content.

# 251. Field-Based 1 Teacher Preparation Experience (I)

This course is initial observations of classroom environments, determining what classroom teachers do. The class combines field observations (28 clock hours) with an on-campus seminar. Corequisite: GnEd 201.

## 302. Educational Psychology (3)

This course explores theories and research in learning and their implications for curriculum and instruction.

#### 318. Instructional Media (3); 2,2

This course examines principles and methods of utilizing instructional media and materials to enhance the classroom delivery in the school curriculum. Labs include simulated purchasing, operation and use of equipment in both media center and classroom settings.

# 320. Language Acquisition and Linguistics for Teacher (3)

This course provides for in-depth study of first and second language acquisition and a broad background in linguistics.

## 351. Field-Based 2 Teacher Preparation Experience (2); 1,2

This course is the development of analytical and reflective reports based on field observation (42 clock hours) of different methods and teaching strategies used in the classroom. These reports form the basis for class discussions. Students will also have the opportunity to implement classroom lessons.

# 410. The Art and Science of Teaching in Secondary Schools (4); 3,2

This course provides an overview of curriculum and organization in the secondary school and to offer actual teaching experience in a microteaching situation, applying basic teaching strategies and techniques for the purpose of developing teacher competency. A special fee is charged.

## 412. Theories and Principles of Bilingual Education (3)

This course explored the fundamental theories and principles of bilingual education, preparing the prospective teacher to intelligently address the issues and concerns in the classroom.

# 420. Sheltered English for Content Area Instruction (3)

This course provides a set of linguistic, instructional, assessment, and classroom-management practices that allows English language learners (ELLS) from the advanced-beginner level on the develop content-area knowledge, operational skills and increased language proficiency. Prerequisite: Engl 317.

## 425. Reasoning Skills for the Schools (3)

This course is a general introduction to the basic skills involved in reasoning and critical thinking and how they can be incorporated into the curricula of the schools.

# 434. Practicum in Secondary Education (1 – 4 VC)

Secondary campus work placement with specific responsibilities over a sustained period of time. Prerequisite: Permission of instructor.

#### 437. Instructional Methodologies for Use in Spanish-Bilingual Classrooms (3)

This course examines theories, approaches, methods and techniques for teaching literacy, biliteracy and other academic skills in English and a pupil's native language. Spanish is the language of instruction and student participation/presentations. Prerequisite: Span 201 or Span 202.

#### 444. Computer Applications in Education (3)

This course provides teachers with a working knowledge of the PC and its applications in education. A special fee is charged. This course incorporates project-based learning.

### 445. Knowledge of the Profession (3)

This course examines legal, ethical, professional and organizational issues related to education and develops skills in collaborating and communicating effective with colleagues, administrators and other professionals. Prerequisites: Completion of core and major requirements. Corequisite: Student teaching.

## 450. Seminar in General or Secondary Education (1-4)

Seminar course in a topic or topics in general or secondary education.

#### 451. Field Base 3 Teacher Preparation Experience: Secondary (6)

This course provides analysis and evaluation of the student's own performance in student teaching based on knowledge of the profession and reflective observation. A special fee is charged. Prerequisite: NMTA exam, 2.5 GPA, admission to student teaching. Corequisites: GnEd 445 and GnEd 455.

# 452. Field Base 3 Teacher Preparation Experience: K – 12 (6)

This course provides analysis and evaluation of the student's own performance in student teaching based on knowledge of the profession and reflective observation. Both elementary and secondary settings are utilized. A special fee is charged. Prerequisite: NMTA exam, 2.5 GPA, admission to student teaching. Corequisite: GnEd 445 and GnEd 455.

#### 453. Field Base 3 Internship (6 – 12 VC)

The internship program in the School of Education is a New Mexico State Department of Education approved equivalent to the Field-Base III block. Internships are ONLY considered at the request of a school district. A special fee is charged. Prerequisite: Admission to student teaching, passed all three parts of the New Mexico Teachers Exam (NMTE), completed all required coursework, and permission of the instructor.

# 455. Classroom Management (3)

This course introduces the student to a variety of techniques for managing behavior in the classroom. Major areas and specific techniques within each will be presented and practiced both in the class and in the student's own teaching situation. Prerequisite: Admission to student teaching. Corequisite: Appropriate major Field-Based III Experience and GnEd 445.

## 490. Independent Study (1 – 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

# Courses in Reading (RdEd)

# 315. Early Literacy (3)

This course explores early literacy instruction, including reading, writing, speaking, listening, viewing and visually representing, and other modalities of learning. Special emphasis will be place on addressing current research regarding teaching early literacy (including phonics, phonemic awareness, fluency, comprehension, and vocabulary.) Knowing and using children's books and authors to promote early literacy. A two-hour per week practicum/lab in a kindergarten through third grade classroom is required. Prerequisites: Admission to Teacher Education Program and GnEd 201.

# 335-435. Selected Topic in Reading (1 - 4 VC)

Course in topic or topics in reading. May be repeated with change of content. Permission of instructor is required.

# 411. Teaching/Diagnosis of Reading (3); 2,2

This course is an overview of teaching reading in the primary and intermediate grades and diagnostic tools and corrective instructional techniques in the classroom. Emphasis is placed on developing competencies in the teaching of reading and adopting reading instruction based on knowledge of reading processes, methods, and materials. A two-hour lab is also required. Prerequisite: Field Base I and II.

#### 416. Teaching Reading and the Language Arts in the Bilingual Classroom (3)

This course explores methods and materials in the Spanish-English bilingual classroom with emphasis upon the development of reading and language arts skills in bilingual children. The class is taught primarily in Spanish. Prerequisite or Corequisite: Spanish 325 or permission of instructor.

#### 426. Reading and Literature for Children and Young Adults (3)

This course is an exploration and evaluation of the artistic qualities of folk and fairy tales, myths, legends, fables epics, hero tales, and realistic stories for children (preschool to grade 8) and young adults (grades 9 to 12), with a view toward helping teachers to motivate youngsters to develop reading skills while reading relevant literature.

#### 427. Reading in the Content Area (3)

This course is a survey of techniques for the development of reading/study skills needed at the secondary level as students employ reading as a tool for learning.

#### 430. Reading Instruction in Special Education (3)

This course is the study and application of reading instructional strategies for students in special education focusing on research-based corrective strategies used across content areas to support students in both the general education curriculum and functional curriculum.

#### 434. Practicum (3 – 6 VC)

Tutorial experience in classroom reading techniques and/or practice in diagnosis and remediation. Prerequisite: RdEd 411 and permission of the instructor.

## 490. Independent Study (1 - 4 VC)

Individual, directed study arranged with the instructor. Prerequisite: Permission of the instructor.

#### 499. Independent Research (1 – 4 VC)

Individual, directed study arranged with the instructor. Prerequisite: Permission of the instructor.

# Courses in Special Education (SpEd)

# 214. Introduction to Special Education (3)

This course explores the identification of exceptional children with respect to educational opportunities, current concepts and goals of special education, specific consideration of educational programs, and a survey of trends and professional opportunities. Prerequisite to special education courses.

## 234–434. Practicum in Special Education (1 – 6 VC)

Supervised work in a special education program setting. Special fee. Prerequisite: Permission of instructor.

# 235 – 435. Selected Topic in Special Education (1 – 4 VC)

Course in topic or topics in special education. May be repeated with change of content.

#### 401. Diagnosis of the Exceptional Child (3)

This course provides practice in the use of a variety of data-collection instruments and techniques, as well as procedures for writing up the data collected, making referrals, and developing an instructional program.

# 410. Curriculum & Methods for Student with Mild and Moderate Exceptionalities (3)

This course is an examination of curriculum content, instructional methods, and individualized education programs appropriate for students with mild and moderate cognitive or behavioral exceptionalities whose education focuses primarily on the general education curriculum.

#### 420. Curriculum & Methods for Students with Severe Exceptionalities (3)

This course is an examination of curriculum content, instruction methods, and individualized education programs appropriate for students with severe cognitive or behavioral exceptionalities whose education focuses on both the functional curriculum and the general education curriculum.

## 430. Reading Instruction in Special Education (3)

This course explores the study and application of reading instructional strategies for students in special education focusing on research-based corrective strategies used across content areas to support students in both the general education curriculum and functional curriculum.

## 450. Seminar in Special Education (3)

A seminar course in a topic or topics in special education.

#### 451. Field-Based 3 Teacher Preparation Experience: Special Education (6)

This course provides analysis and evaluation of the student's own performance in student teaching based on knowledge of the profession and reflective observation. A special fee is charged. Prerequisite: Admission to student teaching. Corequisite: GnEd 455.

#### 454. Field Based 3, Double Major (6)

This course provides analysis and evaluation of the student's own performance in student teaching based on knowledge of the profession and reflective observation. Prerequisites: NMTA exam, 2.75 GPA, admission to student teaching. Corequisites: GnEd 445 and 455.

# 455. Classroom Management in Special Education (3)

This course is an examination of behavior management techniques, reward systems, fading and intermittent reinforcement schedules used with students who exhibit more severe behavior exceptionalities. School-wide, classroom and individual student behavior intervention plans will be reviewed with emphasis on behavior manifestation determination and other IDEA mandates for addressing students' behavioral needs.

#### 482. Early Childhood/Special Educ (3)

This course develops an awareness in educators concerning an understanding of children with or without special needs. Cross-listed as: EcEd 434.

#### 490. Independent Study (1 – 4 VC)

Individual, directed study arranged with an instructor. Prerequisite: Permission of instructor.

# 499. Independent Research (1 – 4 VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

# Major in Social Work (BSW)

The social work major, which leads to a bachelor of social work degree is composed of 52 credit units. Students majoring in social work are not required to have a minor program of study. Students must complete all required 300-level courses before proceeding to take 400-level senior courses.

# Required courses: 52 credit hours

- SW 330: Research Methods 1 (3)
- SW 333: Aspects of Aging (3)
- SW 341: Social Policy & Serv 1 (3)
- SW 345: Children's Services (3)
- SW 365: Generalist Social Work Practice 1 (3)
- SW 366: Generalist SW Practice 2 (Interviewing & Assessment) (3)
- SW 385: HBSE 1 (Individual & Family Theories) (3)
- SW 386: HBSE 2 (Group, Org, & Com Theories) (3)
- SW 430: Research Methods 2 (3)
- SW 432: Field Practicum 1 (4)
- SW 433: Law and Ethics in Social Work (3)
- SW 434: Field Practicum 2 (4)
- SW 451: Field Practicum Sem 1 (1)
- SW 452: Field Pract Sem 2 (1)
- SW 465: Generalist Social Work Practice 3 (3)
- SW 466: Generalist Social Work Practice 4 (Macro Practice) (3)
- SW 468: Theories of SW Practice (3)
- SW 485: HBSE 3, (Human Diversity & Multicultural Theory) (3)

#### Major Total: 52 credit hours

# Courses in Social Work(SW)

# 330. Research Methods 1 (3) Sp

This is the first course in the undergraduate research sequence. It introduces students to qualitative and quantitative methodologies used in social research and assessment. The course also covers statistical analysis and the use of computer technology in social research. Research on behalf of the diverse populations of New Mexico and the Southwest is emphasized. Prerequisites: SW 341, and SW 342.

# 333. Aspects of Aging (3) Fa, Su.

The course covers the emotional, biological, environmental, mental, and legal aspects of aging that occur in the elderly, with special emphasis on the Hispanic and Native American populations of New Mexico and the Southwest. Summer courses offered at the Rio Rancho center only.

#### 335 – 435. Selected Topics in Social Work (1 – 4 VC); Fa, Sp

One or more elective courses relating to selected topics in social work practice.

#### 341. Social Policy and Services 1 (3) Fa

This first course in the two-part sequence covers the history of social work, the history and current structures of social welfare services, and the knowledge, values, and skills necessary to understand major social welfare policies. This foundation course introduces analysis of organizational, local and state issues, and policy analysis and advocacy. All course content is oriented to understanding the effects of social policies on Hispanics, Native Americans and other historically oppressed populations.

# 345. Children's Services (3); Sp

This course provides an overview of services for the protection of children. The intersection of human behavior theory with micro level generalist practice and with macro level program and policy formulation in child welfare is presented within a framework of critical thinking and sound decision making. Medical and legal aspects of child abuse and neglect are addressed as well as federal-, state- and community-based child welfare policies and programs. Emphasis is placed on child welfare practice with Hispanic, American Indian, and other oppressed populations of New Mexico and

the Southwest. Prerequisites: Completion of all 300-level social work courses.

# 365. Generalist Social Work Practice 1 (3); Fa.

This first course in the practice sequence introduces students to multiple theoretical approaches to generalist practice with diverse individuals. The philosophical and ethical foundations of social work are examined as they manifest in each step of the social work process. Practice knowledge and skills necessary for ethical and competent generalist practice with emphasis on the diverse populations of New Mexico and the Southwest are covered.

## 366. Generalist SW Practice 2: Interviewing and Assessment (3); Fa

This second course in the practice sequence focuses on skills and strategies for competent and ethical foundation level interviewing and assessment with diverse clients throughout the life span. Generalist practice interviewing and assessment techniques for children, adolescents and adults will be included. Emphasis is placed upon practice with Hispanic, American Indian, and other oppressed populations of New Mexico and the Southwest. Prerequisite: SW 365.

#### 385. Individual and Family Theories (HBSE 1) (3); Fa

This two-semester course sequence surveys theoretical perspectives of human life-course development and the environmental contexts within which development occurs. The sequence explores the interactions among individuals and between individuals and families, groups, organizations, communities, society, and culture. The sequence emphasizes ethnocultural contexts with special attention on the diverse populations of New Mexico and the Southwest.

## 386. Group, Organization, and Community Theories (HBSE 2) (3); Sp

This is the second course of a two-semester sequence described in SW 385. Prerequisite: SW 385.

# 429. Family Violence (2) Elective

The course surveys major sociological and psychological theories of family violence throughout the life span. Social and interpersonal factors contributing to family violence are explored in an ethnocultural context, with special emphasis on the Hispanic and Native American populations of New Mexico and the Southwest.

