College of Arts and Sciences, Ortega Hall 201
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Vera Norwood, Interim Dean

Introduction

The College of Arts and Sciences offers bachelor of arts and bachelor of science degrees in a variety of subjects that relate to humanity’s cultural, social and scientific achievements. Although the fields of study offered by the departments in the College underlie the more specialized work of graduate and professional schools, most of the degree programs are not designed as vocational ends, but rather as the means for understanding society’s condition, achievements and problems. Students obtaining a degree from Arts and Sciences should have a broad understanding of the world in which they live and should be able to think logically and express themselves clearly. Consequently, the College requires preparation based on the offerings of several departments.

Admission Requirements

Freshman and new transfer students who intend to major in the College of Arts and Sciences must visit the College Advisement Center before registering for classes. The Center is located in Ortega 251. Appointments are available Monday through Thursday from 8:00 a.m.–4:30 p.m. Walk-ins are available on Friday. Late hours may be available, please call 277-4621 for more information.

Transfer from Other Units Within the University

Minimum Requirements:
1. A minimum of 26 hours; 23 must be in courses acceptable toward graduation.
2. A cumulative grade point average of at least 2.00 on all work attempted.
3. Demonstrated competence in the writing of English as evidenced by one of the following:
   a. Completion of ENGL 102 with a grade of C (2.00) or higher.
   b. A score of 29 or better on the English portion of the SAT.
   c. A score of 650 or better on the verbal portion of the SAT.
   d. Credit for ENGL 102 through CEEB advanced placement program.
   e. Acceptance of a writing proficiency portfolio (procedures available through the Department of English).
4. Students must declare a major and be accepted by that department prior to admission into the college.
5. Non-degree students apply to the Office of Admissions.

Transfer from Accredited Universities

1. A cumulative grade point average of at least 2.00 on all work attempted.
2. A minimum of 26 hours; 23 must be in courses acceptable to Arts and Sciences.
3. Demonstrated competence in the writing of English (see above).

CLEP

Unless the University of New Mexico course equivalent is specified, the College of Arts and Sciences accepts credit earned through the general CLEP and the ACT only as elective credit, not as credit toward fulfillment of major, minor or group requirements. Subject CLEP may be used to fulfill group requirements and toward elective credit but not for major or minor requirements.

Graduation Requirements

A degree from the College of Arts and Sciences is designed to give students a relatively broad background while allowing concentrated study in two disciplines. This is accomplished through group requirements, the selection of a major and minor, and the opportunity to select electives. Students formally declare a major and minor when they enter the College. They must file a degree application (available from the College office) upon completion of 90 hours. A list of courses required for graduation is then sent to the student. The student is solely responsible for being familiar with and completing all graduation requirements.

A degree from the College of Arts and Sciences is awarded upon completion or accomplishment of the following:
1. A minimum of 96 hours of courses taught by Arts and Sciences departments. Exceptions are allowed for majors in family studies (88 hours) and art (92 hours). Effective Fall 1997, 18 hours of honors courses count for Arts and Sciences credit.
2. A total of 128 acceptable hours.
3. A grade point average of at least 2.00 as defined in the General Academic Regulations section of the catalog.
4. Forty-two hours of upper-division course work (courses numbered 300 or 400) with a minimum grade point average of 2.00 on all upper-division hours accepted by the College. The College of Arts and Sciences does not accept in fulfillment of the upper-division requirement any lower-division course work transferred to the University of New Mexico as the equivalent of an upper-division course. While a particular topic may be adequately covered in such a lower-division course as to be considered acceptable for fulfillment of major or minor course requirement from a disciplinary content viewpoint, it does not meet the upper-division requirement, as upper-division courses are taught assuming a degree of maturity and sophistication on the Junior/Senior level. In other words, lower-division courses accepted by substitution approval at a departmental level DO NOT constitute substitution for the 42-hour upper-division requirement.
5. A major and minor or a double major, or one of the special curricula of the College (see approved programs listed below). At least one of which must be housed within the College of Arts and Sciences.
6. The University of New Mexico Core Curriculum, as described below.
7. Arts and Sciences (A&S) College Group Requirements as described below.
8. Demonstration of competence in the writing of English as described above.
9. One semester/session of resident enrollment subsequent to admission to the College of Arts & Sciences with a minimum of 6 semester hours taught by Arts & Sciences departments.
10. Students must comply with University requirements for a Bachelor’s Degree as outlined in the Student Services section of this catalog. Students who have not been in continuous attendance must follow the current catalog requirements upon re-enrollment. Existing degree summaries may have to be modified in accordance with new University Core Curriculum requirements and A&S Group alignments (see sections below: Core Curriculum and A&S Groups).
11. All paperwork and requirements documenting transfer equivalencies, grade changes, removals of incomplete, substitutions and/or waivers awarded at the departmental or college level must be filed in the College.
Advisement Center by the last day of classes in the semester of graduation. Procedures for petition are available in the A&S Advisement Center.

12. Students in the College of Arts & Sciences receive PROGRESS reports detailing their status with respect to University and college requirements, as well as those in the major and minor areas of study. This automated degree-audit is intended to aid students in planning their academic program but will not reflect waivers and substitutions granted until paperwork filed with the College office is processed by the Office of the Registrar. Certification of completion of degree requirements is solely the responsibility of the College.

University Core Curriculum

New University requirements are applicable to students starting at the University of New Mexico beginning Fall 1999, including readmitted students and transfers to the University of New Mexico. The University of New Mexico Core Curriculum reflects the values of the University and its faculty toward the value of a liberal arts education: students graduating from the University of New Mexico should have developed common skills and abilities based on shared experiences regardless of their particular degree programs. These skills and abilities include 1) a high level of ability in written expression and communication; 2) mathematical literacy—that is, the capacity to understand and utilize mathematics in the modern world; 3) the essential concepts in the physical and natural sciences and appreciation for the natural environment and methods of evaluating it; 4) an understanding of the social and behavioral sciences and an elemental understanding of the human environment; and 5) an appreciation of cultural values, creative expression and the history and experience of human society through courses in the humanities, fine arts and languages. Specific courses (listed below) will fulfill the University of New Mexico Core in seven subject areas delineated below. For updated information regarding courses acceptable in fulfillment of the University of New Mexico Core Curriculum, see A&S Advisement Center. Note that these requirements in many cases automatically fulfill the A&S Group requirements in the same designated subject areas (described further below). Students should be familiar with BOTH the University of New Mexico Core and A&S Group Requirements in order to minimize the number of credit hours taken to satisfy both sets of requirements. A grade of C (not C-) is required in all courses used to fulfill the requirements of the Core Curriculum.

The University of New Mexico Core Curriculum, revised as of Fall 2003, is as follows:

Writing and Speaking (9 hours): English 101 and 102 plus an additional course chosen from English 219, 220; Communication and Journalism 130; Philosophy 156.

Mathematics: One course chosen from MATH 121, 129, 150, 162, 163, 180, 181, 215, STAT 145.

Physical and Natural Sciences: Two courses, one of which must include a laboratory, chosen from Anthropology 150 and 151L, 121L (lab required), 160 and 161L; Astronomy 101 and 101L; Biology 110 and 112L, 123 and 124L; Chemistry 111L (lab required), 121L (lab required) or 131L (lab required), 122L (lab required) or 132L (lab required); Earth and Planetary Sciences 101 and 102L; Geography 101 and 105L; Natural Sciences 261L (lab required), 262L (lab required), 263L (lab required); Physics 102 and 102L, 105, 151 and 151L, 152 and 152L, 160 and 160L, 161 and 161L.

Social and Behavioral Sciences (minimum 6 hours): Two courses chosen from American Studies 182, 185; Anthropology 101, 130; Community and Regional Planning 181; Economics 150, 105; Education-F 105; Environmental Science 101; Fine Arts 284; Media Arts 210; Music 139, 140; Theatre 122.

Humanities (6 hours): Two courses chosen from American Studies 198; Classics 107, 204, 205; Comparative Literature and Cultural Studies 223, 224; English 150, 292, 293; Foreign Languages (MLNG) 101; History 101L, 102L, 161, 162; Honors Legacy Seminars at the 100- and 200-level; Philosophy 101, 201, 202; Religious Studies 107, 263, 264.

Foreign Language (non-English language; minimum 3 hours): One course chosen from any of the lower-divi- sion non-English language offerings of the Departments of Linguistics (including Sign Language), Spanish and Portuguese, Foreign Languages and Literatures, and foreign languages in other departments and programs.

Fine Arts (minimum of 3 hours): One course chosen from Architecture 101; Art History 101, 201, 202; Dance 105; Fine Arts 284; Media Arts 210; Music 139, 140; Theatre 122. Students may elect to take one 3-hour studio course offered by the Departments of Art and Art History, Music, Theatre and Dance, and Media Arts to fulfill this requirement.

Group Requirements

The A&S Group Requirements reflect the College’s commitment to a broad liberal arts education. A&S students must exceed the University of New Mexico Core requirements in several of the subject areas. Course selections are from a broader list than applicable to the University of New Mexico Core Curriculum (see below). Beginning in the Fall 1999, students must complete A&S Group requirements in SIX of the following seven categories. All Core Curriculum (UNM CC) requirements in all areas must be completed as detailed above, and these count toward completion of A&S groups of the same subject area. No single course may be applied to more than one group. Because of their inter- and multidisci- plinary nature, students planning to use courses from African American Studies, American Studies, Anthropology, Chicano Studies, University Honors, Geography, Native American Studies or Women Studies to fulfill Group requirements must consult with the A&S Advisement Center regarding applica- bility of the courses toward these requirements. Problems courses (e.g., 490/499) cannot be used to fulfill group requirements.

I. Writing and Speaking: (9 hours total—may include same 9 hours as UNM CC): From English writing, Communication and Journalism, or Philosophy 156.

II. Mathematics (6 hours total—may include 3 hours from UNM CC): See Math restrictions (page 230). MATH 111, 112, 120 or 215 may not be used to satisfy any portion of the 6 hour total.

III. Physical and Natural Sciences (10 hours total, including laboratory—may include 7 hours and laboratory from UNM CC): From Astronomy, Biology, Chemistry, Earth & Planetary Sciences or Physics. Selected Anthropology or Geography courses may apply (see current listings in A&S Advisement Center.) Not more than 7 hours from any one area.