# 430. Research Methods 2 (3); Fa

This second course in the undergraduate research sequence builds on knowledge and skills introduced in SW 330. Additional topics presented include hypothesis development, variables, methods of data collection, research design, instrumentation, and applied research strategies. Research on behalf of the diverse populations of New Mexico and the Southwest is emphasized. Prerequisite: SW 330.

#### 432. Field Practicum 1 (4); Fa

The purpose of field practicum is to offer students the opportunity to apply classroom knowledge to practice. The field practicum requires students to be placed with a community agency during their senior year. In their agency placement, students are expected to demonstrate social work skills, knowledge, and values in working with individuals, groups, families, and communities. A total of 208 hours of field practicum/placement are required. Corequisite: SW 451 and SW 465.

#### 433. Law and Ethics in Social Work (3); Sp

The course examines areas of the law in which social work and our legal system intertwine. It also surveys ethical principles and related legal concepts that impact professional social work, and introduces a framework for the resolution of practice dilemmas. Finally, the course provides students with basic practice skills necessary to find and interpret the law. Major emphasis is placed on the operation of the legal system in New Mexico and the Southwest.

#### 434. Field Practicum 2 (4); Sp

This foundation practicum sequence is designed to help students apply foundation knowledge of social work skills, values and ethics in practice. By providing a series of supervised assignments and tasks, the practicum experience will expose students to a variety of social work roles. Students will apply generalist social work knowledge, skills and values to practice with individuals, couples, families, groups and communities. Corequisites: SW 452 and SW 466.

# 451. Field Practicum Seminar 1 (1); Fa

This seminar provides students an opportunity to integrate practice theory with field (practicum) experi-

ence. Students are exposed to a wide range of practice situations and will have an opportunity to address pragmatic and procedural aspects of field instruction. Prerequisite or corequisites: SW 432 and SW 465.

# 452. Field Practicum Seminar 2 (1); Sp

This seminar provides students an opportunity to integrate practice theory with field (practicum) experience. Students are exposed to a wide range of practice situations and will have an opportunity to address pragmatic and procedural aspects of field instruction. Prerequisite or corequisite: SW 434.

# 465. Generalist Social Work Practice 2 (3); Fa

This third course in the practice sequence builds upon the knowledge and skills developed previously. The course focuses on practice skills necessary for competent and ethical practice with diverse families and groups. Emphasis is placed upon generalist social work practice with Hispanic, American Indian and other oppressed populations of New Mexico and the Southwest. Prerequisites: Completion of all 300 level SW courses. Corequisites: SW 432 and SW 451.

## 466. Generalist Social Work Practice 3 (3); Sp

This final course in the undergraduate practice sequence builds upon the knowledge and skills previously developed. This course introduces students to macro-level practice theory and skills necessary for competent and ethical practice. Topics include community organizing, development, and resource-building with a focus on the rural and urban communities of New Mexico and the Southwest. Emphasis is placed on macro practice with Hispanic, American Indian and other oppressed communities. Prerequisites: Completion of all 300 level SW courses and SW 465. Corequisites: SW 434 and SW 452.

# 468. Theories of Social Work Practice (3); Sp

This course focuses on a comparative analysis of frameworks, theories and models of social work practice. The course examines the four forces in psychology as the building blocks of an integrative, multicultural, ecosystems approach to social work practice. Implications of each practice approach for work at the micro, mezzo, and macro level are examined. Emphasis is placed on the evaluation of the practice approaches for work with diverse populations, with special emphasis on the Native American and Hispanic populations of New Mexico.

#### 485. Human Diversity and Multicultural Theory (HBSE 3) (3); Sp

The course surveys relevant theory describing the ethnocultural context of human behavior. The manner in which culture impacts the social functioning of individuals, families, organizations and communities is addressed. Consistent with the mission of the social work program, primary emphasis is placed upon Hispanic, Native American, and other diverse populations of New Mexico and the Southwest. Prerequisites or corequisites: SW 385, SW 386.

## 492. Independent Research (1 - 4 VC)

Individual, directed research arranged with an instructor. Prerequisite: Permission of instructor.

# **Interdepartmental Programs**

New Mexico Highlands University offers a number of interdepartmental studies. Faculty and administrators from various disciplines work together in offering these courses and programs.

Inquiries may be directed to the dean of the College of Arts and Sciences.

# Minor in Cognitive Science

Cognitive science is an interdisciplinary field concerned with the nature of the mind. Drawing on the resources of mathematics, philosophy, psychology, computer science, linguistics, and other disciplines, students of cognitive science study such phenomena as consciousness, the relation of the mind to the body, and the nature and limits of computation. This discipline addresses long-standing questions about the nature of thought, intelligence, perception, emotion, and other aspects of mental life by examining the way information is processed in computers, the nature of language, and the relation of cognition to the brain.

# Required courses: 12 credit hours

• CS 471: Art Intelligence (3)

- CS 472: Cognitive Science (3)
- Phil 3/405: Major Phil Move (3)
- Psy 319: Mem & Cog Proc (3)

#### Electives: 12

Choose four courses from the following list:

• Anth 461: Comm & Cult (3)

OR

- Engl 442: Contemp Engl Ling (3)
- CS 316: Prog in Lisp & Prolog (3)
- CS 431: Database Mgmt (3)
- Math 320: Linear Algebra (3)
- Math 460: Appl Multivar Stat (3)
- Phil 211: Formal Logic (3)
- Psy 410: Physiological Psy (3)
- Psy 411: Tech in Phys Psy (1)
- Psy 418: Comp Cognition (3)
- Soc 438: Soc of Knowledge (3)

# Minor Total: 24 credit hours

#### Minor in Combined Science

The combined science minor at Highlands University allows students to select courses in two or more of the science fields to include behavioral science, computer science, math, life science and/or physical science. Also, students are advised to remember that the university requires that all minors contain at least 12 credit hours of courses at the 300 to 400 level. A minor in combined science may be used to satisfy the university requirements for the bachelor of science degree of a minor in a science field.

#### Required courses: 28 credit hours

Complete at least 28 credits in courses from at least two of the science fields (not to include the field of the major) with at least eight credits in two of the fields selected. The science fields are biology, chemistry, engineering, forestry, geology, computer science, mathematics, physics, psychology, and sociology/anthropology. The selection of courses in the combined science minor must be approved by the student's bachelor of science major adviser.

#### Minor Total: 28 credit hours

# Major in General Science for Secondary School Teachers (Grades 7 - 12)

The purpose of the major is to provide science teachers in training with a fundamentally strong background in the basic sciences. Thus, a greater pool of talent in the field of science education will be created, from which surrounding middle schools and high schools can draw. The program has been designed to emphasize the fundamental understanding of both physical and life sciences. Courses will be selected from biology, geology, and chemistry.

The objectives of the general science major are to:

- •Provide science teachers in training with a multidisciplinary program that will adequately prepare them to teach the science courses expected in middle school and high school science programs.
- •Train science teachers to develop each of the competencies required by the State Board of Education for licensure in science education.

Students must complete the Highlands University core curriculum requirements, which should include a minimum of Math 140 and eight credits from the lab sciences listed below. Math 211 and Math 160 are required for the BS rather than a BA degree. The BS degree is recommended for students preparing to teach high school.

## Required core: 41-43 credit hours

- Biol 211: Gen Biology 1 (4)
- Biol 212: Gen Biology 2 (4)
- Chem 211-215: Gen Chem/Lab 1 (5)
- Chem 212-216: Gen Chem/Lab 2 (5)
- CS 144: Intro to Computer Sci (3)
- Geol 101: Survey of Earth Sci (4)
- Geol 202: Earth History (4)
- Biol 420: Tchng Sci & Math in Secondary School (3)
- Phys 151-152: Algebra Physics 1 & 2 (8)

#### OR

- Phys 291-292: Calculus Phys 1 &2 (10)
- Biol 359: Fund of Lab Safety (1)

#### OR

• Chem 359: Fund of Lab Safety (1)

# Total Core: 43 credit hours

#### Electives: 16 credit hours

With the advice of a science adviser, select at least one course from each of biology, chemistry and geology for a minimum of 16 credits above the 300 level. In addition, the student must undertake a minor in secondary education. Students must fulfill requirements for entrance to teacher preparation and licensure. Please refer to the School of Education for details.

# Major Total: 59 credit hours

# Minor in General Science For Elementary School Teachers (Grades K-5)

The purpose of the minor is to provide elementary school teachers in training with a fundamentally strong background in a variety of concepts in life science, physical science, and earth and space science. Courses will be selected from those areas listed below. Students should consult with an adviser early in their academic career to select the appropriate courses and avoid possible problems with prerequisites or scheduling. Not all of the 300- or 400-level classes are offered every semester or even every year.

The objectives of the general science minor are to:

- Provide pre-service elementary teachers with a program that will adequately prepare and encourage
  them to teach the most fundamental science concepts to students at the elementary school level.
- Broaden the scope of science to elementary school teachers in training, so they will be well versed
  in all aspects of science allowing them to develop methods in which to relay the content material to
  their students so that the students can fully understand the concepts.

#### Core:

Students should select at least one course at the 100 or 200 level from each of biology, chemistry, geology, physics and forestry. Each student should choose a specialty in one science and take two courses in this field that will enable them to take upper-division credits in this field. Combinations that would satisfy this requirement include: Biology 211 and 212; Chemistry 211, 215, 212, and 216; Geology 101 and 102; Forestry 105 and Biology 212. Please consult with an adviser early in the course of studies to make sure that prerequisite are met.

• Biol 359: Fund of Lab Safety (1)

OR

• Chem 359: Fund of Lab Safety (1)

# Total Core: 20-27 credit hours

With the advice of a course/science adviser, select at least two courses from the specialty science. In addition, students must also choose at least two credit hours from the following:

• Selected Topics in (335/435) biology, chemistry, environmental geology, forestry or physics

#### OR

- Independent Study in (390/490) biology, chemistry, geology, forestry, or physics
   OR
- Independent Research (399/499) in biology, chemistry, geology, forestry, or physics

To make a total of 10 additional required credits

#### Minor Total: 32-37 credit hours

Note: This minor does not satisfy the secondary school endorsement requirements (grades 7–12) for the State of New Mexico.

# Honors Program Minor

The honors program offers advanced and creative students an opportunity to develop their abilities and talents in classes and projects more challenging than those experienced by most undergraduates. The honors program at Highlands combines studies in the arts and humanities with those in the social and natural sciences. In the final course, students design a semester-long research or creative project of professional quality related to their major field of study.

The honors faculty changes from year to year, with three faculty members from different fields assigned to the first three honors classes. Honors faculty closely interact with students in the program as mentors and academic advisers.

The honors program offers the following distinctive benefits: a superior education (more reading, writing, and more seminar discussion among students and faculty, whereby students develop greater intellectual acuity, breadth of knowledge, and aptitude for creative thinking); small seminar-style classes; recognition on transcript of all honors courses, which is likely to enhance applications for professional careers and graduate schools. Completion of the honors program fulfills the university requirement for an academic minor.

Students who apply for admission as new freshmen with an ACT score of 21, or with a high school GPA of 3.5 or better, will be considered automatically, and will be contacted and invited to participate in the program. Students may also be nominated by a high school teacher or counselor or by a faculty member at Highlands University. Transfer students may be admitted to the program with a college GPA of 3.5 or better.

#### Required courses: 21 credit hours

- HONR 150: Honors Seminar 1 (6)
- HONR 250: Honors Seminar 2 (6)
- HONR 350: Honors Seminar 3 (6)
- HONR 450: Honors Thesis (3)

# Women's Studies Minor (WMST)

Women's studies is an interdisciplinary field that grew out of the recognition that the experience and potential of over half the world's population has real consequences for academic study and teaching, research and scholarship. By considering women both as subjects of inquiry and as inquiring subjects, we have discovered new ways of thinking about gender, sexuality, race, ethnicity and their intersections in disciplines, for a total of 21 credit hours.

#### Required Courses: 21 credit hours

- WMST 200: Intro to Women's Studies (3)
- WMST 300: Feminist Theory (3)
- WMST 499: Women's Studies: Internship/Directed Study (3)

Choose are least 12 additional credit hours from the list of women's studies courses in consultation with the major adviser.

# Electives: 12 credit hours

• CJS 409: Domestic & Sexual Violence (3)

- Engl 314: Women in Literature (3)
- Engl 315: Native American Women's Literature: Voices and Visions (3)
- Engl 318: Chicano/a Literature (3)
- Engl 464: Women and Rhetoric (3)
- Hlth 352: Health & Sex Education (3)
- Hist 411: Women in the US (3)
- Psy 422: Human Sexuality (3)
- Psy 430: Gender Roles (3)
- SW 429: Family Violence (3)
- Span 406: Hispanic Women Authors (3)
- Soc 429: Gender, Culture, and Society (3)
- Soc 450: Women and Globalization (3)

#### Minor total: 21 credit hours

# Course descriptions for Women's Studies

#### 200 Introduction to Women's Studies (3)

This course centralizes women's experiences in terms of interpretation and analysis. Basic concepts and orientations as part of women's studies courses are introduced. The course focuses on women's lived experience, with a special attention on the ways gender construction interacts with race, class, sexual orientation, and ethnicity. The main goal is to develop critical thinking and readings skills that relate to women's lives, the ways in which the interlocking systems of colonialism, racism, sexism, ethnocentrism and heterosexism that shape them and create space for resistance and rearticulation. The course will take an international perspective. Emphasis of the course will change depending on the instructor.

#### 300. Feminist Theory (3)

Feminist theory explores the basic forms that organize everyday society and that influences dominant ways of thinking. Feminist theory employs a variety of schools of thought including liberalism, Marxism, psychoanalysis, postcolonial theory, and transnational feminist theory. Students in feminist theory will gain a insight into the range and uses of feminist theory.

The main goal of this course is to introduce ways of investigating and reflecting upon recent topics and discord within feminist dialogues, within an international context. Central content areas include feminism and nationalism; cultural identity; diaspora dialogue; the social construction of gender, race and sexuality; perspectives on pornography and racial hatred propaganda/speech/acts; and international sex trafficking and prostitution. Questions considered include: What makes up theory in women's studies? How useful is theory in reflective, critical, challenging debates revolving around dominant sex/race/class power structures? What can theory offer activists? What recent debates and dialogues are emerging within feminist/womanist theory? The continues theme in this class is to teach students basic tools of analysis for addressing these issues.

#### 435. Special Topics (1-4)

Gender and politics; eating disorders, gender and education.

# 499. Women's Studies: Internship/Directed Study (3)

This course includes directed studies on a women's issue, in the student's major field, to be approved by the Women's Studies Committee and to be supervised by a designated faculty member for the committee in conjunction (if necessary) with a selected faculty member in the field of the study. Internships apply theory, concepts and skills developed in the women's studies minor to work on projects related to profit or nonprofit organizations. A final research paper in the range of 15-20 pages will result form the student's directed study. Prerequisites: WMST 200 AND 300 and senior status and approval of women's studies.

# Personal Skills

Personal learning courses assist students as they acclimate to college life. These interdepartmental courses focus on skills necessary for success as well as supplemental instruction in a variety of topics,

such as library research skills, reading comprehension, and general learning skills. The courses include practicum courses that provide experiential learning through field placements. Course numbers followed by N are skill-based courses. While they count toward the credit hours required for financial aid, they do not count toward the graduation requirement of 128 credit hours.

# Interdepartmental Courses (InDp)

# 107. Freshmen Seminar: SMET Section (3)

This freshmen course is intended to provide tools, techniques, hints, ideas, illustrations, examples, methods, procedures, processes, skills, resources, and suggestions in the areas of science, math, engineering, and technology. Prerequisite: Permission of instructor required.

## Cooperative Education Placement Practicum

### 234. Co-op Educ Practicum (1 – 6 VC)

With program supervision, students from a variety of disciplines gain practical knowledge through experiential learning in a professional setting.

## 434. Co-op Educ Practicum (1 – 6 VC)

With program supervision, upper-division students from a variety of disciplines gain practical knowledge through experiential learning in a professional setting.

# 435. Selected Topics in Coop Educ Placement Practicum (1 – 6 VC)

Open to upper-division students, this course provides topics in interdisciplinary studies. The specific topic is stated when the course is scheduled. Freshmen will sharpen their study skills, become familiar with university resources, and improve academic inquiry and electronic access skills. An advanced/challenge section is available for students with strong academic skills.

#### 107. Freshmen Seminar: SMET Section (3)

This freshmen course is intended to provide tools, techniques, hints, ideas, illustrations, examples, methods, procedures, processes, skills, resources, and suggestions in the areas of science, math, engineering, and technology. Prerequisite: Permission of instructor required.

# 131. Freshmen Seminar: Honors Section (3)

This section of the freshmen, or leadership course, is designed for students who have a B+ (usually 3.5 GPA) average in high school or for nontraditional students who offer other indications of above-average ability. Prerequisite: Permission of instructor required.

#### Honors Courses

#### 150. Honors 1 (6)

Team-taught by three faculty members from diverse disciplines, Honors Seminar 1 introduces students to the foundations of belief systems through the delineation of epistemological models. Students will learn about the beginnings of intellectual inquiry, the framing of research questions, and ethics and standards.

# 250. Honors 2 (6)

Team-taught by three faculty members from diverse disciplines, Honors Seminar 2 will build on the first course by examining how epistemological models have evolved and changed over time and have become specialized to distinct areas of inquiry in particular fields.

#### 350. Honors 3 (6)

Team-taught by three faculty members from diverse disciplines, Honors Seminar 3 concerns the application of theoretical models to a contemporary global issue. Students select a research topic and complete the study necessary to identify a focused research problem and question.

## 450. Honors Thesis (3)

This course is team-taught by at least two faculty members, one of whom is the student's major adviser, who form an undergraduate thesis committee. Students complete a senior thesis project of professional quality which is submitted for conference or campus presentation.

# **Bachelor of University Studies**

# Track I; Option II

Study Area 1 (20 credit hours)

Study Area 2 (20 credit hours)

Study Area 3 (20 credit hours)

#### Track II

Study Area 1 (20 credit hours)

Study Area 2 (20 credit hours)

Study Area 3 (20 credit hours)

#### **Curriculum Requirements**

- 1. University Core Curriculum Requirements (37-43 credit hours)
- 2. University Studies Program Requirements
  - a. UNIV 100 Intro to University Studies (1)

The minimum total credit hours required for graduation is 128. Fifty-one of the 128 credit hours must be upper-division credit hours (300-400). The final year must be completed as an New Mexico Highlands student with a declared USBA form completed and approved by the USBA coordinator. An overall GPA of a 2.0 is required for graduation.

# Courses in Bachelor of University Studies (USBA)

# 100. Introduction to University Studies (1)

This course is an introduction to the theory of interdisciplinary studies. The course focuses on exploring common pathways and connections among disciplines. It enables students to develop a personal theory of interdisciplinary studies and culminates in a detailed plan for an individualized major.

#### 400. Capstone Course (3)

This multidisciplinary capstone course is designed to be a culminating experience for a general education. Students from a range of study areas will work in groups on various projects. They will explore connections among their various disciplines and between their own college and off-campus community experiences.

# **Department and School Information**

# **College of Arts and Sciences**

Dr. Roy Lujan, Dean Douglas Hall, Room 136 505.454.3080

FAX: 505.454.3389

# Description

The College of Arts and Sciences includes undergraduate programs in the departments of English, History, Political Science, and Languages and Culture, Visual and Performing Arts, Biology and Chemistry, Computer and Mathematical Sciences, Exercise and Sports Sciences, Natural Resources Management, Nursing, and Social and Behavioral Sciences. The college faculty serves the university, its student body, and the community. By such service, faculty members are instrumental in bringing positive change to the university, providing mentorship and sponsorship of student groups and organizations, and providing a resource for producing resolutions to challenging issues. The college's commitment to learning is demonstrated by capable and informed graduates from varied ethnic backgrounds and world regions.

#### Mission

The mission of the College of Arts and Sciences is to provide a high-quality and challenging undergraduate educational experience that prepares students for succeeding in a complex and changing world. The college not only plays a significant role in providing instruction in core-curriculum courses, but it is also dedicated to serving and fulfilling the needs of its majors and minors while simultaneously recognizing the importance of preserving Northern New Mexico's cultural heritage.

#### Goals

The goals of teaching in the college encompass not only imparting to students the knowledge, values, attitudes, and verbal and cognitive skills that comprise the basis of a liberal education, but also instilling in them the ability and desire to think and work independently and creatively; to appreciate the intrinsic rewards of learning; and to recognize the lifelong benefits of a commitment to truth and excellence.

The goals of research in the college are to explore and discover answers to perplexing and complex questions, remain current in scholarship, expand and enhance our intellectual base, serve as mentors for our students, and disseminate knowledge to colleagues, students, and the greater community.

# **Department of English**

Dr. Barbara Risch, Department Chair Douglas Hall, Room 141 505.454.3451 | FAX: 505.454.3389

E-mail: barbararisch@nmhu.edu

# Mission of the Department of English

The Department of English mission is to provide quality education leading to intellectual growth and professional success. Majors and minors are offered in English and writing. The program is committed to preserving, interpreting, and promoting the unique multicultural heritage of the region.

The English program endeavors to develop fluency in the use of English through critical, creative, and technical writing. The departmental curriculum is designed to meet a variety of interests: literature, creative writing, linguistics, rhetoric, cultural studies, mythology, and professional writing. The study of English prepares students for careers in teaching, publishing, arts, journalism, technical writing, business, law, and government.

#### Faculty

Regina Briefs-Elgin (Composition, Creative Nonfiction) Helen Blythe (18th-20th Century British Literature)

Brandon Kempner (American Literature)

Daniel Martinez (Creative Writing Poetry, Chicano/a Literature)

Holly Middleton (Composition and Literacy Studies, Pedagogy)

Barbara Risch (English Linguistics, Writing Narrative)

Alice Lee Stauffer (Philosophy)

Eduardo Tafoya (Creative Writing-Fiction, New Testament)

Donna Woodford-Gormley (Early British Literature)

#### **Resources and Facilities**

The English department is located in Douglas Hall, a newly renovated building that houses classrooms, the Writing Center, the Language Learning Center, and offices for faculty and graduate assistants in the humanities.

The English program provides the services of the Writing Center to students in all university courses as well as in English composition courses. The facility offers individual tutoring and small group work. Teaching assistants in the English M.A. program learn tutoring pedagogy while working at the Writing Center during their first semester.

The English program houses a national humanities journal that publishes poetry, fiction, and essays in Spanish, Diné, and English. Students earn practicum credit for their work in the production of the journal. The department also sponsors a chapter of the international English honor society, Sigma Tau Delta.

#### English

The English program offers intensive study of literature, writing, linguistics, mythology, and cultural studies. The program core for the major consists of literature surveys, a course in language, and a course in criticism, all of which provide foundational knowledge of literary periods, genres, theory, and language. The English major, in conjunction with the School of Education, prepares students for careers as secondary school English teachers. The department also offers a pre-professional major for those interested in preparing for graduate studies in law and other fields, or for careers in professional writing, advertising, or publishing.

The English program provides the services of the Writing Center to students in the English composition sequence and in other university courses. The Center, staffed by English Ph.D.s, M.A.s, and graduate students, offers one-on-one instruction in all stages of the writing process, from developing a thesis statement through accurately citing sources. Teaching assistants in the English M.A. program develop their pedagogical skills by serving as instructors at the Writing Center during their first semester.

English minors have two options: a general minor with a literary emphasis, and a minor in writing. Philosophy

The program offers a minor in philosophy, which includes coursework in formal logic, ancient and medieval philosophy, and modern philosophy. English and philosophy also participate in the cognitive science minor described elsewhere in the catalog.

# Department of History, Political Science, Languages and Culture

Dr. Peter Linder, Department Chair Douglas Hall, Room 241

505.454.3423 | FAX: 505.454.3389

#### Mission of the Department of History and Political Science

History and political science form an academic unit serving the undergraduate and graduate student body with a wide range of courses and possibilities for study. Historical and political understanding and awareness are perceived as one of the chief attributes of a functional and involved citizen of the United States. It is the mission of this program to provide services that will contribute to this goal, train graduates to work in appropriate fields utilizing historical and political skills and knowledge.

#### Mission of the Discipline of Languages and Culture

Because of its location, the discipline of languages and cultures is committed to the preservation, in-

terpretation, and promotion of the unique multicultural heritage of the region. Thus, it recognizes the importance of the Spanish and Native American presence in the local and global community. The discipline further strives to integrate other foreign languages along with their respective culture and literatures.

# **Faculty**

René Baca (Language Learning Center)

Peter Linder (History)

Carol Litherland (American Sign Language)

Roy Lujan (History, Political Science)

Abbas Manafy (Political Science)

Gabriela Moreno (Applied Linguistics)

Eric Romero (NAHS)

Kristie Ross (History)

Veronica Saunero-Ward (Latin-American Literature)

Carmen Vidal-Lieberman (Spanish Peninsular Literature)

Steven J. Williams (History)

#### History

Historians investigate the past to understand the present or how we came to be where we are and what we are. The word "history" derives from the Greek word for "inquiry." Historians are, broadly speaking, interested in the social, political, economic, and religious daily affairs of all people. Their methods range from interviewing eyewitnesses of recent events to researching old diaries and letters or public or private documents and records, to compiling computer-generated data on people and their activities. The history faculty at Highlands especially encourages students to make connections between their own lives and times and the past.

Students of history can seek careers in teaching or other professions, and many will continue for an advanced degree or enter law school. Professional applications of history include careers in public affairs, business, and the private sector where research, communication, and other liberal arts skills are valued. Some history students obtain positions in museums, archives or in historical research and preservation for private and public institutions.

#### **Political Science**

Aristotle characterized politics as the "queen of the sciences." Political science is, in one sense, an ancient discipline and, in another sense, one of the most recently developed social sciences. The origins of the study of politics reach back to the beginning of human society, for people have always made observations about the nature of their government. It is also true that political science, as it is taught today, is a very new discipline as current scholars have attempted to move from observations about politics to scientific observations about politics. Political science, in the broadest sense, is the study of governments, governing procedures, and political processes. The political science faculty encourages students to make connections between the theoretical (or textbook) study of government/politics, and how government affects their lives in contemporary times.

Students in political science can seek careers in government, teaching, or private industry. The political science major serves as excellent preparation for law school or other academic pursuits such as graduate study. It provides pre-professional training for governmental or public-sector positions involving policy making or administration. Representative employers include government agencies at the national, state or local levels, nonprofit organizations, corporations and research institutions.

# Spanish

The discipline of languages and literature provides the beginning language student with two different learning approaches. Students who wish to take Spanish or seek to fulfill the core language requirement may choose the track that best matches their needs:

#### **Heritage Language Learners**

Spanish for heritage language learners addresses the bilingual speakers of Spanish who have achieved a certain degree of speaking and listening abilities outside of the classroom, but who have had little or no formal training in the language at the college level. The track is designed for students who grew up around Spanish-speaking communities and understand basic Spanish conversation. The objective in Spanish as a heritage language is to build upon the language base that the student already possesses and also to teach literacy in Spanish. The heritage courses emphasize reading, writing, developing advanced vocabulary, as well as reviewing specific problematic grammar and orthographic rules that are typically evident in Spanish-heritage students. Selected authentic readings from Hispanic / Latino and Spanish or Latin American writers will serve as the framework for cultural and social issues that will lead to discussions.

# **Second Language Learners**

This track addresses the needs of students who wish to learn other languages in addition to their native language(s). The term second language is used to describe any language whose acquisition starts after early childhood (including what may be the third or subsequent language learned). Course materials and methodology reflect effective teaching strategies in the field of second language acquisition and incorporate technology-enhanced instruction.

#### **Spanish Placement Exam**

The purpose of the Spanish Placement Exam is to identify the student's proficiency in the language.

Please note the following:

On the first day of the semester, the instructor will bring his or her students to the Language Learning Center to take the Spanish placement exam. This exam determines the level at which students will begin the language proficiency requirement. This exam is also designed to detect heritage speakers of the Spanish language. Generally, these are learners who were raised in homes where Spanish was spoken and who are orally proficient in Spanish, but have had little or no formal training in the language. This exam allows faculty to place them in the appropriate Spanish classes for heritage language learners, which are intended to capitalize on their linguistic assets by increasing their awareness and appreciation of the different Hispanic cultures.