IV. Social & Behavioral Sciences (12 hours total—may include 6 hours from UNM CC): From Economics, Linguistics, Political Science (except 250, 291, 478 or 499), Psychology or Sociology (except 338, 381, 481L, 478, 490 or 499). Selected African American Studies, American Studies, Anthropology, Chicano Studies, Geography, Native American Studies or Women Studies courses may apply (see current listings in A&S Advisement Center). Not more than 6 hours from any one area.

V. Humanities (9 hours total—may include 6 hours from UNM CC): Not more than 6 hours from any one area in literature, (including English, American, foreign and comparative literature), History, Philosophy (except 156), Religious Studies (except 333, 422 and 430). Selected African American Studies, American Studies, Chicano Studies, Native American Studies or Women Studies courses may apply (see current listings in A&S Advisement Center).

VI. Second Language (4th semester or equivalent; 3 hours minimum–UNM CC; hours may not satisfy this requirement if courses selected are from lower than 4th semester equivalent): As many hours as needed to complete the fourth semester of a non-English language. Fulfillment may be met through testing. Students with proficiency in a foreign language, (for example, any student who uses English as a second language) should consult with the department offering that language or the A&S Advisement Center for advisement, placement and/or testing.

VII. Fine Arts (6 hours total–may include 3 hours from UNM CC): Acceptable are selected courses in the history, appreciation and criticism of art, architecture, music, theatre and dance. Selected African American Studies, American Studies, Anthropology, Chicano Studies, Native American Studies or Women Studies courses may apply (see current listings in A&S Advisement Center). Three hours of studio OR performance art may apply.

Any transfer work to be applied toward a University of New Mexico Core or A&S Group requirement must be approved by an A&S Senior Academic Advisor. Courses in University Honors or Undergraduate Seminar programs may, with Dean’s approval, be counted toward selected group requirements on a case-by-case basis. No courses with the introductory Studies designation may be applied to any of the Core or A&S Group requirement.

Additional Information

Major and Minor Studies. Upon entering the College, students shall formally declare 1) a major and a minor; or 2) two majors; or 3) one of the special curricula of the College. After declaring these, the program of studies must meet the approval of the chairpersons of the major and minor departments or the supervisor of the special curriculum. Students may not elect both a major and a minor outside the College of Arts and Sciences. Half of the major must be completed at the University of New Mexico. A quarter of the minor must be completed at the University of New Mexico.

Only work of C (2.00) quality or better is accepted for the major and minor. Pass/Fail (CR/NC) grades are not accepted in the major or minor unless they are courses specifically carrying only pass/fail (CR/NC) grades. No more than 24 pass/fail (CR/NC) credit hours are acceptable toward a degree over and above the specifically designated CR courses.

NOTE: Some departments may have major requirements for grades which vary from the College’s established policies. For information contact the Arts and Sciences Advisement Center or the major department.

Grades of C- and D are not acceptable in the major or minor (unless otherwise stated by the department) but may be used for group requirements or as elective hours counting toward the 128 required for graduation. Only grades of C or better are accepted for core curriculum requirements.

The same courses may not be used to fulfill both major and minor requirements. If the same course(s) are required for both major and minor or for both majors in the case of double majors, an equivalent number of approved hours shall be added to the total combined hours required. Contact the College Advisement Center for further information.

Dual Degree in the College of Arts and Sciences. The college of arts & sciences allows students to have two majors in lieu of or in conjunction with a minor. Only one degree is awarded but the transcript will indicate both majors. Because there is one degree being earned, degree requirements must be completed only once. Students must choose which major will determine degree designation (B.A. vs B.S.).

Adding Majors or Raising Minors. Students who already have a B.A. or B.S. degree from Arts & Sciences and who are not enrolled in a graduate or professional program may complete the requirements for another major or raise a previously earned minor to a second major. Requirements must be complete within five years of the original degree awarded. These students must apply for admissions to the college of Arts & Sciences, declare the appropriate major on the application, and register as a senior. This provision is limited to the applicability of previous course work to the most current catalog major requirements.

Cooperative Education Program. The College of Arts and Sciences offers a cooperative education program (Co-op) for students majoring in some departments in the College. The Co-op curriculum is a work-study program which alternates a semester or year of full-time academic study with a semester or year of full-time employment. Co-op students gain employment experience in major subject-related areas, which provides career guidance and makes their academic study
more meaningful. Also, Co-op students earn a substantial part of their educational expenses.

Students who are interested in the Co-op Program should contact the Co-op Director soon after being admitted to the University. Co-op students normally must finish the first semester of the freshman year with at least a 2.50 grade average before beginning interviews for a Co-op job. Thus, Co-op students normally begin their first work phase after the end of the freshman year at the earliest. To be eligible for Co-op a student must be enrolled in a degree-granting college.

While on each work phase, Co-op students must register in a special Arts and Sciences course, Cooperative Education Work Phase, and pay a registration fee. This registration maintains the student's academic status, including eligibility for dormitories, activity cards, library privileges and insurance. After completing each work phase, Co-op students who wish to earn credit may enroll in a course, Evaluation of Co-op Work Phase, for 1–3 credit hours. A maximum of 6 hours of academic credit earned from Co-op evaluation courses may be counted as elective credit toward the degree but not toward the major, minor or group requirements.

Courses for Which Degree Credit is Not Given. The College of Arts and Sciences does not accept any courses which are by nature remedial, tutorial, skills or preparatory. Examples include: any course numbered 100 and such courses as Women Studies 181.

Except as noted below, the College does not accept: practicum or activity courses such as typing, PE, dance or shop work; courses that are primarily technical or vocational, such as courses in Radiography, Business Technology Programs, Medical and Biomedical Technology, etc.; courses oriented toward professional practice, such as those taught by Nursing, Pharmacy, Elementary Education, Health Promotion, Health Education, Physical Ed, Professional PE, Art Ed, Music Ed and Leisure Programs, etc.; or any course with a "T" suffix; courses taken in a law or medical school. Students may enroll in these courses in pursuit of their own interests but should not expect degree credits for them.

Exceptions
Credit will be given toward a degree:
1. for ensemble music or dance, up to 4 hours, separately or in combination. Declared dance minors may exceed the 4-hour limit in dance only to the extent required by the Theatre and Dance Department.
2. for courses in methods of high school teaching, provided these courses are required for certification in a single or composite field, up to 12 hours. Secondary Education minors may exceed the 12-hour limit to the extent required for this minor.
3. for Undergraduate Seminar Program courses that are approved for credit by the College of Arts and Sciences, up to 4 hours.
4. for nonprofessional PE activity courses, up to 4 hours.
5. for 24 hours of Family Studies courses for Psychology, Criminology and Sociology majors with a minor in Human Services.

Honors

Dean's List
At the end of each Fall and Spring semester, the College of Arts & Sciences compiles the College Honor Roll (Dean's List) of students who have achieved outstanding academic success in that semester. To qualify, students must be enrolled in the College, have earned a semester grade point average of at least 3.75 for at least 12 graded credit hours in that semester, and have a cumulative grade point average of at least 3.25. Qualifying courses must be graded (not CR/NC). The Dean's List is compiled after all grades for the semester are reported, and students are notified via email. Students may request a hard copy through the Arts and Sciences Advisement Center.

Departmental Honors
Students are urged to consult with their major departments about the availability and requirements of departmental honors programs.

Probation, Suspension, Dismissal
Students enrolled in the College of Arts and Sciences are placed on probation at the end of any semester in which the cumulative grade point average on the University of New Mexico work falls below 2.00.

Students on probation are liable for suspension at the end of any semester in which the cumulative grade point average does not rise to 2.00 or better.

Students placed on probation may be continued on probation if they substantially raise the cumulative grade point average and are making reasonable progress in meeting Arts and Sciences course requirements. "Substantially raise the cumulative grade point average..." is defined as earning a semester grade point average of at least 2.5. "Reasonable progress..." is defined as at least one-half of the student's course load being in courses offered by Arts and Sciences departments (exclusive of Introductory Studies courses) and courses taught by departments outside Arts and Sciences which apply towards the student's major, minor or group requirements. If these conditions are not met, the student is suspended from the University of New Mexico.

The first suspension is one semester. The second suspension is one year. The third suspension is five years. While suspended, students may take correspondence courses through the University of New Mexico Continuing Education to raise their grade point average. Students are reminded that a maximum of 30 credit hours of the University of New Mexico correspondence courses may be applied toward a degree.

At the end of the suspension period, a student must apply for readmission to Arts and Sciences with a written petition addressed to the Associate Dean for Student Academic Affairs. All petitions for readmission or revocation of suspension must be received by the Arts and Sciences Advisement Center no later than one week prior to the start of the semester in which the student wishes to return.

Departments or Programs of Instruction
A student may not elect both a major and minor outside the college.

Major in A&S
Minor in A&S
African American Studies (B.A.) African American Studies (B.A.)
American Studies (B.A.) Anthropology (B.A. or B.S.)
Anthropology (B.A. or B.S.) Asian Studies (B.A.)
Asian Studies (B.A.) Astrophysics (B.S.)
Astrophysics (B.S.) Biochemistry (B.A. or B.S.)
Biochemistry (B.A. or B.S.) Biology (B.A. or B.S.)
Biology (B.A. or B.S.) Chemistry (B.A. or B.S.)
Chemistry (B.A. or B.S.) Classical Studies (B.A.)
Classical Studies (B.A.) Communication (B.A.)
Communication (B.A.) Comparative Literature (B.A.)
Comparative Literature (B.A.) Comparative Literature (B.A.)
Comparative Literature (B.A.) Criminology (B.A.)
Criminology (B.A.) Earth and Planetary Sciences (B.A. or B.S.)
Earth and Planetary Sciences (B.A. or B.S.) Economics (B.A.)
Economics (B.A.) Economics-Philosophy (B.A.)
Economics-Philosophy (B.A.) English (B.A.)
English (B.A.)

ARTS AND SCIENCES

English-Philosophy (B.A.)
Environmental Science (B.S.)
European Studies (B.A.)
Geography (B.A. or B.S.)
History (B.A.)
Journalism & Mass Communication (B.A.)
Latin American Studies (B.A.)
Languages (B.A.):
  - French
  - German
  - Greek
  - Portuguese
  - Russian
  - Spanish
  - Japanese
  - Latin
Languages (interdisciplinary):
  - Japanese
  - Latin

Philosophy (B.A.)
Physics (B.S.)
Physics & Astrophysics (B.A.)
Political Science (B.A.)
Psychology (B.A. or B.S.)
Religious Studies (B.A.)
Russian Studies (B.A.)
Sign Lang Interp (B.S.)
Science, Technology and Society
Sociology (B.A.)
Speech and Hearing Sciences (B.A.)
Statistics (B.S.)
Women Studies (B.A.)

Other Programs

The majors and minors listed below are not programs in the College of Arts and Sciences. A student may elect to complete either a major or minor, but not both, from the following programs outside the College of Arts and Sciences. (Students should remember that they must have 96 hours in Arts and Sciences.)

Major
  - Art (B.A.)

Minor
  - Art (Studio or History)
  - Chicano Hispano
  - Community and Regional Planning
  - Computer Science
  - Dance
  - Electrical and Computer Engineering (for mathematics and physics majors only)
  - Family Studies
  - Fine Arts
  - Human Services (for Psychology, Criminology and Sociology majors only)
  - Library Science
  - Management
  - Mechanical Engineering (for mathematics majors only)
  - Media Arts
  - Music
  - Military Science

Pre-professional and Other Curricula

Students are cautioned against assuming that four-year college courses prepare them for professional work. At least one year of specialized graduate work is advisable in many fields, even if not actually required.

Pre-professional advisement is the responsibility of the Arts and Sciences Advisement Center where students will be advised and/or referred to an appropriate faculty advisor.

Law School Admissions

Information on Law School Admissions and on Law Schools may be obtained in the The Official Guide To U.S. Law Schools: Pre-Law Handbook, which may be obtained from: Publications, LSAC/LSAS, Dept. 0, P.O. Box 63, Newtown, PA 18940-0063. See an Arts and Sciences Advisor or visit the Pre-Law Web site at http://www.unm.edu/~pre/law.

Curriculum Preparatory to Medicine

Specific requirements for admission to medical schools in the United States and Canada are included in a volume published by the Association of American Medical Colleges and is titled Medical School Admission Requirements, U.S.A. and Canada. Interested students should consult this volume and see an Arts and Sciences Advisor or visit the Pre-Med Web sites at http://www.unm.edu/~premed and http://www.unm.edu/~artsci/advise/premed.html.

Curriculum Preparatory to Dentistry

Specific requirements for admission to dental schools in the United States and Canada may be obtained by writing to the individual schools. Lists of the schools and their addresses can be obtained by contacting Dental Programs or by writing to the American Dental Association, 211 East Chicago Avenue, Chicago, IL 60611. Students interested in dental school should see an Arts and Sciences Advisor or visit the Pre-Dental Web site at http://www.unm.edu/~artsci/advise/predental.html.

Graduate Program

Programs of graduate study in the various departments and programs of the College of Arts and Sciences lead to the M.A. or M.S. and Ph.D. degrees as follows:

- American Studies
- Anthropology
- Biology
- Chemistry
- Communication and Journalism
- Comparative Literature (M.A. only)
- Earth & Planetary Sciences
- Economics
- English
- French (M.A. only)
- French Studies (Ph.D.)
- Geography (M.A. only)
- German Studies (M.A. only)
- History
- Latin American Studies (M.A., Ph.D.)
- Linguistics
- Mathematics

Major and minor requirements and course descriptions will be found listed by departments.
Optical Science and Engineering (Ph.D. only—see Physics)
Philosophy
Physics
Political Science
Portuguese (M.A. only)
Psychology
Sociology
Spanish (M.A. only)
Spanish and Portuguese (Ph.D.)
Speech-Language Pathology
Statistics

For details on degree requirements, appointment as graduate assistant or research assistant or other details, see listing by department and general information about graduate study. Prospective graduate students are urged to address all inquiries to department chairpersons or directors of programs.

AFRICAN AMERICAN STUDIES

Finnie Coleman, Director, Academic
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Faculty
Mohamed Ali, Ph.D., University of New Mexico
Pamelya Herndon, J.D., University of Texas
Shiame Okunor, Ph.D., The University of New Mexico
Admasu Shunkuri, Ph.D., University of Kansas

Professor Emeritus
Cortez Williams, Ph.D., The University of New Mexico

Affiliated Faculty
Robert Harding, J.D., University of Kentucky
Jonnie Jones, J.D., Georgetown University
Lenton Malry, Ph.D., The University of New Mexico
Patricia Parrham, Ph.D., University of Texas
Howard Ross, Ph.D., Southern Illinois University
Vera Verhoeven, J.D., The University of New Mexico

Introduction

African American Studies is an interdisciplinary major degree-granting program which provides to the University community the African-American perspective to issues relevant to the education of all people, especially African Americans, for the 21st century. Some of the courses are cross-listed with Political Science, Language, Literacy and Sociocultural Studies, American Studies, English, Communication and Journalism and other departments. All the courses may be taken toward a degree, substitutes for required courses with prior approval of the student’s major department, or as electives.

NOTE: The African-American Studies program name will change to Africana Studies, effective Spring 2007.

Bachelor of Arts in African American Studies

The interdisciplinary major in African American Studies approaches the study of the historical, cultural, and intellectual development of people of African descent from a multidisciplinary perspective.

Students are expected to follow a cross-disciplinary program with a strong research skill development emphasis. The B.A. requires 128 hours including completion of the Arts & Sciences distribution, the University of New Mexico Core Curriculum and other requirements of the University of New Mexico. Thirty-nine of the 128 hours must be taken from African American (15 of the 39 must be 300 level and above) distributed as follows:

I. (3 hrs.) Foundational
AFAM 103 Foundations of African-American Studies (required)

II. (3 hrs.) Language
AFAM 101 Swahili I
AFAM 102 Swahili II
AFAM 106 Elementary Arabic I
AFAM 107 Elementary Arabic II
AFAM 206 Intermediate Arabic I
AFAM 207 Intermediate Arabic II

III. (12 hrs.) History
AFAM 284 African-American History I (required)
AFAM 285 African-American History II (required)
AFAM 388 Blacks in Latin American I (required)
AFAM 396 Emancipation and Equality
HIST 474 Slavery and Race Relations

IV. (9 hrs.) Political Science
AFAM 299 Black Leaders in the U.S.
AFAM 309 Blacks in Politics
AFAM 329 Introduction to African Politics (required)
AFAM 333 Black Political Theory (required)

V. (6 hrs.) Feminist Studies
AFAM 250 Black Woman (required)
WMST 234 Her Own Voice: Black Women Writers
WMST 331 Third World Women

VI. (6 hrs.) Literature and Culture
AFAM 251 Black Books I
AFAM 380 African Literature
AFAM 385 The African World
AFAM 381 Black Books II
AFAM 399 Culture and Education

Minor Degree—General

The General Minor requires 24 hours of African American Studies courses which include AFAM 101, 103, 284, 299 or 309 and 12 hours of 300 level or above courses of which not more than 3 hours may be earned through independent study or problem courses. Substitution of courses from other disciplines is possible with prior departmental approval.

Plan A

101 Swahili I 3
103 Foundation of African-American Studies 3
284 African-American History I 3
299 Black Leaders in the U.S. 3

Symbols, page 611.
AFRICAN-AMERICAN STUDIES

Minor Degree—Specialized

The Specialized option requires 24 hours and must have emphasis in economics, anthropology, history or other disciplines offering adequate relevant courses. Students are required to take 12 hours of AFAM courses and the remaining 12 hours to be taken from the department of emphasis. A minimum of 6 of the 12 hours from each of the two departments must be 300 level or above. AFAM 284 and 285 are required for this option.

Plan B

284 African-American History I 3
285 African-American History II 3
300 & above electives (AFAM) 6
300 & above electives (concentration) 6
Concentrations: history, economics, anthropology, psychology, political science, sociology, etc. (300 and above) 6

Total 24

Plan C (Arts and Sciences majors only)

The African American Studies minor requires 24 hours, 15 hours of core courses and 9 hours of electives in the College of Arts & Sciences.

Required Core Courses (15 hours):
1. a. AFAM 284 African-American History I
   b. AFAM 285 African-American History II
2. The following courses must be cross-listed with Arts and Sciences department or be taken as courses in such department
   a. AFAM 329 African Politics (Political Science)
   b. AFAM 333 Black Political Theory (Political Science)
   c. AFAM 397 African-American Literature (English)
   –or–
   AFAM 392 Black Liberation and Religion (English)
   –or–
   ENGL 411 (when topic is appropriate)

Electives (9 hours):
Nine hours of electives must be taken in one of the following departments: Political Science, Economics, Anthropology, History, English. A list of approved courses is on file with the African American Studies department.

The Summer Institute In African American Studies

Director, Shiame Okunor

The institute is jointly sponsored by the African American Studies and the History Department. Institute courses are thematic and cross-listed with many departments enabling each course theme to be addressed through the lenses of multiple disciplines. The Institute’s courses are taught by distinguished visiting professors and augmented by local faculty members.

396. Emancipation and Equality. (3)
The course examines the ending of and aftermath of slavery focusing on Silversmith’s The First Emancipation and also the general emancipation of the Civil War era. (Summer)

*397. Interdisciplinary Topics. (1-3) A

Related Courses

250. Black Woman. (3) Fields
280. Black Experience in the U.S. (3) Williams
285. African-American History II. (3) Williams
297. Interdisciplinary Topics. (3) Parnham
309. Black Politics. (3) Shunkuri
387. Blacks in Latin America I. (3) Williams
391. Problems. (1-3) Okunor
395. Education and Colonial West Africa. (3) Okunor
*397. Interdisciplinary Topics. (1-3) A
399. Culture and Education. (3) Okunor

African-American Experience I and II
These activities are augmented by sponsorship of the following University-community project: Team of Excellence.

Mentorship Program

Coordinators, Dr. Shiame Okunor and Letha Allen

African American Studies answered to the need to demystify college and to prepare minority elementary and high school students for college life by creating The Team of Excellence Mentorship Program. The Program sends mentors and tutors to elementary and high schools in economically distressed neighborhoods to tutor and mentor minority students.

The Goals of the Program:
To Improve:
1. writing and reading skills,
2. math and science competencies,
3. oratory abilities, and to
4. sponsor students in academic competitions.