The Spanish placement exam results are sent to the transcript specialist to be noted in each student's respective file.

- Once students begin their track, whether it is for second language learners or heritage language learners, they must follow said track sequentially. No exceptions.
- If the placement exam recommends that the student take an upper-division class, the student is encouraged to speak with the professor teaching the class before officially enrolling in the course to discuss any concerns. The student might feel that the placement exam does not fully reflect his or her level in the Spanish language. By speaking with the professor, the student will be able to decide whether he or she is ready to enroll in an upper-division class.
- If a student shows proficiency at an intermediate-low level (HL 111 / SL Sp 101 and HL 112 / SL Sp 102), the student has waived the language proficiency requirement.
- A successful placement exam, however, does not earn credit hours toward graduation. It only waives the classes that are necessary to fulfill the language proficiency requirement.
- Placement evaluation scores are valid for only one year. If students allow a year or more in between the 101/111 and 102/112 levels, they will have to take the placement exam again.
- The placement exam is administered at the Language Learning Center, 104 Douglas Hall.
- The LLC offers a language placement exam for speakers of other languages. For more information, contact the LLC staff.

#### **Resources and Facilities**

Language students at Highlands are exposed to the Spanish language every day in the community and on campus.

The university's location in Northern New Mexico, where 70 percent of the population is Hispanic, offers a richly varied setting for studies in local, regional, and international culture and languages.

The Thomas C. Donnelly Library has more than 5,000 titles in Spanish culture and literature with an especially rich collection in the golden age of Spanish literature.

The Language Learning Center (LLC) offers tutoring services in Spanish and American Sign Language to students who want to supplement their language learning outside of the classroom. Throughout the semester, tutors organize workshop topic sessions that focus on certain grammatical concepts and other aspects of the language that professors believe the students need to develop. The LLC tutors also host charlas (conversation sessions) for those who want to exercise and improve their oral communication skills in Spanish. Signed conversation sessions are also held for students who want to practice and improve their ASL fluency. Students are encouraged to schedule an appointment with the tutors, but are welcomed to seek tutoring on a walk-in basis.

Aside from our tutoring services, the LLC houses many language learning resources that our staff can recommend to students who are interested in enhancing their language knowledge. The center is equipped with 24 computer workstations that have Internet access and contain the most popular Microsoft Office\* software applications, an instructor computer workstation with a SMART Board™ interactive whiteboard, and a large media collection of audio-visual programs and recordings to enhance Spanish language instruction and acquisition.

# **Department of Visual and Performing Arts**

Professor Miriam Langer, Department Chair Media Arts Building, Room B6 505.454.3588 | FAX: 505.454.3241

E-mail: melanger@nmhu.edu

#### Description

The Department of Visual and Performing Arts includes instructional programs in art, design studies, music, media arts, and theater.

## Mission of the Department of Visual and Performing Arts

The general mission of the Department of Visual and Performing Arts is to educate students in the technical skills, the theoretical underpinnings and the sociocultural context for the disciplines represented by the academic programs. VPA seeks to inspire students to make creative and expressive ideas in the foundation of their lives and in their work, which is the essence of the cultivation of the human mind and spirit.

In its collaborative enterprises, VPA seeks to provide opportunities for students to work closely with faculty and staff in its academic courses, thus demonstrating that faculty and staff readily interact with students. \*Community members join the department for many productions and activities. VPA aims to incorporate appropriate elements from northern New Mexico's artistic, theatrical and musical culture in its courses and productions, which relate to the rich heritage of Hispanic and Native American cultures that are distinctive of the state of New Mexico. \*Ultimately, VPA aims to prepare its students for an active professional life in each discipline through the knowledge, creativity, teaching skills and dedication of its faculty and staff, showing excellence in teaching, discovering, preserving and applying knowledge.

#### **Faculty**

Todd Christensen (Art)

Tatianna Dutoit (Music)

Andre Garcia-Nuthmann (Music)

Edward Harrington (Music)

Megan Jacobs (Media Arts)

Miriam Langer (Media Arts)

David Lobdell (Art) Kerry Loewen (Media Arts) Ardys Otterbacher (Media Arts) Andrew Wollner (Media Arts)

#### **Resources and Facilities**

New Mexico Highlands University provides a media arts building with state-of-the-art computer systems; music studios for audio recording, songwriting, group rehearsal and individual practice; art studios for ceramics, painting, drawing, jewelry and metalsmithing, printmaking, sculpture, and a fully equipped art foundry; a 1000-seat proscenium stage theater; a green screen special effects studio; and two computer labs dedicated to video graphics, effects and animation, and high-end design and printing.

Students in visual and performing arts are joined by other students on campus and by community members in the concert choir, madrigal choir, HU Singers, wind ensemble, guitar ensemble, jazz ensemble, and mariachi, as well as four main-stage productions. Two galleries in the arts building, Burris Hall, and the design studies wing of the Media Arts Building serve as the focal point for artistic work produced through various classes and studios. The Art Club, Media Arts Club, Music Club, and Theatre Club are an active part of campus life, as well as serving to promote their various programs.

#### **Visual Arts**

The fine arts program trains students for a career in visual art and prepares them to advance academically. A focus on critical thinking and commitment in coursework enables students to become visually literate, technically competent, historically informed and conceptually relevant.

The program aims to support traditional fine art mediums as well as contemporary art forms that merge multiple disciplines including digital media. Art history informs students of background and traditional content issues in art. The expectation is that students will assimilate this knowledge through their production practices. The program provides training in electronic media for documentation and publication purposes which assists the student in gaining access to exhibition venues and academic program applications.

Highlands' art discipline reserves the right to retain student images submitted for course credit for the purposes of education, exhibition, and promotion. Lab fees are required for all studio courses. Expenses vary from course to course and some supplies will be provided from student fees.

#### **Interdisciplinary Bachelor of Fine Arts**

The fine arts and media arts BFA is designed to address a creative trend in art that combines electronic media with traditional media. This degree applies to those wishing to use multimedia for the sake of expression. The program creates a bridge between traditional and electronic media beyond the need for documentation and exhibition.

#### Media Arts (BFA)

During the last decade, changes to the communications and design fields have been tremendous. The divisions that once existed between graphic design and communication arts have disappeared, creating a merged field that called media arts. The BFA in media arts includes concentrations in design, interactivity and multimedia, and digital filmmaking, with room for experimentation within each area. Students choose their area of concentration at the end of their second year.

Students who complete the BFA. in media arts will have expertise in design and technology, preparing them to work in this constantly evolving field, whichever concentration area they choose.

The many and varied media arts industries need career professionals who are broadly trained and adaptable. Graduates of this program may find positions in traditional graphic design, the film industry, in web development or as exhibit designers, to name just a few of the possibilities.

Students entering the BFA program in media arts will be working toward building a professional portfolio in their area of concentration. In order to work toward this goal, yearly portfolio critiques are required.

#### Media Arts (BA)

The bachelor of arts in media arts is available for students who choose to minor outside the media arts program. The major in media arts addresses the basic concepts of design, multimedia and digital filmmaking. Students who major in media arts will complete the degree with the skills to either continue their studies or add technical skill to other interest areas.

#### Music/Theater

The music program at Highlands University offers a variety of options to meet the needs of students with pre-professional interests in music. A wide range of choral and instrumental ensembles provides students with opportunities to participate in active music making. These include the concert choir, madrigal choir (El Coro de la Tierra Alta), jazz choir, HU Singers, music theater, wind ensemble, guitar ensemble, jazz ensemble, and mariachi (Vaqueros de la Sierra). Other choral and instrumental ensembles are offered according to student interest. Scholarship opportunities include activity awards, the Muller Family Scholarship, the Lorraine Schula Scholarship, the Thomas Mishler Scholarship and the Lorenzo Miguel Gallegos Scholarship.

Students in the music program will become proficient, acquiring a thorough knowledge of the philosophy, aesthetics, literature and history of Western art music.

Students interested in instrumental performance should pursue the BA in music, as it is the core of all Highlands music programs. In addition to the BA, students may follow the concentration in music education, which prepares graduates for licensure as K-12 music teachers in New Mexico. Students wishing to pursue music studies in more depth may decide on the bachelor of fine arts (B.F.A.) concentrations in vocal performance or music composition. The B.F.A. concentrations are appropriate for students seeking opportunities in graduate studies and professional careers.

Minors in general music and in music technology and composition are offered exclusively to non-music majors. The minor in general music is designed for students who have a passion for music, supplementing their principal studies. The music minor programs provide opportunities for musical training in conjunction with a variety of major programs such as business, media arts, and literature.

#### Minor in Theater

Degrees in theater are not available. However, several theater courses are offered for the enrichment of students interested in acting, the stage, and theater history.

# **Department of Biology and Chemistry**

Dr. Mary Shaw, Department Chair Ivan Hilton Science Building, Room 325 505.424.3407 | FAX: 505.454.3203 E-mail: shaw mary@nmhu.edu

#### **Biology**

The Department of Biology offers instructional programs leading to a bachelor of science in biology.

#### Mission of the Department of Biology

The mission of this program is to provide students with a high-quality science education that includes experience with research and field projects. The programs provide a scientific and technical background that empowers students to successfully pursue science and technology careers or proceed on to advanced graduate studies. Faculty in the biology department strives to make each student's educational experience challenging and rewarding.

#### **Faculty**

E.R. "Dick" Greene

Merritt Helvenston, (Chemistry)

Jennifer Hernandez Gifford

Carol Cutler Linder

Rodolfo Martinez, (Chemistry)

Ben Nelson

Richard Plunkett

Maureen Romine

David Sammeth, (Chemistry)

Mary Shaw

Tatiana Timofeeva, (Chemistry)

#### **Resources and Facilities**

The Department of Biology is housed in the Ivan Hilton Science and Technology Building. Modern laboratory spaces with state-of-the-art safety and teaching features provide students with hands-on, student-centered learning environments.

The biology program prides itself on its ability to place students into bioscience careers. Data suggests that our graduates are highly successful in being admitted to and completing medical, dental, and veterinary schools nationwide. The department attributes this success to intensive biology laboratory experiences with cutting-edge technology, and instructors committed to individual student progress. Facilities include physiology, microbiology, molecular biology, greenhouse and plant biology laboratories. A computer laboratory with bioinformatics software is available for classes and student use. Students majoring in biology are taught the practical use of common scientific instrumentation they will encounter in their careers. All biology students are required to complete an undergraduate research project that provides students with a realistic perspective of biology and how scientific investigations are conducted. Many of the faculty have active research programs that hire undergraduate students and provide further training. Summer internships are also available.

Consult the Highlands University natural science website for new or additional information at www. nmhu.edu/academics/undergraduate/siencemath/biology/indez.aspx.

# Major in Biology (BS)

Biology majors must complete a total of 81 to 83 hours in biology, chemistry, math, and physics courses. The minimum requirement for a bachelor of science in biology satisfies 46 upper-division credit hours, and the university requires at least 51 credit hours in upper-division (300-400 level) courses. No minor is required but is encouraged. Minors in geology, combined science, or chemistry can be earned by thoughtful choices of electives that satisfy the additional five upper-level credit hours necessary for an undergraduate degree. Consult your biology adviser early in your academic career to establish degree plan.

#### Major in General Science for Secondary School Teachers (Grades 7 – 12)

The purpose of the major is to provide science teachers in training with a fundamentally strong background in the basic sciences. Therefore, a greater pool of talent in the field of science education will be created, from which surrounding middle schools and high schools can draw. The program has been designed to emphasize the fundamental understanding of both physical and life sciences. Courses will be selected from biology, geology, and chemistry. The objectives of the general science major are to:

- provide science teachers in training with a multidisciplinary program that will adequately prepare them to teach the science courses expected in middle school and high school science programs, and
- prepare science teachers to develop each of the competencies required by the State Board of Education for licensure in science education.

Students must complete the Highlands core curriculum requirements, which should include a minimum of Math 140 and eight credits from the lab sciences listed below. Math 211 and Math 160 are required for the BS rather than a BA degree. The BS degree is recommended for students preparing to teach high school.

## Minor in General Science for Elementary School Teachers (Grades K – 5)

The purpose of the minor is to provide elementary school teachers in training with a strong background in a variety of concepts in life science, physical science, and earth and space science. Students

should consult with an adviser early in their academic career to select the appropriate courses and avoid possible problems with prerequisites or scheduling. Not all of the 300- or 400-level classes are offered every semester or even every year. The objectives of the general science minor are to:

- provide pre-service elementary teachers with a program that will adequately prepare and encourage them to teach the most fundamental science concepts to students at the elementary school level, and
- broaden the scope of science to elementary school teachers in training, so they will be well versed in
  all aspects of science allowing them to develop methods in which to relay the content material to their
  students so that the students can fully understand the concepts.

This minor does not satisfy the secondary school endorsement requirements (grades 7-12) for the State of New Mexico.

(Please refer to Interdepartmental Programs for more details regarding this minor.)

#### Minor in Combined Science

The combined science minor at Highlands allows students to select courses in two or more of the science fields to include behavioral science, computer science, math, life science and /or physical science. Also, students are advised to remember that the university requires that all minors contain at least 12 credit hours at the 300 to 400 level. A minor in combined science may be used to satisfy the university requirements for the bachelor of science degree of a minor in a science field.

(Please refer to Interdepartmental Programs for more details regarding this minor.)

# Pre-Professional Programs in Health and Science Fields (Medicine, Dentistry, Veterinary Medicine, Ophthalmology, Optometry, etc.)

Entry into professional school is often dependent upon success in a selected series of courses rather than completion of a particular major program. Thus, the choice of a specific major is frequently flexible. In addition, the extent of pre-professional training needed varies considerably.

Some areas where pre-professional advising is appropriate are:

- Pre-medicine
- Pre-physical therapy
- Pre-veterinary medicine
- Pre-dentistry
- Pre-pharmacy
- Pre-optometry
- Medical technology (all levels)
- Pre-engineering

Refer to the appropriate departments for further details and advisement regarding these fields.

#### Chemistry

The Department of Chemistry offers both BA and BS programs in chemistry. The discipline provides courses that fulfill the university's laboratory science core curriculum requirements, as well as required cognate courses for programs in other sciences and engineering.