The Charlie Morrisey Research Hall

Director, Dr. Shiame Okunor

The Charlie Morrisey Research Hall is a repository of documents including photographs, rare books and artifacts documenting the presence of Africans in New Mexico in particular and Southwest in general. Presently, the Hall has more than 1,500 photographs, books and other documents. The CMR Hall also organizes public lectures and panel discussions. These lectures and panels address the presence and contributions of Africans and African-Americans to the Southwest. Periodically, the CMR Hall organizes major exhibitions of its rare photographs and other artifacts. Interested organizations may request rental of the Hall’s traveling exhibitions of The Charlie Morrisey collections of rare photographs and artifacts.

The “African Field History Experience” Project

Faculty:
Admasu Shunkuri, Ph.D
Steve Bishop, Ph.D
Shiame Okunor, Ph.D, Director

The “African Field History Experience” Project was established in 2000. The Project subscribes to the holistic approach to education. Its main goal is to bridge the gap between the intellectual encounter with African American Studies courses and the experiential. Therefore, students participate in a 3 week
African American Studies (AFAM)

101. Swahili I. (3)  Foundation course for all beginning students interested in reading or speaking the language. (Offered upon demand)

102. Swahili II. (3)  Foundation course for all beginning students interested in reading or speaking the language. (Offered upon demand)

103. Foundation of African-American Studies. (3)  Okunor  An exploration of the philosophical basis for the creation and the existence of African-American Studies program. (Fall, Spring)

106. Elementary Arabic I. (3)  Ali  (Also offered as MLNG 106.) A course in elementary modern standard Arabic.

107. Elementary Arabic II. (3)  Ali  (Also offered as MLNG 107.) A course for those with very minimal exposure to modern Arabic Language.

115. Communication Across Cultures. (3)  (Also offered as CJ 115.) An introduction to communication among people from different cultural backgrounds, emphasizing intercultural relations. The class seeks to identify, honor and enhance the strengths of different cultural perspectives.

206. Intermediate Arabic I. (1)  Ali  (Also offered as MLNG 206.) The course covers the writing system, phonology, vocabulary, morphology and syntax structures of the Arabic language. Students will attend language laboratory to enhance their listening, comprehension and pronunciation skills.

207. Intermediate Arabic II. (3)  Ali  (Also offered as MLNG 207.) The course increases student’s reading, writing and speaking skills in Arabic including student’s knowledge of the writing system, the phonology, the vocabulary, the morphology and the syntax structures of the language. Language laboratory requirement is optional.

250. Black Woman. (3)  Fields  (Also offered as WMST 250.) A comprehensive survey of the role the Black woman has played in the society of the United States. Emphasis will be placed on achievements and contributions. (Fall)

251. Black Books I. (3)  Okunor  (Also offered as ENGL 251.) The course introduces students to the African American classics of the slavery era. Daily experiences of the characters in these books become the basis for discussing race, class, gender, revolt, freedom, peace and humanity.

280. Black Experience in the United States. (3)  Okunor, Williams  (Also offered as AMST 280.) A comprehensive survey of the African-American experience in the United States, from pre-European days in Africa to the Civil War, U.S. (Fall)

284. African-American History I. (3)  Williams  (Also offered as HIST 284.) A comprehensive survey of the story of African-Americans from pre-European days in Africa to the Civil War, U.S. (Fall)

285. African-American History II. (3)  Williams  (Also offered as HIST 285.) The course will explore each of the major historical events, Black leaders of those times and their influence on the social and political advancement of African-American from the Civil War to the present. (Spring Restriction: permission of instructor.)

294. Institutional Racism. (3)  Herndon  A study of the pervasive nature and the broad effects of race-influenced institutional decisions; the differences in the legal definition of institutional and individual racism.

297. Interdisciplinary Topics. (1-3)  Special topic courses in specialized areas of African-American Studies. Community Economic Development; Race and American Law; Culture and Personality.


303. Introduction to Black Liberation and Religion. (3)  Okunor  (Also offered as RELG 303.) Students will be introduced to the Black experience, which necessitates the redefinition of God and Jesus Christ in the lives of Black people as the struggle for transcendental and political freedom.

307. Blacks in the U.S. West. (3)  Williams  (Also offered as AMST 351.) A survey of the lives of Blacks in the American West (1528–1918).

309. Black Politics. (3)  Shunkuri  (Also offered as POLS 309.) A study of the history and diverse educational and political maturation processes of elected American officials and functions of the political process. (Fall)

318. Civil Rights Politics and Legislation. (3)  Shunkuri, Verhoeven  (Also offered as POLS 318.) An analysis of the dynamics of the major events, issues and actors in the civil rights movement (and legislations) in view of the theories of U.S. politics. Recommended prerequisite: 103.

329. Introduction to African Politics. (3)  Shunkuri  (Also offered as POLS 329.) An introductory course in the volatile politics in Africa. The various ideologies that underlie political movements and influence African governments will be explored.


381. Black Books II. (3)  Okunor  (Also offered as ENGL 381.) This is the second phase of a three-part journey through the Black experience in search of humanity and peace. The vehicle is post-slavery books written by and about Black people. Issues raised and the characters in the books provide the occasion for in-depth discussion of inhumanity, protests, self definition, race relations, liberalism, etc.

382. Malcolm X. (3)  Okunor  The course allows the many voices of Malcolm X to speak through selected materials on Malcolm X. The materials become vehicles for discussing Malcolm’s and the many social, political and cultural issues the literature raises.

385. The African World. (3)  Shunkuri  An interdisciplinary introduction to the study of Africa; its political and economic geographies; its traditional and new societies; and its politics in global perspectives.
386. Peoples and Cultures of the Circum-Caribbean. (3) Field
(Also offered as ANTH 387.) Outlines the sociocultural transformation of the region since 1492. Emphasis upon cultural legacies of, and resistance to, colonialism, the Afro-Caribbean and Hispanic heritages, and the contemporary trans-nationalization of island identities.

388. Blacks in Latin America I. (3) Williams
A comprehensive analysis of the plight of Black people in Latin America as compared with their experiences in North America, from the 15th to 19th century. (Fall)

391. Problems. (1-3 to a maximum of 12) ∆ Okunor, Shunkun, Williams
[Summer, Fall, Spring]

392. Black Liberation and Religion. (3) Okunor
(Also offered as RELG 392.) Introduction to some traditional western religious schools of thought as a basis for intensive examination of the works of prominent Black liberation theologians.

395. Education and Colonial West Africa. (3) Okunor
A study of European education and its psychological, sociological and cultural impact on traditional African society. (Fall, Spring)

396. Emancipation and Equality. (3) Okunor
The course examines the ending of and aftermath of slavery focusing on Silversmith’s The First Emancipation and also the general emancipation of the Civil War era. (Summer)

400. Black Liberation and Religion. (3) Okunor
(Also offered as RELG 400.) Introduction to some traditional western religious schools of thought as a basis for intensive examination of the works of prominent Black liberation theologians.

401. African-American Religious Traditions. (3)
(Also offered as RELG 401.) This course will examine the bipolarity of religion in African-American history, showing how Black religion in the U.S. has served as an institution both for acculturation and also for self and cultural assertion.

Related Courses

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

LLSS 493. Topics. (1-3, no limit) ∆ Okunor

LLSS 516. Educational Classics. (3) Okunor
This course focuses on influential educational perspectives in Western civilization (i.e., Greek, Judeo-Christian, medieval and enlightenment Europeans) and in other cultures (i.e., Chinese, American Indian or Buddhist). Modern and post-modern thought also is explored.
Prerequisite: 415.

LLSS 518. Comparative Education. (1-3, no limit) ∆ Okunor
This course is designed as an instrument for the study of the history, culture, religion, politics, etc. of people of various nations through the study of their educational systems. (Offered upon demand)

LLSS 615. Contemporary Philosophy of Education. (3) Okunor
Focuses on 20th-century philosophies of education throughout U.S.A., Latin America, China and Europe with an emphasis on critical pedagogy, pragmatism, progressivism, process philosophies and essentialism. (Spring)

AMERICAN STUDIES

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Jake Kosek, Ph.D., University of California at Berkeley
Alex Lubin, Ph.D., University of Minnesota
Rebecca Schreiber, Ph.D., Yale University

Introduction
American Studies is designed for the student interested in the interdisciplinary study of American culture. It encourages flexibility and innovation within a general structure of areas of interest, including but not limited to: Culture Studies (including folklore and material culture); Southwest Studies; History, Science and Technology; Popular Culture; Gender Studies; Race, Class and Ethnicity. The student will work closely with an undergraduate advisor in putting together the major and must receive the advisor’s approval for all course work. Nine hours of courses in American Studies may overlap with Arts and Sciences group requirements.

Undergraduate advisor varies, contact department office.

Major Study Requirements
1. Introductory course (AMST 285 or equivalent) 3
2. Interdepartmental Studies of American Culture: after consultation with American Studies undergraduate advisor choose 30 hours of courses from at least two of the six areas listed below, with no more than 12 hours from any one area. Fifteen hours of this course work must be from courses numbered 300 and above. Of the 30 hours required in this section and the 12 hours required in section 3.a below (a total of 42), 18 must be in American Studies.

History
Literature (English, Foreign Languages and Literatures)

Political, economic and geographical studies
Social and cultural systems (Soc, Anth, Psych)

Arts, Humanities and Communications (Phil, Ling, Fine Arts, C & J, Comp Lit)

Natural History (Biology, Earth and Planetary Sciences, Chemistry)

Symbols, page 611.
3. Senior Program: after consultation with faculty advisor, choose 15 hours in courses numbered 300 and above:
a. Twelve interdepartmental hours in courses centering around a particular topic or problem in American culture. Of the 12 hours required in this section and the 30 hours required in 2 above (a total of 42), 18 must be in American Studies.

Total Hours 48

A minor (18–26 hours in another department) is strongly recommended but not required.

Minor Study Requirements

An American Studies minor may be elected by undergraduates majoring in the departments of Anthropology, Art History and Criticism, Economics, English, History, Philosophy, Political Science or Sociology. People having other majors will need the special approval of both their major advisor and the American Studies office.

The minor in American Studies is designed to introduce students to the interdisciplinary study of the culture of the United States. The requirement is 24 hours, including 15 hours in American Studies: 285, 3 hours at any level and 9 hours at the 300 level. Students will take the remaining 9 hours in an integrated program chosen from other departments (Anthropology, Art History and criticism, Economics, English, Geography, History, Political Science, Philosophy, Psychology or Sociology) or American Studies courses. All of these 9 hours must be from courses at the 200 level or above. With proper selection of courses a student may elect a minor in American Studies with an emphasis in African-American, Chicano, Native American or Women Studies. A student may choose to focus his or her minor program on other important themes in American culture, such as the popular arts or ecology in America, or may emphasize the interdisciplinary study of a region or the nation as a whole. All students should consult with their major advisor and the American Studies undergraduate advisor as early as possible to obtain approval of their minor programs.

Major or Minor: Southwest Concentration

The wealth of courses in various departments and colleges at the University of New Mexico dealing with the American Southwest and the Mexican Borderlands supports this concentration. Recognizing the unique contributions of Southwest regional cultural development to the larger United States, the American Studies concentration in Southwest Cultural Studies provides undergraduates and graduates with an interdisciplinary program that is both structured and flexible.

Major Concentration in Southwest Culture Studies includes:

1. Requires American Studies 285, American Life and Thought (3), 186, Introduction to Southwest Studies (3). Courses designed to provide an introduction to interdisciplinary methods and a context for Southwest Studies.
2. Twenty-seven hours of Interdisciplinary Studies of Southwest Culture: In consultation with the American Studies undergraduate advisor, the student will structure a coherent program of nine related courses selected from five general areas: History and Literature, Social and Cultural Systems, Political and Economic Studies, Arts and Humanities and Natural History. The major portion of this course work should center on a particular historical focus (Spanish Colonial, U.S. Territorial, Contemporary Southwest, etc.), ethnic or cultural experience (Chicano Experience, Southwest Native Americans) or specific geographical or environ-

mental studies (The Ecology of Arid Climates, etc.). In all cases, students are encouraged to develop a broad comparative analysis (for example, a U.S. national cultural context or a Latin American context) or an extended chronological emphasis, not simply a concentration on a single narrow topic.
3. Senior Program: After consultation with the American Studies undergraduate advisor, choose (from courses numbered 300 and above):
a. Twelve interdepartmental hours in courses centered around a specific topic or problem in Southwest Cultural Studies. The theme of this final course work generally emerges from the previous broad sampling (section 2 above).
b. American Studies Senior Seminar in U.S. Culture (485): A course in which the interdisciplinary implications of each student’s major topic are explored.

Minor Concentration in Southwest Culture Studies

This minor is designed to introduce students to the interdisciplinary study of the culture of the Southwest. Within the concentration, students may study the broad issue of Southwest Culture or focus on a specific area such as Native American Studies, Chicano Studies or cultural ecology. Hours requirements are identical with the minor specified above with the exception that the student must take American Studies 186, Introduction to Southwest Studies, as part of the 15 hours of required American Studies courses.

Departmental Honors

Students seeking departmental honors should apply to the American Studies undergraduate advisor in their junior year. In addition to maintaining a 3.20 overall grade point average, Honors candidates must also successfully complete 3 credit hours of Senior Honors Thesis (499) and the American Studies Senior Seminar in U.S. Culture (485) in their senior year.

Graduate Programs

Graduate Advisor
Varies, contact department office.

Application Deadlines
Annual: February 1.

NOTE: Early application is recommended. No new applications will be accepted after February 1.

Degrees Offered

M.A. in American Studies
Ph.D. in American Studies

The Department of American Studies is committed to the interdisciplinary study of American culture and society as a whole. Besides general courses in American life and thought, six areas of special concentration are offered: culture studies (including folklore and material culture); Southwest studies; environment, science and technology; popular culture; gender studies; race, class and ethnicity. Students consult with department faculty to develop individual, inter-departmental programs of study in the humanities and social sciences that focus on these or other significant aspects of American society and thought.

Symbols, page 611.
Requirements for Graduate Minor in American Studies

The "declared minor" in American Studies is only available for Master’s level students at present. To complete the minor, students must complete 9 hours of 500-level courses (seminars) under Plan I. Under Plan II students need 12 hours of 500-level courses. Under either plan, 1–3 hours of Independent Study with a faculty member in American Studies can count toward the minor. AMST 500 is a restricted course and does not count toward the minor.

American Studies graduate students who wish to do a minor in another department should do so in consultation with their academic advisor and should contact the other department for specific guidelines for the minor. Faculty members in American Studies may opt to waive their right to serve on a committee of studies outside American Studies. Plan I students may take no more than 9 hours of graduate course work in any other single department, and Plan II students may do no more than 15 hours of graduate course work in any other single department.

Admission

The program is offered at the master’s and doctoral levels. The doctorate usually requires a Master of Arts degree in such majors as American Studies, Art History, History, English, Philosophy, Economics, Education, Political Science, Sociology or Anthropology. In making application, candidates are expected to submit a substantive letter of intent with a clear statement of their American Studies research interests and their goals in pursuing such investigations on a graduate level. Only candidates who show purpose and promise and whose research needs can be appropriately met will be admitted by a committee of the department faculty.

Course Requirements

At least 30 hours in residence beyond the M.A. are required for the doctorate; this requirement sometimes extends to 36 hours or even more, depending upon the breadth of the candidate’s background.

Taking into consideration the experience and purposes of each student, individualized programs will be planned to emphasize two major areas of interest with supplementary work in other areas.

The master’s is offered under Plan I (thesis) and Plan II (non-thesis) as described in this catalog. The master’s program in each case requires an interdisciplinary and interdepartmental grouping of courses for the study of American culture. Under Plan II, the student must successfully complete a minimum of 32 hours of graduate work. Plan I (thesis) calls for 24 hours of course work in addition to thesis hours.

All graduate students must take the pro-seminar, American Studies 500 American Culture Study in the first fall semester of their graduate career and at least four other American Studies seminars.

Foreign Language

In addition to the course requirements for the doctorate, the American Studies Department language requirement may be fulfilled either through the various options approved by the Office of Graduate Studies or through satisfactory completion of an alternative methodology option to be determined by the student in consultation with the student’s committee on studies and the chairperson of the department.

Examinations

Students are expected to form a committee on studies after completing 12 hours of graduate credit. Decisions about course work and its distribution, the foreign language to be presented and any special problems related to the proposed area of concentration will be reached in consultation between the candidate and the committee on studies. All graduate students are required to take two exams. The first is the American Culture Study (ACS) exam, taken one year after entry into the program and based on the required pro-seminar and the ACS reading list. The second is taken after completion of course work. It is a written comprehensive examination, the primary purpose of which will be to ascertain the candidate’s ability at synthesizing the subject matter and various methodologies covered during his or her time in the program. Detailed guidelines for the comprehensive examination are available through the department.

Dissertation

The dissertation will concern itself with at least two disciplines in a specific area of American life and usually with more than two.

American Studies (AMST)

General Courses

200. Topics in American Studies. (3 to a maximum of 6)

The content of this course varies by semester. Topics include: America in the 50s; America in the 60s–70s; the American family; power and culture; schooling in America.

285. American Life and Thought. (3)

Examination of the development of American cultural values and attitudes from the 17th to the early 20th centuries. Demonstrates the use of interdisciplinary modes of inquiry.

385. Theories and Methods of American Studies. (3)

Introduces students to interdisciplinary approaches in the study of American culture, focusing on “Race, Ethnicity, Gender and National Identity;” “Media, Popular Culture, and Cultural Studies;” “Critical Regionalism;” and “Environment, Science and Technology.”

485. Senior Seminar in the Culture of the United States. (3)

An analysis of the value of synthesis in liberal scholarship. Focus will be on cooperative interdisciplinary research. (Spring only)

497. Individual Study. (1-3 to a maximum of 9)

498. Internship. (1-6)

Involves internships in off-campus learning experiences related to the study of American and regional culture and character, such as work in local communities and with relevant institutions.

499. Honors Thesis. (3)

Development and writing of senior honors thesis under supervision of faculty advisor. Prerequisite: 285. Restriction: permission of undergraduate director. (Spring)

500. American Culture Study Seminar. (3)

Examines the basic texts and methods in the field of American studies through discussion and critical/analytical writing assignments. Required for all American Studies graduate students; restricted to graduate students in the department. (Fall)

520. Topics in Environment, Science and Technology. (3 to a maximum of 6)

Graduate study of subjects in Environment, Science and Technology. Content varies by semester and topics include: science/technology studies, environmental justice, the environment and political and social development, ecology in America, gender and nature.
597. Individual Study-Master’s Degree. (1-3 to a maximum of 6) ∆

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

600. Research Methods. (3) This seminar reviews: 1) archival and library research; 2) data collection and fieldwork (plus subsequent analysis and presentation of data); 3) processes of hypotheses and theory building; and 4) development of a research proposal. Prerequisite: 500. (Spring)

697. Individual Study. (1-3 to a maximum of 12) ∆ For Ph.D. candidates only.

699. Dissertation. (3-12) Offered on a CR/NC basis only.

Culture Studies

303. Law in the Political Community. (3) (Also offered as POLS 303.) Introduction to the role of law and legal institutions in politics and society. Prerequisite for POLS 315.

308./508. Cultural Autobiography. (3) This course is concerned with meaning, identity and subject formation in the autobiographical text. Readings will focus on contemporary critical theory about autobiography and post-colonial studies. Students will draw on a broad range of personal accounts that result from the construction of race, gender, class and ethnicity in the United States past and present.

309./509. Topics in Social Movements. (3 to a maximum of 6) ∆ An interdisciplinary approach to the analysis of social movements, focusing on cultural and social formations of these movements. Topics include: folklore of social movements; labor struggles; peace movements; land conflicts.

310./510. Topics in Culture Studies. (3 to a maximum of 6) ∆ Varying topics undergraduate course. An in-depth study of one subject in the field of interdisciplinary culture studies. Topics may include material culture, folklore, consumerism, public culture, critical theory, cultural identity and language and representation.

311./511. Material Culture in America. (3) (Also offered as MSST 311/511.) This course covers the theory and practice of material culture study as it has been used to define American culture. Course content includes architecture, technology, religious art and artifacts, literary, folk and “fine” arts.

312./512. War and American Culture. (3) Focusing on World War II and the Vietnam War, this course will analyze the “cultural construction” of war in 20th-century America. Topics include ideas of citizenship, gender and race, popular culture, roles of media and government.

510./310. Topics in Culture Studies. (3 to a maximum of 6) ∆ An in-depth study of one subject in the field of interdisciplinary culture studies. Topics may include material culture, folklore, consumerism, public culture, critical theory, cultural identity and postcolonial studies.