# **Mission of the Department of Chemistry**

The mission of the Department of Chemistry is to teach chemistry courses required for the education of all students attending New Mexico Highlands University. The department also offers chemistry major programs leading to the BA and BS degrees, as well as minors for those students majoring in other areas requiring significant study in chemistry. The bachelor of science degree is appropriate for those students intending to enter the science workforce directly after graduation. Chemistry graduates may also continue their education in graduate school either at Highlands University or at another institution. Chemistry students may also choose to enter a professional school to study for careers in medicine, veterinary science, dentistry, pharmacy, chemical or petroleum engineering. The BA degree is sufficient for students pursuing health science careers.

Chemistry has modern laboratories for chemistry classes and research. Chemical measurement instrumentation includes a high-field nuclear magnetic resonance device, X-ray diffraction equipment, gas and liquid chromatographs, mass spectrometers, IR, UV, and visible spectrophotometers, and laser spectroscopy facilities. Students who major in chemistry are expected to become fully competent in the use of the instruments by the time they graduate. Students gain a practical perspective on chemistry through involvement with research projects. Chemistry has been highly successful in placing its graduates in exciting careers in industry and government, while many students proceed to advanced graduate studies in chemistry at other institutions. Most chemistry faculty have research grants that can hire students.

Chemistry has been called the central science because it is the discipline that deals with the molecular structure and reactivity of materials: areas fundamental to the other sciences and to engineering. Consequently, chemistry is a bridge between the many science disciplines in which molecular level understanding is needed. Such disciplines range from engineering, physics, and geology through the life sciences of psychology, biology, and environmental sciences. Traditional chemistry professions include manufacturing, such as pharmaceuticals and high-technology materials, as well as research and testing services. A chemistry major also provides an excellent background for students intent on pursuing a health profession in medicine, pre-dentistry, or pre-veterinary.

Chemistry students learn content and critical thinking skills required for scientific research. The American Chemical Society certifies the Highlands chemistry BS degree. Among the strengths of the program are the outstanding suite of instrumentation required for modern analytical procedures and small class sizes that allow students close contact with instructors.

An approved sample recommended curriculum and/or plan of study is available.

#### **Resources and Facilities**

The Department of Chemistry is housed in the Ivan Hilton Science and Technology Building. New laboratory spaces, with state-of-the-art safety and teaching features provide students with hands-on, student-centered learning environments.

# **Department of Exercise and Sport Sciences**

Dr. Kathy Jenkins, Department Chair Wilson Physical Education Complex, Room 227 505.454.3479/3287 | FAX: 505.454.3001 E-MAIL: kjenkins@nmhu.edu

# Mission of the Department of Exercise and Sport Sciences

The mission of the Department of Exercise and Sport Sciences is to improve the quality of life related to the many aspects of human movement. We concentrate on a full spectrum of human potential, from young to old, fit to unfit, recreational to higher athletic, healthy to diseased, and able-bodied to disabled. Our programs are related to the study of exercise physiology, health, teaching, athletic injuries, recreation, sports administration, and coaching.

#### **Faculty**

Andrellita Chavez (Athletic Training)
Kathy Jenkins (Exercise Science)
Yongseek Kim (Recreation)
Charles (Pete) LeRoy (Health)
Joe Schmalfeldt (Physical Education)
Angela Snyder (Health)

#### **Resources and Facilities**

Two undergraduate majors are available for Highlands students to pursue in the Department of Exercise and Sport Sciences: human performance and sport (HPS) and health. The HPS major offers a choice of three concentration areas: exercise science, physical education and recreation sport man-

agement. Additionally, three minors are available: HPS, Health, and Coaching. There are also four concentrations in health: pre-professional athletic training, health education, health promotion and wellness, and pre-professional allied health.

The ESS faculty offers courses for the community as well as university personnel. The New Mexico Highlands University Wellness Program (HU-Wellness) provides a variety of health-promotion activities, including classes, consultations, seminars and workshops. Fitness and health assessments with consultation and exercise prescriptions are available to employees, students, and community members. The Cardiovascular Health Enhancement and Exercise Rehabilitation (CHEER) Program provides supervised exercise classes for patients with heart disease.

In addition, the ESS department cooperates with other academic areas within the university by providing opportunities for students to take a variety of academic classes. There are numerous activity classes for students, faculty, and community members to take, such as skiing, swimming, golf, fitness activity, racquetball, and weight lifting. As part of their core requirements, students from across the university have an opportunity to take at least two physical education courses or the Fit for Life class (wellness course). The Fit for Life course is a prerequisite for all ESS majors.

The career choices for students receiving a major in the ESS are numerous: activity director/instructor, aquatic manager, adapted physical education instructor, athletic director, athletic trainer, personal fitness trainer, cardiac rehabilitation specialist, community health consultant, corporate wellness director, employee wellness consultant, health promotion and wellness leader/director, exercise laboratory technician, physical education teacher, health education teacher, recreation director, senior citizen recreation director, therapeutic recreation specialist, travel and tourism director, and many more.

The John A. Wilson Physical Education Complex is the pride of the program. The building offers modern facilities for physical and health education instruction, student and faculty research, as well as complete facilities for athletic training. The HU Wellness Program and Exercise Science Laboratory enable students to obtain practical experience in fitness testing and exercise programming.

# Department of Nursing

Susan Williams, Director, RN-BSN Engineering Building, Room 101 www.nmhu.edu/nursing 505.426.2203 or 505.454.3210 E-mail: sdwilliams@nmhu.edu

## Mission of Department of Nursing

The mission of the Department of Nursing is to prepare quality nurse health care providers through excellence in education, scholarship and service. This program builds on the strength of the licensed registered nurse and challenges the individuals enrolled in this program to expand their critical thinking for new professional nursing roles, methods of health care delivery and approaches to health care practice issues.

#### **Faculty**

Karen Brooks

Bea Hurtado

Susan Williams

#### **Resources and Facilities**

The Department of Nursing is located in the renovated Engineering Building. Offices of the department and a classroom used by nursing are available in the building. The nursing department cooperates with other academic areas within the university for students to take courses besides nursing, to meet the general education core requirements of the baccalaureate degree.

## **Bachelor of Science in Nursing**

The RN to BSN program of study is specifically designed for the registered nurse student to earn a baccalaureate degree. The RN-BSN program is only available to students with a valid license to practice as a registered nurse and hold an associate degree or diploma in nursing. Baccalaureate nursing education prepares professional nurses who have a strong foundation in liberal education. The RN-BSN nursing program allows the registered nurse to build on core nursing knowledge and experience and, through the program, expand their knowledge base as leaders in the profession. Upon completion of the program, graduates will be prepared for positions in patient care, leadership, community health and be qualified to apply for advanced work in nursing at the master's level.

Requirements for Admission to the RN-BSN Completion Program

The applicant must have:

- 1. Graduated from an approved associate degree or diploma program in nursing.
- 2. Valid unencumbered nursing license as a registered nurse in the state of New Mexico or compact state.
- 3. Cumulative minimum GPA of 2.5 on a 4.0 scale.
- 4. Applicant must apply to Highlands and also to the RN-BSN program. Admission to New Mexico Highlands University does not guarantee admission to the RN-BSN program.
- All general core requirements of New Mexico Highlands University must be met in addition to the upper-division nursing courses.
- 6. RNs will be awarded 30 hours of upper division credit for completion of the associate degree in nursing and a valid registered nurse license. Credit will not be awarded until the successful completion of at least nine semester hours of the program.

# **Department of Computer and Mathematical Sciences**

Dr. Gil Gallegos, Department Chair Ivan Hilton Science Building, Room 291 505 454.3302- | FAX: 505 454.3169 E-mail: grgallegos@nmhu.edu

#### Description

The Department of Computer and Mathematical Sciences offers bachelor of science and bachelor of arts degrees in mathematics, computer science and minors in mathematics, computer science and physics.

The degree in computer science has three areas of concentration: software/hardware systems, information systems, and an individualized program of study. These are designed so the student may convert readily to the computer science major.

The department also offers transferable courses in engineering in support of the New Mexico Higher Education Department (HED) Engineering Transfer Module for students who wish to undertake the first two years of engineering studies at Highlands and transfer to accredited engineering programs nationally for completion of an engineering degree. The department supports other majors at Highlands University by providing undergraduate and graduate mathematics and physics classes. The department also provides mathematics classes tailored to specific majors, such as education and business.

## Mission of the Department of Mathematics, Engineering, and Physics

The Mission of the Department of Computer and Mathematical Sciences is to train students in the fields of mathematics, computer science, physics, and engineering. By encouraging and developing problem solving, critical/analytical thinking, and practical, laboratory-based skills, our students will be well prepared for careers in any combination of these fields, either via solid preparation for further graduate education or immediate entrance into the workforce (industry, teaching, and national laboratories).

#### **Faculty**

Dr. John S. Jeffries (Mathematics)

Dr. Gregg Turner (Mathematics)

Dr. Joe Sabutis (Physics)

Dr. Gil Gallegos (Computer Science)

Dr. Hossein Tahani (Computer Science)

Dr. E. R. "Dick" Greene (Bioengineering)

Dr. Joseph McCaffrey (Physics)

Mr. Carlos Martinez (Mathematics)

Mr. Marvin Mascareñas (Mathematics)

Mr. Lonny Montoya (Computer Science)

#### **Resources and Facilities**

The department resides within the Ivan Hilton Science and Technology Building on Highlands' main campus.

As part of the physics program, the department maintains an astronomical observatory located on the roof of the Ivan Hilton Science and Technology Building. The observatory is equipped with a 16-inch Meade research-grade telescope.

# **Department of Natural Resources Management**

Dr. Kenneth Bentson, Department Chair Ivan Hilton Science Center, Room 334 505.454.3366 | FAX: 505.454.3202 E-mail: kbentson@nmhu.edu

# Description

The Department of Natural Resources Management (NRM) offers instructional programs leading to a bachelor of science in forestry and environmental geology. Various concentrations are offered within these programs.

## Mission of the Department of Natural Resources Management

The mission of the programs (forestry and environmental geology) in the NRM Department is to provide students with a high-quality science education that includes experience with research and field projects. The programs provide scientific and technical background that empowers students to successfully pursue science and technology careers, or, proceed to advanced graduate studies. Faculty in NRM strives to make each student's educational experience challenging and rewarding.

#### Faculty:

Kenneth Bentson (Forestry)

Craig Conley (Forestry)

David W. Hacker (Forestry)

Jennifer Lindline (Geology)

Edward Martinez (Forestry)

Michael Petronis (Geology)

Maureen Romine (Biology)

#### **Environmental Geology (BS)**

Environmental geology is an applied science concerned with the practical application of the principles of geology in the solving of environmental problems. Environmental geology deals with Earth resources, geologic hazards, and the interactive of humanity of the environment. The environmental geology BS at Highlands is designed to be the best possible preparation for advanced geology work in the graduate school or for professional employment as a geologist. The coursework allows students to develop an understanding of the physical function, operations, hazards, and connectivity of earth systems. Emphasis is placed on the acquisition of scientific knowledge, mathematical proficiency, research skills, technical ability, and writing competencies. Because it is a small department, faculty-student relationships are strong, and faculty members are able to assist out students on an individual basis. This allows the department to accommodate students with diverse economics, social, and academic backgrounds.

The Highlands environmental geology BS has two different tracks: environmental geology and water resource. Both are highly integrated degree programs including basic courses in geology and water science, as well as laboratory experience, independent research, field study, and elective coursework. The environmental geology concentration is designed to provide quantitative preparation for career pathways involving interdisciplinary study of the environment with a geological emphasis. The water resources concentration is designed to provide broad-based science and management practice for professions involving integrated water resources management.

Environmental geology graduates have excellent employment opportunities both locally and elsewhere in water, minerals, and energy resource exploration, resource recovery, resource management, water minimization, pollution prevention, contaminant remediation, and environmental protection. Environmental geology students are not required to take a minor, but those concentrating in environmental geology are required to take a summer field course (Geol 375) prior to graduation.

# Forestry (BS)

Forestry is the application of scientific principles to the sustainable management of forest resources, including alternative forest products (e.g., wildlife, medicinal herbs, craft materials, etc.). The primary goal of the forestry program is to produce technically competent forest and natural resources managers who understand the ecological notions that underpin human use of forest resources. Students receive training in the various techniques used to determine resource quantities and qualities, economic values, and social constraints in management of natural resources.

Students who major in forestry are not required to take a minor. A summer field course is required of all students prior to their graduation. Students who wish to pursue graduate degrees should talk to an adviser about recommended coursework.

The two concentrations within the forestry major are forestry and wildland fire.

# Minor in General Science for Elementary School Teachers (Grades K - 5)

The purpose of the minor is to provide elementary school teachers in training with a fundamentally strong background in a variety of concepts in life science, physical science, and earth and space science. Courses will be selected from those areas listed below. Students should consult with an adviser early in their academic career to select the appropriate courses and avoid possible problems with prerequisites or scheduling. Not all of the 300- or 400-level classes are offered every semester or even every year.

The objectives of the general science minor are to:

- Provide pre-service elementary teachers with a program that will adequately prepare and encourage them to teach the most fundamental science concepts to students at the elementary school level.
- Broaden the scope of science to elementary school teachers in training, so they will be well versed
  in all aspects of science allowing them to develop methods in which to relay the content material to
  their students so that the students can fully understand the concepts.

Please refer to Interdepartmental Programs for more details regarding this minor.

#### Minor in Combined Science

The combined science minor at Highlands University allows students to select courses in two or more of the science fields to include behavioral science, computer science, math, life science and/or physical science. Also, students are advised to remember that the university requires that all minors contain at least 12 credit hours at the 300 to 400 level. A minor in combined science may be used to satisfy the university requirements for the bachelor of science degree of a minor in a science field.

(Please refer to Interdepartmental Programs for more details regarding this minor.)

# Pre-Professional Programs in Health and Science Fields (Medicine, Dentistry, Veterinary Medicine, Ophthalmology, Optometry, etc.).

Entry into professional schools is often dependent upon success in a selected series of courses rather than completion of a particular major program. Thus, the choice of a specific major is frequently flexible. In addition, the extent of pre-professional training needed varies considerably.

Some areas where pre-professional advising is appropriate are:

- Pre-medicine
- Pre-physical therapy
- Pre-veterinary medicine
- Nursing
- Pre-dentistry
- Pre-pharmacy
- Pre-optometry
- Medical technology (all levels)
- Pre-engineering

Refer to the appropriate departments for more details and advisement regarding these fields.

#### **Resources and Facilities**

The Department of Natural Sciences is housed in the Ivan Hilton Science and Technology Building. New laboratory spaces with state-of-the-art safety and teaching features provide students with handson, student-centered learning environments. Environmental geology students are not required to take a minor, but those concentrating in environmental geology are required to take a summer field course (Geol 375) prior to graduation.

# **Department of Social and Behavioral Sciences**

Dr. Ian Williamson, Department Chair

Hewett Hall, Room 205

505.454.3342 | FAX: 505.454.3331 E-mail: iwilliamson@nmhu.edu

# Description

The department offers undergraduate programs in psychology, sociology, anthropology, and criminal justice.

#### Mission of the Department of Social and Behavioral Sciences

The mission of the Department of Social and Behavioral Sciences is to contribute to meeting the educational and research needs in psychology, sociology, anthropology, and criminal justice and the related fields; contribute to meeting the career needs in psychological and social services and social sciences, as well as contribute to training for careers in education, engineering, physical and biological sciences, medicine, and other science fields; contribute to meeting the need for secondary school teacher certification in sociology and/or anthropology; and to provide psychological and sociocultural service and expertise for the region, as well as the greater global community.

#### **Faculty**

Erika Derkas (Sociology)

Camea Gagliardi-Blea (Psychology)

Mario Gonzales (Anthropology)

Jean Hill (Psychology)

Warren Lail (Anthropology)

Linda LaGrange (Psychology)

Maura Pilotti (Psychology)

Gerald Russell (Psychology)

Arlie Tagayuna (Sociology/Criminal Justice)

Orit Tamir (Anthropology)

Thomas Ward (Sociology)

Ian Williamson (Psychology)

#### Sociology and Anthropology

The disciplines of sociology and anthropology combine to offer a holistic approach to the study of humankind. The program offers both bachelor of arts and bachelor of science degree options with four possible emphases: sociology, anthropology, criminology, and American Indian studies. The region's long and varied human traditions, dating from the prehistoric past of 10,000 years ago with Clovis and Folsom to the 21st century mixed-culture traditions, provide an excellent natural laboratory for sociocultural studies. The program emphasizes student participation in field and campus laboratory experiences, practicum, and computer competence in analysis of data. Small classes provide an enriched educational environment for both students and faculty.

Career opportunities include preparation for graduate studies, teaching, cultural resource management, and practice in federal, state, and local agencies, as well as in private businesses and nonprofit sectors.

# Major in Sociology and Anthropology (BS)

For a bachelor of science degree, complete the requirements for bachelor of arts major in sociology and anthropology plus: complete a minor of at least 20 credits in one of the science fields other than sociology and anthropology, or complete a combined science minor, or complete a second major in a bachelor of science degree program, or complete a two-year degree in a science field; and complete eight credits in mathematics, including Math 211.

#### **Criminal Justice Studies**

A bachelor's degree in criminal justice studies provides an excellent foundation for students interested in working within the criminal and juvenile justice systems. In addition, it offers a strong foundation for those interested in pursuing a law degree or a masters degree in Public Administration or a closely related field. The criminal justice system is quite broad, and professionals, regardless of their specialization, must integrate information from a variety of academic disciplines. The program is designed with this objective in mind.

## **Psychology**

Psychology, the study of human behavior and mental processes, includes such topics as learning, memory, cognition, motivation, emotion, sensation, perception, personality, attitudes, social interactions, and psychopathology.

The special focus in this field is the individual rather than human societies or cultures. Although the study of psychology contributes to the understanding of abnormal human behavior, knowledge of psychology also enhances the understanding of normal human behavior.

Psychological research is conducted exclusively with the scientific method in applications that range from multifactorial laboratory experiments to single case studies. At Highlands, students experience the diversity within the field through a broad selection of courses. Behavioral and psychodynamic emphases are offered in the study of mental disorders, while research psychology is represented by cognitive, biological, social, and personality approaches.

Career goals of psychologists include teaching, research, and service. Psychologists, counselors, and psychometricians work at such sites as mental health centers and hospitals, geriatric facilities, and correctional institutions. The psychological profession also includes school psychologists and human relations or organizational behavior psychologists for industry or government.

#### **Resources and Facilities**

The human riches of Northern New Mexico provide an outstanding context for psychological, social, and cultural studies at New Mexico Highlands University. Students can engage in field archaeological digs, ethnographic, psychobiological research, and clinical practicum. Additionally, students have the opportunity to conduct research in our phychobiology and anthropology labs. Studies of human behavior emphasize field data and computer applications for analysis and interpretation.

The department provides a computer laboratory for student use. Students have access to word processing, spreadsheets, and statistical packages, as well as the Internet.

Student professional societies and organizations, such as Psi Chi, and the Sociology and Anthropology

Club, provide opportunities for student participation and program enrichment beyond the classroom.

# School of Business Administration

Dr. Margaret Young, Dean Sininger Hall, Room 208 E-mail: young\_m@nmhu.edu 505.454.3522 | FAX: 505.454.3354

#### Description

The school offers undergraduate programs in accounting, finance, international business, management, management information systems, marketing and general business.

#### Accreditation

The School of Business Administration is accredited by the Association of Collegiate Business Schools and Programs (ACBSP) at the undergraduate and graduate level.

#### Mission of the School of Business Administration

New Mexico Highlands University's School of Business Administration is committed to the success of our students and to the highest observance of our professional accreditation standards. Our mission is to become the best small school of business in the Southwest and to prepare students to be confident, competent, ethical, and responsible business decision-makers, managers, leaders, and agents of economic and social betterment in today's changing global business environment.

#### **Our Core Values**

- Advancement of knowledge
- Student success
- A diversity of ideas
- Accessible education
- Community
- Individual well-being
- Sustainable practices
- Multiculturalism

# Excellence in teaching is evidenced by:

- faculty recruiting and development that fosters enhancement in the quality of teaching,
- scholarly and research activity that supports and enhances classroom teaching, and
- faculty service that narrows the gap between classroom theory and the needs of the business community.

#### **Education experience is offered through:**

- Small class enrollments to foster interactive and high involvement learning,
- Opportunities for students to participate in many real-world scenarios in classroom and internship settings, and
- faculty-student relationships that extend from academic advising through career choices, including facilitating employment opportunities

#### **Faculty**

Ali Arshad (Economics & Finance)

Donna Brooks (Management)

Margot Geagon (Management & Finance)

John V. Hayes (Financial Planning)

David Korb (Accounting)

Ronald Maestas (Management & MIS)

Emmanuel Nkwenti (Mgmt & Int'l Business)

Hal Olafson (Finance)

Luis Ortiz (Mgmt & Int'l Business)

James Peters (Accounting)

Mary Romero (Accounting)

Charles Swim (MIS/Mgmt)

William Taylor (Economics)

Kent Tucker (Finance)

Donna Vigil (Accounting)

David West (Software Driven Systems Design)

James Williams (Marketing)

Margaret Young (Marketing)

#### **Business**

The School of Business Administration provides academic programs that provide a solid foundation for students in leadership roles in business, government and education. Performance standards are high for both undergraduate and graduate programs. Academic programs reflect the philosophy and common professional components of the accrediting body, the Association of Collegiate Business Schools and Programs (ACBSP). To prepare students for professional careers, the curricula address both the specifics of the work place and the more general aspects of society.

The School of Business Administration offers two degrees. The bachelor of business administration (BBA) degree has concentrations in accounting, finance, international business, management, marketing, management information systems, and general business. The bachelor of software-driven systems design (BSSD) degree prepares students to design, develop, and manage complex computer and information-based systems. Students may select a second major or minor in a field outside the School of Business or may select a minor from within the School of Business. The school's majors and minors are listed below:

The general education requirements for the BBA degree (See University Core Requirements) are 42 to 45 credit hours. All business majors and minors (including non-business minors) are required to take CS 101, Econ 216.

Students, in conjunction with their advisers, may select upper-division electives from the following disciplines: anthropology, business, sociology, psychology, political science, media arts, exercise and sport science. The number of electives varies by concentration.

The bachelor of software-driven systems design degree prepares students to design, develop, and manage complex computer and information-based systems that are integral to the efficient operation of modern society.

The BSSD program is more applied and less theoretical than traditional computer science degrees, more intensive and technical than traditional management information systems degrees.

The program involves a radical departure from traditional classroom learning (even classroom combined with internships) and will resemble a formal apprenticeship. Students pursuing this degree will spend time each week in the software studio in the apprenticeship program, working on real-world projects, while simultaneously learning the theories and curricular matter outlined below.

#### Exit Requirements for the BBA degree

During the last year of coursework, all undergraduate students are required to complete Mgmt 489, Strategic Management. Students will work as a team to prepare and present a strategic business analysis as the final aspect of their undergraduate business preparation. The business case will be presented to members of the School of Business Administration faculty at the end of each semester.

# **School of Education**

Dr. Michael Anderson, Dean

Victoria D. de Sanchez Teacher Education Center, Room 114B

505 454-3357 | FAX: 505 454-3384

#### **Mission Statement**

The Highlands School of Education prepares teachers, counselors, and administrators for diverse and inclusive environments through excellence in teaching, research, and service.

# **Faculty**

James M. Alarid (Special Education)

Michael Anderson (General Education)

Mary Lou Arguelles-Anderson (Educational Leadership)

David Braun y Harycki (Curriculum & Instruction)

James B. Burns (Educational Leadership)

Kathryn Dziekan (Counseling)

Jayni Flores (Elementary Education)

Joan Gallini (General Education)

Geraldine Glover (Counseling)

Stella Helvie (Special Education)

Marie Hummel (Early Childhood Multicultural Education)

Michael Immerman (General Education)

Effie Laman (Special Education)

Karen Lehman (Special Education)

George Leone (Counseling)

Merryl Kravitz (Secondary Education)

Doug Main (Counseling)

Patricia Martinez-Burr (Counseling)

Alice Menzor (Curriculum & Instruction/ Reading)

Kara Moloney (Curriculum & Instruction/ Reading)

Chris Nelson (Special Education)

Carolyn Newman (Early Childhood Multicultural Education)

Seonsook Park (Curriculum & Instruction/ Reading)

Lori Rudolph (Counseling)

Loretta Salazar (Curriculum & Instruction/ Bilingual)

Gayle Anne Talaga (Educational Leadership; Curriculum & Instruction)

#### **Resources and Facilities**

The Victoria D. de Sanchez Teaching Education Center is a modern three-level building that houses classrooms, two interactive television rooms, Smart classrooms, faculty offices and an Instructional Materials Evaluation Center.

The building also serves as a home for Vista sin Limites, the Northeast Regional Education Cooperative, the Center for the Education & Study of Diverse Populations, Advanced Placement-New Mexico, Counselor Training Center and MESA-Northern New Mexico.

Established by the School of Education, the Center for the Education and Study of Diverse Populations studies diverse populations whose needs are unmet and who encounter barriers to services and opportunities, and develops strategies for removing those barriers.

- The School of Education houses a regional Instructional Materials Evaluation Center that contains
  publisher-supplied samples of state-approved texts and materials for review by school district administrators, teachers, parents, and education faculty and students. The Center also functions as
  an institutional curriculum library, providing selected samples of resources for short-term loan.
- The Literacy Council of Northeastern New Mexico staffs an adult literacy center and provides services within the Instructional Materials Evaluation Center.
- Finally, the School of Education offers selected undergraduate and graduate programs at the centers in Santa Fe / Española, Rio Rancho, Raton and Farmington with the cooperation of the Educational Outreach Services Program.

# **Conceptual Framework**

Highlands' School of Education believes in democratic access to an education, both theoretical and authentic, that allows the reflective learner to continue to develop cultural schemas and diverse cognitive processing skills to construct a knowledge base, practice the skills and develop professional dispositions in authentic settings needed to excel in education, leadership, counseling or other self-determined endeavors.

#### **Themes**

There are eight themes that guide the School of Education's practices and decision-making processes:

- Diversity
- Reflective Practitioner
- Culturally Inclusive
- Authentic Settings
- Practice
- Knowledge
- Professionalism
- Leadership

The purpose of the School of Education is to provide highly qualified, entry-level early childhood, elementary, secondary, and/or special education teachers and other professional personnel such as, educational leaders and counselors, to serve New Mexico and/or national P-12 school districts. The program is embraced by the following themes: diversity, leadership, culturally inclusive, authentic setting(s), practice, reflective practitioner, and knowledge and steeped in a conceptual framework that fosters democratic access to an education, allowing the reflective practitioner to continue to develop cultural schemas, diverse cognitive processing skills to construct a knowledge base that is entwined in the School of Education's themes.

#### **Teacher Preparation and Licensure Programs**

Entrance to undergraduate teacher preparation programs at Highlands is evaluated through advisement and assessment of students' skills and motivation entering the teaching profession. Preparation for the profession requires an academic course of study through a major in elementary, early childhood, or special education or a minor in secondary education together with an academic minor or major in an appropriate content field.

The following describe the gateways that assess and guide students through the School of Education. This process will initiate an in-school file for students as they matriculate in the School of Education.

#### **Initial Licensure Programs**

Initial programs leading to a bachelor of arts and making candidates eligible for a New Mexico teaching license include early childhood education, elementary education, and special education. Secondary education is a program minor that must be combined with a content-area major.

## **Gateway Alpha (Program Entry)**

Key assessments determine candidate eligibility for admission to School of Education initial licensure programs. Those assessments and their criteria are:

- 1. New Mexico Teacher Assessment (N.M.T.A.) Basic Skills score of at least 240;
- 2. Overall GPA of at least 2.5 (based on a minimum of 24 credit hours);
- 3. A C or better in GNED 201 (Introduction to Teaching), SPED 214 (Introduction to Special Education), GNED 251 (Field Base I) or ECME 300;
- 4. A score of at least 3 out of 4 on a designated writing assignment in GNED 201 or ECME 300; and
- 5. A C or better in ENG 112 (Composition); and 6. A C or better in MATH 140 (College Algebra).