511./311. Material Culture in America. (3) (Also offered as MSST 311/511.) This course covers the theory and practice of material culture study as it has been used to define American culture. Course content includes architecture, technology, religious art and artifacts, literary, folk and “fine” arts.

512./312. War and American Culture. (3) Focusing on World War II and the Vietnam War, this course will analyze the “cultural construction” of war in 20th-century America. Topics include ideas of citizenship, gender and race, popular culture, roles of media and government.

513. Theories and Methods of Folklore Study. (3) This course examines key methods and theoretical approaches to the study of folklore, focusing on the artistic and symbolic dimensions of daily life as expressed in oral traditions, folkloric events and material culture.

515./315. Race, Class & Gender in the Culture Industry. (3) This course will focus on 20th century U.S. cultural history and cultural studies. Proceeding chronologically, the course integrates a range of cultural mediums to investigate the construction of social identity.

516. Language and Cultural Representation. (3) An intensive study of various contemporary theories about the intersection of language and culture. Readings focus on the interdisciplinary study of language, drawing especially on postmodern theory.

517./317. Visual Culture. (3) This course will investigate the role of visual experience in everyday life. The assigned works represent a variety of interdisciplinary approaches to American visual culture, including photography, film, television, material culture, and public art.

608./308. Cultural Autobiography. (3) This course is concerned with meaning, identity and subject formation in the autobiographical text. Readings will focus on contemporary critical theory about autobiography and post-colonial studies. Students will draw on a broad range of personal accounts that result from the construction of race, gender, class and ethnicity in the United States past and present.

509./309. Topics in Social Movements. (3 to a maximum of 6) An interdisciplinary approach to the analysis of social movements, focusing on cultural and social formations of these movements. Topics include: folklore of social movements; labor struggles; peace movements; land conflicts.

518. Post-Colonial Theory. (3) This is a graduate-level introduction to the interdisciplinary field of post-colonialism. The readings will cover areas in post-structuralism, post-modernism, semiotics, discourse analysis, textuality, Western Marxism, cultural nationalism, colonialism(s) and imperialism.

519. Topics in Cultural History. (3 to a maximum of 6) ∆ Graduate seminars; content varies. Topics include: democracy, culture and history; American landscapes; history and narrative.

Environment, Science, Technology

182. Introduction to Environment, Science and Technology. (3) An introduction to the socially and politically constructed values directing Americans’ attitudes toward nature, science and
technology and to the impacts of those attitudes on built and natural environments regionally, nationally and globally.

320. Topics in Environment, Science and Technology. (3 to a maximum of 6) \(\Delta\)
The content of this course varies by semester. Topics include: environmental justice, ecology in America, gender and nature, ethics and genetics, automobiles in American culture.

322./523. Environmental Justice. (3)
This course is designed as a multicultural/interdisciplinary approach to the study of environmental justice. Topics include: environmental racism, internal/nuclear colonialism, harmful technologies, industrial pollution and other toxins in communities of color.

324./524. Environmental Conflicts in the U.S. West. (3)
This course covers environmental conflicts in the U.S. West from World War II to the present. Topics include: natural resource debates, impacts of such technologies as dams and nuclear reactors, agricultural conflicts and environmental justice.

523./323. Environmental Justice. (3)
This course is designed as a multicultural/interdisciplinary approach to the study of environmental justice. Topics include: environmental racism, internal/nuclear colonialism, harmful technologies, industrial pollution, and other toxins in communities of color.

524./324. Environmental Conflicts in the U.S. West. (3)
This course covers environmental conflicts in the U.S. West from World War II to the present. Topics include: natural resource debates, impacts of such technologies as dams and nuclear reactors, agricultural conflicts and environmental justice.

525. Environmental Theory and Practice. (3)
This course surveys key methods and model case studies in ecological history, in impacts of technology on the environment and in the role of cultural values and ethics in natural resource policy decisions.

Gender Studies

183. Introduction to Gender Studies. (3)
This course focuses on the interdisciplinary study of the construction of gender as a category. Readings will span cross-cultural and historical materials, including literary, artistic and popular representations of masculinity and femininity in America.

330./530. Topics in Gender Studies. (3 to a maximum of 6) \(\Delta\)
Varying subjects derived from the contemporary cultural studies focus on matters of gender. Topics include: feminist theory; gender and nature; the factor of gender in disciplinary and interdisciplinary studies.

332. Sexuality and Culture. (3)
An introduction to a range of interdisciplinary readings in cultural studies of sexuality. The focus of the course is to inquire into the construction of sexualities and to assess their impact in shaping scholarship and cultural theory.

333./533. [333.] Gender and Tradition. (3)
A study of the connections between gender, the traditions associated with women and men, and the intricate linkages of gender and tradition with systems of power and oppression in various cultures and time periods.

530./330. Topics in Gender Studies. (3 to a maximum of 6) \(\Delta\)
Varying subjects derived from the contemporary cultural studies focus on matters of gender. Topics include: feminist theory; gender and nature; the factor of gender in disciplinary and interdisciplinary studies.

533./333. Gender and Tradition. (3)
A study of the connections between gender, the traditions associated with women and men, and the intricate linkages of gender and tradition with systems of power and oppression in various cultures and time periods.

535. Theories and Methods of Gender Study. (3)
A graduate, introductory course covering major trends in interdisciplinary gender studies. Content may vary by semester, but includes feminist theory, historical constructions of gender and sexuality and emerging studies of masculinity.

536. Masculinities. (3)
Introduction to changing meanings of masculinity in America from World War II through the present. Focus on cultural construction of masculinity and men’s experiences in spheres of work, family, leisure, war and sexuality.

Popular Culture

184. Introduction to American Popular Culture. (3)
Survey of basic concepts of popular culture and methods for its study. Source materials are drawn from diverse areas—television, film, comics, music and sports. May be repeated for credit with permission from AMST undergraduate advisor.

340. Topics in Popular Culture. (3 to a maximum of 6) \(\Delta\)
Content varies by semester. Topics include: popular music, popular culture of the 1960s; sex and gender in popular culture; chicano/a vernacular culture; black popular culture; popular environmentalism.

341./541. Topics in Film. (3 to a maximum of 6) \(\Delta\)
Varying subjects, based in theoretical and/or historical approaches. Topics include: sex and gender in popular film; films of the nuclear age; African-American film; ethnicity in American cinema; film theory.

342./542. Television in American Culture. (3)
This course is an introduction to the history of television as a medium from its origins through the present moment. In the course we will focus on the structure of the television’s role within American society, and television as a site of cultural representation.

540. Topics in Popular Culture. (3 to a maximum of 6) \(\Delta\)
Content varies by semester. Topics include: popular music, popular culture of the 1960s; sex and gender in popular culture; chicano/a vernacular culture; black popular culture; popular environmentalism.

541./341. Topics in Film. (3 to a maximum of 6) \(\Delta\)
Varying subjects, based in theoretical and/or historical approaches. Topics include: sex and gender in popular film; films of the nuclear age; African-American film; ethnicity in American cinema; film theory.

542./342. Television in American Culture. (3)
An examination of television history, genres (sitcom, soap opera, talk-show, news, etc.) and representations of American peoples and culture—aimed at introducing basic critical perspectives on the medium and exploring its sociocultural influences.

545. Theories & Methods of Popular Culture. (3)
Graduate seminar surveying approaches to the study of popular culture and major theoretical debates in the field. Students also work with popular culture texts, including film, television, toys, fashion, music and advertising.

Race, Class and Ethnicity

185. Introduction to Race, Class and Ethnicity. (3)
An interdisciplinary introduction to the issues of race, class and ethnicity in American life and society. (Fall, Spring)
250. The Black Experience in the United States. (3) (Also offered as AFAM 290.) An analysis of the political, economic, religious and familial organization of Black communities in the United States.

251. The Chicano Experience in the United States. (3) Investigation of the historical and social conditions that have shaped the development of Chicano life.

252. The Native American Experience. (3) (Also offered as NAS 252.) Introductory survey of Native American History, culture and contemporary issues. Students read literature by and about Native Americans covering a variety of topics including tribal sovereignty, federal policy, activism, economic development, education and community life.

350/550. Topics in Race, Class, Ethnicity. (3 to a maximum of 6) ∆ Offers specialized topics on an alternating basis dealing with race, class and ethnicity in the formation of American life and society. Subject areas include immigration, class formation, conquest, colonization, public policy and civil rights.

351. Blacks in the U.S. West. (3) (Also offered as AFAM 307.) A survey of the lives of Blacks in the American West (1528–1918).

352/552. Native American Cultural Production. (3) This course examines contemporary Native American cultural production including literature, art and film with an emphasis on historical, political and cultural contexts. Topics may include: definitions of cultural production, sovereignty, colonialism, cultural survival and identity.

353/553. Race Relations in America. (3) An interdisciplinary investigation of the development of race as a set of power relations, lived identities and ideas. Pays particular attention to the relationships of race to work, immigration, gender, culture and intellectual life.

354/554. Social Class and Inequality. (3) This course is an interdisciplinary approach to the study of class formations in society. Topics include: culture, ideology, politics, history, Marxism, Weberian sociology, (post-)structuralism, colonialism, textuality, praxis and deconstruction.

356/556. Topics in Native American Studies. (3 to a maximum of 6) ∆ Topical survey of theoretical approaches, research methodologies and subject areas within the interdisciplinary field of Native American Studies.

357/557. Topics in African-American Studies. (3 to a maximum of 6) ∆ Offers topics addressing African-American social, cultural, political and intellectual life. Topics include: black social movements, African-American intellectual history, black cultural studies, slavery in the Americas.

358/558. Topics in Latino/a Studies. (3) This interdisciplinary topics course examines the fastest growing population in the U.S. and includes Latino intellectual history, political and economic relations, recovery projects, music, film and media representations and environment, community and post-colonial studies.

359/559. Interracialism in America. (3) This course introduces students to historical and contemporary debates about the meaning of interracial romance, marriage and sexuality—and its relationship to definitions of American citizenship and democracy. Through engaged study of primary and secondary, social and cultural forms, students will develop an interdisciplinary understanding of race, gender and sexuality.

362/562. Native American Representation and Resistance. (3) This course will examine popular representations of Native Americans from American literature, film, policy, science and popular culture. Topics include critical and cultural theories of representation and identity and Native resistance and cultural production.

550/350. Topics in Race, Class, Ethnicity. (3 to a maximum of 6) ∆ Offers specialized topics on an alternating basis dealing with race, class and ethnicity in the formation of American life and society. Subject areas include immigration, class formation, conquest, colonization, public policy, and civil rights.