## **Gateway Beta (Admission to Clinical Practice)**

Key assessments determine candidate eligibility for admission to clinical practice/student teaching (Field Base II). Those assessments and their criteria are:

- 1. N.M.T.A. content score of at least 240;
- 2. Overall GPA of at least 2.75;
- 3. Two focused reference letters from two School of Education faculty members; and
- 4. Dispositions rating of at least three of four possible points from Field Base II or a designated class in the major.

## **Gateway Gamma (Program Completion)**

Key assessments determine candidate eligibility to become a program completer. Those assessments and their criteria are:

- 1. N.M.T.A. Competency score of at least 240;
- Field Base III (Student Teaching) university supervisor rating of at least three of four points possible by the final classroom observation;
- 3. Field Base III Cooperating Teaching rating of at least three of four points possible by the final classroom observation; and
- 4. Dispositions rating of at least three of four points possible in Field Base III.

For Gateway Alpha, the overall GPA of at least 2.5 (based on a minimum of 24 credit hours) is inclusive of transfer credits. Candidates plan their academic programs in careful consideration of the subjects or grade levels they may wish to teach. They receive support and guidance from faculty advisers throughout the period of their studies and also in seeking their first jobs.

Of special note for all education candidates is the university's practicum-based program for teacher education. At three different points in their advanced studies, elementary, early childhood, special education, and secondary teaching candidates gain on-the-job experience through field placements in actual school settings. The final placement is a full student teaching assignment undertaken in the student's final semester of studies. The school makes arrangements for student teaching with school systems at some distance from campus, as well as in the nearby region. Advanced planning and a formal application are required at least one semester in advance of student teaching.

#### **Chalk and Wire**

During the fall 2009 semester, the School of Education adopted an electronic assessment system, Chalk and Wire, as a platform to create candidate electronic portfolios. Chalk and Wire is required of all School of Education candidates and of those who seek admission. Chalk and Wire tracks candidates' progress as they address the competencies of their licensure areas. It is used as a vehicle to assess programmatic strength, weaknesses and areas in need of modification. As candidates continue to meet these competencies and professional standards the quality of teaching, counseling and administration will continue to improve in Northern New Mexico and wherever our candidates decide to practice their chosen profession.

# **Requirements for Admission to Teacher Preparation and Licensure Programs**

Admission to the School of Education is a separate and independent process than admission to the university. Candidates need to purchase a Chalk and Wire license. All applications for admission into the School of Education are only accepted through Chalk and Wire. Candidates must complete all

requirements listed in Gateway Alpha before they are admitted. If a candidate is deficient in any one of the Gateway Alpha requirements, admission will be denied until all requirements are met. Students should contact the School of Education early in their freshman year to receive guidance in the process. Early advisement is essential to avoid delays in meeting all requirements.

- 1. Complete the following courses with a grade of C or better:
  - GnEd 201: Intro to Teaching (3)
  - GnEd 251: Field-Base 1 Teacher Prep Experience (1)
  - SpEd 214: Intro to Special Ed (3)
  - ECME 300: Professionalism (2), ECME students only
- 2. Complete and submit an application through Chalk and Wire for admission into the School of Education.

Complete the appropriate freshman and sophomore courses in the university's core curriculum together with additional "extended core" courses required for education majors and minors by the New Mexico Public Education Department. The choices to be made will reflect the requirements for licensing that have been set by the New Mexico Public Education Department (NMPED). These courses include:

- 12 hours in English
- 12 hours in Science
- 12 hours in History
- 6 hours in Fine Arts
- 6 -9 hours in Mathematics
- 6 hours in Social/Behavioral Science

Consultation with an education adviser is essential to establish this program of courses. An overall grade point average of at least 2.5 is required. In addition, C or better grades are required in ENGL 112 and MATH 140. State law requires 12 credits of math for elementary licensure.

3. Take the New Mexico Teacher Assessment (NMTA) exams to be eligible for student teaching. Students must have passed the basic skills and Content exams of the NMTA to be approved for student teaching. Students must pass the Competency Exam of the NMTA prior to New Mexico PED licensure. Students have no more than two opportunities to complete successfully any of the field-based experiences. With the submission of the School of Education application, the candidate must have established an electronic portfolio, completed disclosure form via Chalk and Wire, submitted disposition assessments from designated classes and field based experiences, and appropriate artifacts from GnEd 201 and ECME 300. Students will also be asked to submit other artifacts from other education classes.

Details of this process, and the minimum required scores, are available from the School of Education. Students seeking a bilingual endorsement are required to pass the Prueba de Español para la Certifición Bilingües exam. Students must maintain close communication with Academic Support Services and the School of Education regarding these important examinations.

Requirements for Admission to Clinical Practice and for Placement in Student Teaching (Field-Base Teacher Preparation or Internship in Teaching)

Students must submit, through their adviser, a formal application for admission to the Office of Field Experiences. The application form is available in the Education Office and the Highlands website (www.nmhu.edu). Adverse decisions can be appealed first to the program's admission committee, then to the school dean.

For admission to clinical practice, a 2.75 overall grade point average is required. Students must complete a degree check with the Registrar's Office and meet periodically with their education advisers for a check on their advancement through the gateways, academic progress, and the verification of passing the appropriate sections of the NMTA exam. Prospective candidates should discuss this requirement with their education advisers.

Candidates for placement in student teaching will file a formal application prior to midterm of the

preceding semester (available in the Education Office and the Highlands website (www.nmhu.edu). Prerequisites for advancement to student teaching (Field-Based III) will be the following:

- 1) a 2.75 overall grade point average;
- 2) completion of required education courses up to those for the final semester;
- 3) completion of at least 24 credits in the academic major, with at least a 2.5 GPA, and 20 credits in the academic minor;
- 4) a passing score on the NMTA basic skills and content area exams;
- 5) submission of progress of the e-portfolio;
- 6) submission of appropriate disposition assessments from designated classes; and
- 7) submission of appropriate reference letters with documented dispositions.

To avoid any unnecessary delays in obtaining an educational license, all PED core courses must be taken prior to Field-Based III approval and placement. Candidates will also present a certificate stating that they have been tested for tuberculosis. and three recommendation letters.

The education program's director of student teaching and each teaching discipline's program committee review the applications for approval, and those students whose applications are denied may appeal to the Office of the Dean.

Student teaching is a full-time assignment during the period of the placement and requires the candidate to fully participate in the life and work of the school. The student teacher follows the daily schedule of the school, assumes regular faculty and out-of-classroom duties, and participates in faculty meetings, PTA/PTO meetings, school plays, and other school-related activities as appropriate. Because this constitutes a full-time commitment, no additional coursework may be taken without special permission from the field-base coordinator. In all cases, the school's cooperating teacher and principal, in consultation with the university supervisor, make the determination of the student teacher's involvement, duties, and course loads.

Final placement of a student teacher in a school is decided by the School of Education, contingent upon the student being acceptable to the school.

To receive a degree in education, the student must also pass the NMTA Competency Exam, submit summative supervisor and cooperating teacher ratings that indicate which INTASC Standards have been met, and submit electronic portfolio and designated class and field disposition assessments.

#### **Majors and Minors**

For secondary education candidates, a content area major and a secondary education minor are available. See College of Arts and Sciences section for information.

Major in Early Childhood Multicultural Education (BA)

The early childhood multicultural education program in the School of Education at New Mexico Highlands University is a four-year (66 hours) bachelor of arts degree. The program prepares classroom teachers and other professionals to work with children from birth to age eight. The program fulfills the New Mexico Public Education Department competency requirements which include child growth, development and learning; developmentally appropriate content; and learning environments and curriculum implementation, health, safety and nutrition assessment and professionalism. The program meets the state requirements of teacher certification/licensure for teaching Pre-K-3 in the public schools and the early childhood special education (developmentally delayed) preschool classroom. Students majoring in early childhood education are not required to take a minor.

Complete and submit a ASE application via Chalk and Wire.

# Minor in Early Childhood Multicultural Education

Early childhood multicultural education offers an undergraduate minor field, which may be selected by students majoring in elementary education or special education. Early childhood multicultural education is a valuable specialization field for those intending to work with newborns to 8-year-old children. Additional courses beyond the minor in early childhood multicultural education are required for a teaching license.

# **Major in Elementary Education (BA)**

Elementary education is offered at Highlands as an academic major field. Education students may select a major in education or a dual major in elementary and special education. The major program meets requirements for special education licensure set by the New Mexico PED. Elementary education majors study such topics as cognitive, physical, emotional, and social development; human relations, instructional planning and implementation, classroom management, assessment and evaluation, and receive training in skills and competencies for elementary subject matter in mathematics, reading and languages arts, social studies, science and other foundational fields. The program complies with the instructional competencies established by the New Mexico PED for entry-level elementary teachers. Before registering for the required major courses, students must complete the requirements for entrance to the Teacher Preparation Program which include GnEd 201, taken in conjunction with GnEd 251, and SpEd 214. Students must have passed the NMTA Basic Skills Exam and the NMTA Elementary Content Exam to be approved for student teaching.

# Minor in Bilingual Education/TESOL (Teaching of English to Speakers of Other Languages)

The minor in bilingual education/TESOL offers an undergraduate preparation to instruct pupils bilingually so as to improve their ability to succeed in the public schools. \*Spanish 111, 112, 211, (or 101, 102, 201) and Span 325 are prerequisites for Spanish 433, 441, and GnEd 437. Consult the Department of History, Political Science, Language and Culture for a test-out option of lower division courses. Courses listed above do not reflect the sequence in which they should be taken.

The ESL program meets the requirements of the New Mexico PED for an endorsement in English as a second language. The program includes courses offered in education, English and anthropology.

# **Minor in Secondary Education**

(Teacher Preparation in Secondary Education)

Students who are preparing to become secondary-level teachers must complete a major from the many academic fields offered at the university; some will also select a content-area minor field. In addition, students must undertake a secondary education minor in the university's School of Education to prepare them for their chosen profession. The selection of courses in the university's major field and in the general education curriculum combine to provide the necessary subject-matter competencies for secondary teaching. This is best done through early advisement from the School of Education.

Additional considerations for professional placement in secondary teaching

In addition to the above requirements, licensing for secondary teaching in the State of New Mexico requires the following:

- 1. Completion of the general education core as well as the university core. Students must have passed the "Basic Skills" component of the NMTA to be approved for student teaching.
- 2. The completion of an appropriate content field or fields. This is accomplished through an academic major. (Secondary education minors may add a content-field minor as well.) To complete a minor in secondary education, students must have 24 credits, including 12 upper-division credits, in a content area compatible with a subject area taught in the 7-12 classroom. The adviser may assist the student in selecting the content field(s). To plan the selected major (or additional minor), students will meet with their major and minor adviser.

Before registering for required minor courses, students must complete the requirements for entrance to the Teacher Preparation Program, which include GnEd 201, and SpEd 214 with a minimum grade of C.

# Major in Special Education (BA)

Education students may select a major in special education or a dual major in elementary and special education. The major program meets requirements for special education licensure set by the New Mexico PED.

Special education students receive instruction in using evidence based teaching approaches for stu-

dents with exceptionalities. Field-base experiences are integrated into the instructional program.

Complete the requirements for entrance to Teacher Preparation Program.

# Major in General Science for Secondary School Teachers (Grades 7 – 12)

The purpose of the major is to provide science teachers in training with a fundamentally strong background in the basic sciences. Therefore, a greater pool of talent in the field of science education will be created from which surrounding middle schools and high schools can draw. The program has been designed to emphasize fundamental understandings of both physical and life science. Courses will be selected from such areas as 1) environmental sciences, 2) biology, 3) geology, 4) chemistry, 5) physics, 6) mathematics, and 7) engineering.

The Objectives of the General Science Major are:

- To provide science teachers in training with a multidisciplinary program that will adequately prepare them to teach expected science courses in middle and high school science programs.
- To train science teachers to develop each of the competencies required by the State Board of Education for licensure in science education.
- To provide specialized/advanced training in specific science subject areas of interest to the science teacher in training.

Refer to Interdepartmental Programs for more details regarding this major.

# Minor in General Sciences for Elementary School Teachers (Grades K - 8)

The purpose of the minor is to provide elementary school teachers in training with a fundamentally strong background in a variety of basic science concepts of both physical and life sciences. Courses that provide the needed basic understanding of the sciences will be selected from those listed in the major.

The Objectives of the General Science Minor are:

- To provide elementary teachers in training with a program that will adequately prepare and encourage them to teach the most fundamental science concepts at the elementary level.
- To broaden the scope of science to elementary school teachers in training, so they will be well
  versed in all aspects of science. This will allow them to develop methods by which to relay the
  content material to their students so that the students can fully understand what is being taught.

Refer to Interdepartmental Programs for more details regarding this major.

#### **Associate of Arts Two-Year Degree Program**

The two-year associate of arts degree in elementary education prepares skilled professionals for work as educational paraprofessionals. A broad selection of courses from the general education curriculum of the university includes requirements in writing and mathematics. A core of courses in the foundations of education enhances knowledge of educational theory and professional practices. All students complete a practicum course that involves a work placement in an actual school setting.

The associate of arts degree students are prepared in the competencies that are mandated by the State of New Mexico Public Education Department. They receive the opportunity to specialize in emphases such as bilingual education, early childhood education, language arts, social studies, science, or special education. In addition, there is an opportunity to expand into a bachelor's degree in elementary or secondary education.

# School of Social Work

Alfredo A Garcia, Ph. D, Dean Lora Shields Science Annex 505.454.3310 or 505.260.6180 | FAX: 505.454.3290 www.nmhu.edu/socialwork

#### Accreditation

The School of Social Work has been accredited by the Council on Social Work Education (CSWE) since 1974.

#### Mission of the School of Social Work

The mission of the School of Social Work is to educate students to practice social work competently with the diverse, multicultural populations of New Mexico and the Southwest. This context of cultural and regional responsiveness informs the school's creation and implementation of all its educational programs.