552/352. Native American Cultural Production. (3) This course examines contemporary Native American cultural production including literature, art and film with an emphasis on historical, political and cultural contexts. Topics may include: definitions of cultural production, sovereignty, colonialism, cultural survival and identity.

553/353. Race Relations in America. (3) An interdisciplinary investigation of the development of race as a set of power relations, lived identities and ideas. Pays particular attention to the relationship of race to work, immigration, gender, culture and intellectual life.

554/354. Social Class and Inequality. (3) This course is an interdisciplinary approach to the study of class formations in society. Topics include: culture, ideology, politics, history, Marxism, Weberian sociology, (post-)structuralism, colonialism, textuality, praxis and deconstruction.

555. Theories and Methods of Race, Class, Ethnicity. (3) This course will survey the theoretical and methodological convergence/divergence of race, class and ethnicity. This class is designed as a graduate-multidisciplinary approach to racial, class and ethnic formations, relations, structures, institutions and movements.

556/356. Topics in Native American Studies. (3 to a maximum of 6) ∆ Seminar offering topical survey of theoretical approaches, research methodologies and subject areas within the interdisciplinary field of Native American Studies.

557/357. Topics in African-American Studies. (3 to a maximum of 6) ∆ Offers topics addressing African-American social, cultural, political and intellectual life. Topics include: black social movements, African-American intellectual history, black cultural studies, slavery in the Americas.

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562/362. Native American Representation and Resistance. (3) This course will examine popular representations of Native Americans from American literature, film, policy, science and popular culture. Topics include critical and cultural theories of representation and identity and Native resistance and cultural production.

Southwest Studies

186. Introduction to Southwest Studies. (3) Provides both an introduction to the complex history and culture of the Southwestern United States and a demonstration
of the possibilities of the interdisciplinary study of regional American culture. It is multicultural in its content as it is multidisciplinary in its methodology.

360/560. Topics in SW Studies. (3 to a maximum of 6) ∆ Offers topics dealing with the social, cultural and technologi
cal developments among the people of the Southwest. Topics include folk art and material culture; rural, urban and border communities; traditional healing; travel and tourism; Hispano/Chicanos after 1848.

361. Native American Folklore of the Southwest. (3) An in-depth study of the expressive behavior of Native American peoples of the Southwest with special emphasis on the traditional material culture, music, dance, oral tradition and festivals of Puebloans, Navajos and Apaches.

363/563. Chicano/Latino Film. (3) Covers the Chicano/Latino experience through its depiction on film and from the perspective of Latino filmmaking. The course analyzes film as communication, film narration, symbolism and subjectivity.

364/564. Chicano/a Visual and Narrative Style. (3) Examines the cultural aesthetics of the Chicano/a community through the study of Chicano/a literature, film, art and vernacular culture. Explores the history of the U.S.–Mexico borderlands in autobiography, folklore, film, music, performance art and literature. Employs cultural studies’ theory to analyze genres and other forms of cultural representation. 

486. Senior Seminar in Southwest Studies. (3) Capstone course for majors/minors in the Southwest Studies that synthesizes current scholarship on critical regionalism: borderlands studies, trans-nationalism, indigeneity, immigration and other topics. Students develop research, analysis and writing to produce an original research paper.

560/360. Topics in Southwest Studies. (3 to a maximum of 6) ∆ Offers topics dealing with the social, cultural and technological developments among the people of the Southwest. Topics include folk art and material culture; rural, urban and border communities; traditional healing; travel and tourism; Hispano/Chicanos after 1848.

563/363. Chicano/Latino Film. (3) Covers the Chicano/Latino experience through its depiction on film and from the perspective of Latino filmmaking. The course analyzes film as communication, film narration, symbolism and subjectivity.

564/364. Chicano/a Visual and Narrative Style. (3) Examines the cultural aesthetics of the Chicano/a community through the study of Chicano/a literature, film, art and vernacular culture. Explores the history of the U.S.–Mexico borderlands in autobiography, folklore, film, music, performance art and literature. Employs cultural studies theory to analyze genres and other forms of cultural representation.

565. Politics of Cultural Identity in the Southwest. (3) This seminar examines cultural and ethnic representations in the tri-cultural Southwest. The course includes consideration of works by native and Hispano/Chicano authors who examine and contest the cultural ideal of the Southwest.

ANTHROPOLOGY

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Steven Feld, Ph.D., Indiana University
Kim Hill, Ph.D., University of Utah

Hillard S. Kaplan, Ph.D., University of Utah
Louise A. Lamphere, Ph.D., Harvard University
Jane B. Lancaster, Ph.D., University of California (Berkeley)
Carole Nagengast, Ph.D., University of California (Irvine)
Sylvia Rodriguez, Ph.D., Stanford University
Lawrence G. Strass, Ph.D., University of Chicago
David E. Stuart, Ph.D., University of New Mexico (Part-time)
Marta Weigle, Ph.D., University of Pennsylvania
Wirt H. Willis, Ph.D., University of Michigan

Associate Professors
James L. Boone, Ph.D., State University of New York (Binghamton)
Richard C. Chapman, Ph.D., University of New Mexico (Part-time)
David W. Dinwoodie, Ph.D., University of Chicago
Les W. Field, Ph.D., Duke University
Larry P. Gorbet, Ph.D., University of California (San Diego)
Bruce B. Huckell, Ph.D., University of Arizona, Research
Keith L. Hunley, Ph.D., University of Michigan
Ana Magdalena Hurtado, Ph.D., University of Utah
Ann F. Ramenofsky, Ph.D., University of Washington
Beverly R. Singer, Ph.D., University of New Mexico
Joe E. Watkins, Ph.D., Southern Methodist University

Assistant Professors
Patrick F. Hogan, Ph.D., Washington State (Part-time)
Debra Komar, Ph.D., University of Alberta, Research
Suzanne R. Oakdale, Ph.D., University of Chicago
Osbjorn M. Pearson, Ph.D., SUNY (Stony Brook)

Professors Emeriti
Anita L. Alvarado, Ph.D., University of Arizona
Richard A. Barrett, Ph.D., University of Michigan
Keith H. Basso, Ph.D., Stanford University
Garth L. Bawden, Ph.D., Harvard University
Lewis R. Binford, Ph.D., University of Michigan
Philip K. Bock, Ph.D., Harvard University
John Martin Campbell, Ph.D., Yale University
J. Stanley Rhine, Ph.D., University of Colorado
Karl H. Schwerin, Ph.D., University of California (Los Angeles)
James M. Sebring, Ph.D., University of California (Berkeley)

Introduction

Anthropology is the study of humanity and its works, from the most remote point in human history to the cultural, linguistic and biological diversity of the present. Each of the five concentrations of anthropology contributes to an integrated picture of past and present human variation. By comparing information gathered about different human groups, anthropologists can understand much about why human society is as we find it today and can offer insights into contemporary problems.

Major Study Requirements (36 credits)

All majors are required to complete a general curriculum (18–20 hours) that provides an integrated preparation for study in any of the five anthropological concentrations. This curriculum includes ANTH 101, two of the following concentration core curriculum sequences and one additional 200-400 level elective course in a third concentration.

Courses in the anthropology core curriculum include:

Archaeology:
ANTH 121L Archaeological Method or Theory
–or– ANTH 220 World Archaeology
ANTH 320 Strategy of Archaeology

Biological Anthropology:
ANTH 150 Evolution and Human Emergence
ANTH 350 Human Biology
For a concentration in biological anthropology take:

**Biological Anthropology**

of 36 credits in anthropology.

concentration, plus elective credits to complete the minimum
sequence within anthropology, plus an elective from a third
topic.

three groups (A, B, C) for a total of at least 9 credits:

Students must also take one additional course from each of
three groups (A, B, C) for a total of at least 9 credits:

<table>
<thead>
<tr>
<th>Group A</th>
<th>Technical (ANTH 372, 373, 375, 421, 473L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group B</td>
<td>Europe, Asia, Africa (ANTH 325, 326, 327, 328, 329)</td>
</tr>
<tr>
<td>Group C</td>
<td>North and South America (ANTH 321, 322, 323, 324, 329)</td>
</tr>
</tbody>
</table>

ANTH 420 may be applied to the above groups, depending on topic.

In addition, a student must complete one additional core sequence within anthropology, plus an elective from a third concentration, plus elective credits to complete the minimum of 36 credits in anthropology.

For a concentration in archaeology take:

**Archaeology**

(36 Credits)

For a concentration in archaeology take:

ANTH 101 (3 credits)
ANTH 121L (4 credits)
ANTH 220 (3 credits)
ANTH 320 (3 credits)

Students must also take one additional course from each of three groups (A, B, C) for a total of at least 9 credits:

<table>
<thead>
<tr>
<th>Group A</th>
<th>Technical (ANTH 372, 373, 375, 421, 473L)</th>
</tr>
</thead>
<tbody>
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<td>North and South America (ANTH 321, 322, 323, 324, 329)</td>
</tr>
</tbody>
</table>

ANTH 420 may be applied to the above groups, depending on topic.

In addition, a student must complete one additional core sequence within anthropology, plus an elective from a third concentration, plus elective credits to complete the minimum of 36 credits in anthropology.

**Biological Anthropology**

(36 Credits)

For a concentration in biological anthropology take:

ANTH 101 (3 credits)
ANTH 150 (3 credits)
ANTH 151L (1 credit)
ANTH 350 (3 credits)
ANTH 351L (4 credits)

Plus two upper division courses (300–400 level) in biological anthropology (may include ANTH 363 or other HEE courses with approval). (6–8 credits).

In addition, a student must complete one additional core sequence within anthropology, plus an elective from a third concentration, plus elective credits to complete the minimum of 36 credits in anthropology.

**Ethnology** (36 Credits)

For a concentration in ethnology take:

ANTH 101 (3 credits)
ANTH 130 (3 credits)
ANTH 330 (3 credits)

Plus two area courses (from ANTH 331, 332, 337, 343, 345, 384, 387) and two topics courses (from ANTH 312, 333, 344, 346, 389).

ANTH 340 may be included above, depending on subject matter.

In addition, a student must complete one additional core sequence within anthropology, plus an elective from a third concentration, plus elective credits to complete the minimum of 36 credits in anthropology.