The School of Social Work has a primary commitment to Hispanic and Native American people. Our curriculum grounds students in core professional social work values, skills and ethical principles, with a focus on promoting awareness and respect for cultural differences and how poverty affects the well being of people in the region.

The School of Social Work offers the BSW Program at the main campus, Las Vegas, New Mexico, and also at the following four (4) campus locations:

NMHU at Albuquerque, NM

NMHU at Rio Rancho, NM

NMHU at Farmington, NM

NMHU at Santa Fe, NM

# NMHU Las Vegas (Main Campus)

Box 9000 Las Vegas, NM 87701

# 505.454.3307 Administration

Jill Baker, Ph.D. Associate Dean

Julia D. Lucero, MSW, LISW, Director,

Field Education

Lou Ann Romero, MSW, Coordinator

Continuing Education

Lawrence Montano, Coordinator

Admissions & Recruitment

Pam Garcia, Adm Asst. Field Education

Jessica Salazar, Receptionist

#### Faculty (NMHU - Las Vegas)

David Arguello, Ph.D.

Jane Gorman, Ph.D.

Andrew Israel, J.D., LMSW,

Rey Martinez, Ph.D.

Dolores Ortega, Ph.D.

Mario Rodriguez, Ph. D.

Irma Sanchez, MSW

#### **NMHU Albuquerque**

5401 Indian School Rd. NE

Albuquerque, NM 87110

505.260.6181 | FAX: 505.896.6122

#### Administration

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Joanne Martinez, Admin. Asst. Field Education

Tina Neal, MBA, Admin. Asst.

Mike Garcia, BA, Evening Coordinator

# Faculty - Albuquerque

Kevin Barnas, LISW

Judith Barnstone, Ph. D.

Cristina Duran, Ph.D.,

Mark Dyke, Psy.D., LMSW

Julius Harrington, DSW

Suzen James, MSW,

George Mercer, MSW,

Avi Kreichman, M.D., Instructor

Jose Sisneros, Ph.D.

# NMHU - Farmington

NMHU at San Juan College 4601 College Boulevard Farmington, NM 87402

505.566.3552 | FAX: 505.566.3584

#### Administration

Faith Eldridge, MSW, Program & Field Coordinator

Craig Stern, MSW,

# **Bachelor of Social Work Program (BSW)**

The bachelor of social work prepares generalist social work practitioners with the knowledge, skills, values and ethical principles necessary to practice with Hispanic, American Indian, and other diverse populations of New Mexico and the Southwest.

The curriculum builds upon a liberal arts perspective and prepares students at a generalist level to understand and evaluate the role of the social work practitioner in the delivery of human services.

The program is a 52-credit unit major, completed in four full-time semesters. Students majoring in social work are not required to complete a minor program of study. Core-curriculum and general elective courses may be taken at other two-year or four-year accredited educational institutions and may be accepted for transfer credit with the approval of the students academic adviser. The BSW program is accredited by the Council on Social Work Education (CSWE). The School of Social Work has been recognized by North Central Accreditation as an Academic School of Excellence.

Course sequencing is subject to change depending on program needs. For current information concerning course sequencing and major requirements, please contact the School of Social Work.

#### Advisement

A faculty adviser is assigned to students at the time they declare their intent to major in social work. Students may enroll for the major courses following the completion of the university's lower-division course requirements or are within nine to 12 credit hours of completion of the core requirements. Although most students complete the BSW program within two years of their undergraduate education, it is the responsibility of the student, with the assistance of an academic adviser, to develop a program of study that details the semesters in which individual courses are to be taken.

#### Academic and Behavioral Expectations

All social work students are provided with a copy of the school's academic and behavioral policy at the commencement of the academic year. The policy outlines expectations regarding students' professional behavior and academic performance, sets forth grounds for suspension and expulsion from the social

work program, and describes the procedures for disciplinary action. As more specifically detailed in the policy, students must demonstrate suitability for the profession of social work via appropriate and adequate classroom and field performance, ability to appropriately relate to colleagues and compliance with all other provisions of the academic/behavioral policy. Students must demonstrate that they have read and understand this policy by signing it and returning it to their academic advisers. The School's policy concerning grade appeals is also provided to students at the commencement of the academic year.

#### **Code of Ethics**

All students in social work are required to have knowledge of, and adhere to, the Social Work Code of Ethics.

#### **Transfer of Credit**

Transfer of credit for social work courses will not be considered unless courses have been completed at another school of social work accredited by the Council of Social Work Education (CSWE). Courses must have been completed within five years from the date of enrollment.

# **Incomplete Grades**

Incomplete grades in prerequisite courses must be completed prior to registering for the following semester. Students will not be permitted to continue until the incomplete is removed from the official transcript.

# **Associate of Arts or Science Degree**

Any student with an associate of arts degree may present an academic transcript to be considered for course credit transfer. Upon verification that the AA academic transcript demonstrates completion of course work equivalent to the required university proficiency and core curriculum requirements, the AA degree will be accepted for transfer and the student will be given credit toward completion of the BSW degree. A minimum of 128 hours are needed to complete a bachelor's degree; this includes completion of the university core and 52 credits of social work courses.

The transfer courses will be evaluated on a course-by-course basis to determine whether they meet the general core requirements. Students transferring from a regionally accredited institution of higher education with an earned associate degree will have New Mexico Highlands University proficiency, extended core, and minor requirements waived. Students are encouraged to complete the AA or AS degree and the 35-hour common core and program prerequisites during their freshman and sophomore years to ensure completion of the bachelor's degree within two additional years.

# Field Practicum

BSW students are required to complete 448 hours of field practicum during their senior year, either in a concurrent or a block placement. Students in field practicum must complete all university core requirements and all 300-level (junior standing) courses prior to enrolling in field practicum. All practicum placements require the approval of the director/coordinator of field education.

Students are placed with the same community agency for two days, 16 hours per week, for two consecutive semesters. BSW students enrolled in concurrent practicum placement must also register for one field practicum seminar course each semester.

Block field practicum placements are only offered during the summer semester. Students must complete all required social work courses prior to beginning block placement/practicum. Students enrolled in a block field practicum placement are placed with a community agency for five days, 40 hours per week, for approximately 12 weeks. BSW students must enroll in two field seminars and two field practicum courses the summer they are in block practicum.

#### **Student Stipends**

The School of Social Work, in partnership with the Children, Youth, and Families Department (CYFD), offers stipends to students who wish to pursue a career in child welfare under the Title IV-E stipend program. All undergraduate senior level students are eligible to apply for the stipends. Students must conduct their field practicum with a CYFD office for one academic year.

Stipend recipients are required to take the SW 400 Children's Services course. The average stipend

amount awarded to students is \$10,000 per academic year. The amount of the stipend award is subject to change.

Upon completion of the BSW program, stipend recipients must work for CYFD for a period of 18 months for each academic year a stipend is received. Stipend application information is provided to all students during the second semester of the junior year.

#### **Student Association**

Students are encouraged to participate in the Undergraduate Social Work Student Association and other university student associations.

#### **Student Responsibilities**

Students are responsible for knowing and following the correct procedures and for meeting the conditions established for their academic programs. This includes completion of all university and school course requirements.

# **Grade Point Average**

A grade point average of 2.5 is required for admission to the bachelor of social work major program. Additionally, the student must maintain at least a 2.5 GPA to continue in and complete the program.

# Application and Admissions Process for Entrance to the Social Work Major

Students majoring in social work must declare their major during their sophomore year. Students interested in pursuing a BSW degree at New Mexico Highlands University must:

- Apply for admission to Highlands University (this applies to students who have not previously attended Highlands).
  - Have a minimum of a 2.5 GPA.
  - Complete lower-division coursework that meets the university proficiency and liberal arts requirements.
  - Complete a Declaration of Intent form with the School of Social Work.

A minimum of 128 hours are needed to complete a bachelor's degree. This includes completion of 40 hours of the university core and 52 credit hours of social work courses. A student may have to take additional elective courses to meet the 128 hour requirement to complete the required university and school course requirements.

# **Bachelor of University Studies**

Office of Academic Affairs Rodgers Hall, Room 105 505.454.3311

#### Mission Statement

The bachelor of arts in university studies is a comprehensive degree that provides a focused undergraduate education without a catalog-defined program of study. The degree is intended for students whose academic path has resulted in a collection of coursework which does not align with a traditional major. With careful planning and curriculum guidance, students will build individualized 60+ credit programs of study in which they investigate novel combinations of coursework.

The degree program has two tracks. Track I is intended for students who have been away from school for more than two years but wish to return to Highlands University to complete their degree. Students can enter credits from military training, or other standardized training that gives students college credit. Students fulfilling Track I requirements can follow either Option I (one 30-credit primary concentration area and two 15-credit secondary study areas) or Option II (three 20-credit study areas). Track II is intended for any Highlands full-time student with more than 60 credit hours or an associate degree from an accredited institution. Students fulfilling Track II are required to define three 20-credit study areas. The remaining upper-division elective coursework will be for the students to choose as they develop their program of study.

# **ADMINISTRATION**

# Administration

James Fries Ph.D.	President
Gilbert Rivera, Ph.D.	Vice President for Academic Affairs
Linda LaGrange, Ph.D.	Associate Vice President for Academic Affairs
Lawrence Trujillo	Associate Vice President for Finance and Administration
Fidel Trujillo, Ph.D.	Dean of Student Affairs

#### Deans:

Roy Lujan, Ph.D.	Dean, College of Arts and Sciences
Margaret Young, Ph.D.	Dean, School of Business Administration
Michael Anderson, Ph.D.	Dean, School of Education
Alfredo Garcia, Ph.D.	Dean, School of Social Work

# **Administrative Support:**

Administrative Support:	
Ruben Aragon	
	Director of Institutional Technological Services
Donna Castro	
Ernestine Clayton	Director of International Education
John Coca	Registrar/Director of Admissions
Joann Lucero-Sisneros	Director of NMHU Center in Partnership w/SJC
Marisol Greene	Director of Facilities Management
Margaret Gonzales	
Gil Gonzalez	Director of Recruitment
Nesbit Hagood	Comptroller
Jean Hill, Ph.D.	Director of Institutional Effectiveness
David Luna	
Jim Mandarino	Director of Alumni Affairs/Foundation Devel Officer
Ed Manzanares	Director of Athletics
Stephen Martinez, Ph.D.	Director of NMHU Center in Partnership with SFCC
Thomasinia Ortiz-Gallegos	
Evonne Roybal-Tafoya	Director of Educational Outreach Services
Michael Saavedra	Director of Purchasing
Roland Salas	
William Sayre, Ph.D.	Director of NMHU Center at Rio Rancho
Eileen Sedillo	Director of Financial Assistance/Scholarships
Donato Sena	Chief of Campus Security
Sean Weaver	Director of University Relations
Yvette Wilkes	Director of Student Housing

# **Faculty**

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Djuro G. Zrilic. B.S., University of Banja; M.S., University of Ljubljana; Ph.D., University of Belgrade. Professor of Engineering.

# **Emeriti**

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John Adams. B.A., Bethany College; M.A., Ph.D., University of Kansas. Professor Emeritus of English.

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Frank Angel. Past President of the University. (deceased)

John Aragon. Past President of the University. (deceased)

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James A. Beatson. (deceased)

Waldemere Bejnar. B.S., M.A., University of Michigan; Ph.D., University of Arizona. Professor Emeritus of Earth Science.

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Ronald Clark. Ph.D., University of California at Riverside, Emeritus Professor of Chemistry.

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John A. Donnelly. (deceased)

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Jose-Pablo Garcia.(deseased)

Lillian H. Gleason. (deceased)

Grady Greene. B.S.E., University of Arkansas; M.S., Kansas State University; Ed.D.,

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Donald G. Guerin. (deceased).

Albert Gutierrez. B.A., M.A., New Mexico Highlands University. Assistant Professor Emeritus of Business.

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Melvin Hill. (deceased)

Stanley J. Hipwood. (deceased)

Fred A. Hopper. (deceased)

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John Spencer Johnson. (deceased)

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William H. Knell. (deceased)

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# **Academic Calendar**

Academic Year	2011-2012	2012-2013
Fall Semester	2011	2012
**Early Registration	M-April 4- Sunday Aug 21	M-April 2- Sunday Aug 19
Classes Begin	M-Aug 22	M-Aug 20
Last Day to Register	M-Aug 29	M-Aug 27
Last Day to Drop	F-Sept 2	F-Aug 31
Labor Day Holiday	M-Sept 5	M-Sept 3
Census	F-Sept 9	F-Sept 7
Midterm Exams	W-F Oct 12-14	W-Sat Oct 10-13
Fall Break	M-T Oct 17-18	M-T Oct 15-16
*Last day to Withdraw	F-0ct 28	F-Oct 26
Fall Recess	W-F Nov 23-25	W-Sat Nov 21-24
Final Exams	M-F Dec 12-16	M-F Dec 10-14
Semester Ends	M-Dec 19	M-Dec 17
Spring Semester	2012	2013
**Early Registration	M-Nov 7 -Sunday Jan 15	M-Nov 5 -Sunday Jan 13
MLK Holiday	M-Jan 16	M-Jan 21
Classes Begin	M-Jan 17	M-Jan 14
Last Day to Register	M-Jan 23	T-Jan 22
Last Day to Drop	F-Jan 27	F-Jan 25
Census	F-Feb 3	F-Feb 1
Midterm Exam	W-F Mar 7-9	W-Sat Mar 6-9
Spring Break	M-F Mar 12-16	M-Sat Mar 11-16
*Last Day to Withdraw	F-Mar 23	F- Mar 22
Spring Recess	F-April 6	F-Sat Mar 29-30
Final Exams	M-F May 7-11	M-F May 6-10
Commencement	Saturday-May 12	Saturday-May 11
Semester Ends	M-May 14	M-May 13
Summer Session	2012	2013
**Early Registration	M-March 5- June 3	M-March 4- June 2
Classes Begin	M-June 4	M-June 3
Last Day to Register	F-June 8	F-June 7
Last Day to Drop	F-June 8	F-June 7
*Last Day to Withdraw	F-June 22	F-June 21
Independence Day Holiday	Wednesday-July 4	Thursday-July 4
Final Exams	W-Th July 26-27	W-Th July 24-25
Semester Ends	M-July 30	M-July 29