**Human Evolutionary Ecology (HEE)** (36 Credits)

For a concentration in HEE take:

ANTH 101 (3 credits)
ANTH 160 (3 credits)
ANTH 161L (1 credit)
ANTH 360 (3 credits)
ANTH 462 (3 credits)

Plus two elective courses in Human Evolutionary Ecology (6 credits).

In addition, a student must complete one additional core sequence within anthropology, plus an elective from a third concentration, plus elective credits to complete the minimum of 36 credits in anthropology.

**Linguistic Anthropology**

Students with a particular interest in linguistic anthropology should combine a concentration in one of the other concentrations (e.g., Ethnology or HEE) with a Minor in Linguistics. They should include in their programs both LING 292 (Linguistic Analysis) and ANTH 310 (Language and Culture).

It is highly recommended that such students consult with an advisor in linguistic anthropology early in their program.

Courses with similar content to 110, 292, 310, 317, 318, 413 and 416 are cross-listed by the Department of Linguistics. Students may obtain credit for these courses in only one department; credits from either department may be applied toward the anthropology major degree requirements.

**Minor Study Requirements**

(21 credits)

A total of 21 hours, including 101 and at least one of the following core curriculum sequences: 110 (or LING 101) and 310; 220 or 121L, and 320; 130 and 330; 150 and 350; or 160 and 360. No more than 3 hours of field or problem courses (399, 497, 499) or 12 hours of lower division (100–200 level) courses may be applied toward the minor. Alternatively, a student may select a distributed minor focusing on anthropology.

**Distributed Minors Outside Anthropology (30–36 credits)**

Anthropology majors with interdisciplinary interests may plan a variety of possible distributed minors designed as preparation for diverse professional or educational goals. These
include urban studies, folklore studies, earth sciences for archaeologists, population science, applied social research, premedicine, behavioral biology, pre-law and regional studies, (Chicano, Native American, Southwestern, etc.). All courses for these distributed minors are taken outside of anthropology. A distributed minor comprises a total of 30 to 36 hours, dependent upon meeting a 15 hour minimum of upper division courses (300–400 level). With guidelines from the undergraduate advisor, students should design their own distributed minors and petition the Department Undergraduate Committee for approval of such programs.

**Distributed Minors Within Anthropology (30 credits)**

Students majoring in other fields may select a distributed minor focusing on anthropology. The distributed minor is similar to the intent and format of the Distributed Minor Outside Anthropology outlined above. This minor requires a minimum of one core curriculum sequence and 6 additional credits of anthropology.

**Departmental Honors**

Students seeking departmental honors should identify a research project during their junior year in consultation with an appropriate professor/mentor and enroll in the Fall of their senior year in ANTH 498; after which, they should enroll in an appropriate section of ANTH 497. These 6 hours of honors work are in addition to the 36 credits required for the major.

**Graduate Programs**

**Graduate Advisors**

Please inquire in department office for names and telephone numbers of current graduate advisors.

**Application Information**

The Anthropology Graduate Application Committee will begin reviewing complete graduate applications on the last Friday of January and will not accept any files or additional information after that date. It is up to the student to allow adequate time (6 to 8 weeks prior to the department deadline) for processing and mail delivery of the application. The department will not accept faxed or Xeroxed copies of any information. There are no exceptions made.

The following materials must be included to complete the application file: three letters of recommendation, a letter of intent, official transcripts, GRE scores, the University of New Mexico graduate school application, Registration Information Form and application fee. Please consult the department for further information.

Applicants to the graduate program in anthropology must identify their particular area of interest and their academic and professional goals in a letter of intent directed to the department’s Graduate Studies Committee. GRE scores (verbal/analytical/quantitative) and three letters of recommendation also are required as part of the application which will be reviewed by the department’s Graduate Studies Committee. Acceptance into the program will depend upon: the number of openings available for new graduate students; the applicant’s potential as indicated by the materials submitted with the application; and agreement by an appropriate faculty person to act as advisor to the student. No student will be accepted into the program unless he or she can be placed under the direction of a faculty advisor who will help to plan the student’s program. Students admitted to the program may change their advisor, subject to prior approval by the new advisor.

Within the anthropology graduate program, there are both general departmental requirements and requirements specific to a student’s concentration. The student must consult with the appropriate graduate advisor for information on concentration requirements before registering. General departmental requirements are described below.

**Degrees Offered**

**M.A. or M.S. in Anthropology**

Concentrations: archaeology, biological anthropology, ethnology/linguistic anthropology, human evolutionary ecology.

The Master of Arts/Master of Science in Anthropology is offered under Plan I (thesis), subject to prior approval by a Committee of Studies in the appropriate concentration and Plan II according to the requirements specified earlier in this catalog. No more than 8 hours of problems courses and no more than 6 hours of field courses may be applied toward the degree under Plan II.

Students desiring an interdisciplinary program may elect a minor or distributed minor, under Plan I or II, subject to the prior approval of an advisor in the appropriate area. A terminal master’s program in Anthropology is also offered for students who want specific training in a particular concentration.

There are no general departmental technical skills or foreign language requirements for the M.A. or M.S. degrees. However, students intending to pursue doctoral research should attempt to obtain such skills, whenever possible, during their master’s program.

All students are required to complete a master’s examination. For students who do not intend to continue in anthropology beyond the master’s degree, the examination will focus on the content of their course work and its relation to anthropology as a whole. For students wishing to enter the doctoral program in anthropology, this examination will also serve as a Ph.D. qualifying exam; its form and content will depend upon the anthropological concentration (archaeology, biological anthropology, ethnology/linguistic anthropology, human evolutionary ecology) appropriate to the student’s research interests. Further details about the master’s examination can be obtained from the department office.

**Ph.D. in Anthropology**

Concentrations: archaeology, biological anthropology, ethnology/linguistic anthropology, human evolutionary ecology.

The Doctor of Philosophy in Anthropology is offered according to the general requirements as specified earlier in this catalog. No more than 12 hours of problems courses and no more than 9 hours of field courses may be applied toward the 48 credit hours required for the degree.

Admission to the Ph.D. program from the master’s program will depend upon the student’s performance in the master’s comprehensive/Ph.D. qualifying examination and on the student’s ability to form a committee on studies in fields appropriate to the student’s research interests. The committee, which will assist in planning the student’s program of study, must include one professor from outside the department and outside of Anthropology (not the committee chairperson). Since the Anthropology Department cannot supervise research in all areas of anthropology, students who cannot form such a committee will not be accepted into the doctoral program. Students entering the graduate program with an M.A., or its equivalent, in anthropology must pass the qualifying exam in the appropriate subfield. Students entering with an M.A. or M.S. in another discipline must pass the qualifying examination.

Prior to initiating major research for the dissertation, the student must: 1) demonstrate proficiency in at least two foreign languages; 2) obtain pre approval for the dissertation proposal; and 3) agree to defend the proposal at a pre approval hearing. Further details about the dissertation can be obtained from the department office.
Anthropology (ANTH)

Introductory Courses for Undergraduates


110. Language, Culture and the Human Animal. (3) Dinwoodie, Gorbet (Also offered as LING 101.) Fundamentals of anthropological linguistics. The biological, structural, psychological and social nature of language; implications for cross-cultural theory, research and applications.

121L. Archaeological Method and Theory. (4) Introduction to archaeological method and theory. Lectures cover basic concepts and strategy. Labs provide hands-on experience with methods of analyzing archaeological remains.


151L. Human Evolution Laboratory. (1) The factual basis of human evolution, from the comparative study of living and fossil primates to interpretation of recent human fossils. Recommended, but not required, that this be taken concurrently with 150. Two hrs. lab.

160. Human Life Course. (3) Kaplan, Lancaster Biology and behavior of the human life course, including the evolution of the life history patterns specific to humans and the impact of population growth and of adaptation to local conditions in promoting human diversity. Students are encouraged, but not required, to enroll concurrently in 161L.

161L. Computer Laboratory in Human Evolutionary Ecology. (1) Introduces the computer as a tool in biological and social science research, provides first-hand experience in data collection, analysis and modeling behavior. No prior computer experience required. Pre- or corequisite: 160.

220. World Archaeology. (3) Introduces archaeological theory, method and technique by presenting the developmental history of human cultures.

230. Topics in Current Anthropology. (3, no limit) Experimental courses on topics of current interest.

238. Cultures of the Southwest. (3) Basic concepts of cultural anthropology, illustrated with overviews of social and cultural patterns of Southwest Indians and Hispanics. Interethnic relations of these with other American populations. Meets New Mexico Lower Division General Education Common Core Curriculum Area IV: Social/Behavioral Sciences. (Offered periodically)

251. Forensic Anthropology. (3) Komar, Staff This course is designed to introduce students to the forensic investigation of death. Emphasis will be on current methods and techniques and include the role of the anthropologist as an integral member of the investigation process.

Upper Division Courses for Undergraduates

In general, prerequisites are listed with each course description. If none are listed, the class is designed for those without previous courses in anthropology. If course does not show a time of offering or is “offered periodically,” please consult the department. At the end of each course description, a letter designation signifies the concentration specialization for which this class can be used. (“A” for Archaeology; “B” for Biological; “E” for Ethno-Linguistics; and “HEE” for Human Evolutionary Ecology.)

304/504. Current Research in Anthropology. (1-3) This course familiarizes students with current, active research in Anthropology by the University of New Mexico faculty and visiting scholars. It also teaches students to critically assess and discuss research questions. (A, B, E, HEE)

310/511. Language and Culture. (3) (Also offered as CJ 319, LING 359.) Examination of the interrelations of language and speech with other selected aspects of culture and cognition. Prerequisites: 110 or LING 101 or LING 292. (E)

*312. Oral Narrative Traditions. (3) Western and non-Western myths, epics, folk tales, life-stories and personal experience narratives as cultural and aesthetic expressions. (E) (Offered periodically)

317/517. Phonological Analysis. (3) Gorbet (Also offered as LING 304.) Phonetic principles and phonological theory, descriptive analysis of phonological systems, transcriptional practice and problems from selected languages. Prerequisite: LING 303. (E) (Fall)

*318. Grammatical Analysis. (3) (Also offered as LING 322 and 522.) Principles of morphological and syntactic analysis and introduction to functional and formal theories of grammar. Descriptive analysis of grammatical structures and problems from a variety of languages. Prerequisite: LING 292 or SIGN 305. (E) (Spring)

320/520. Strategy of Archaeology. (3) Boone, Ramenofsky The purpose and theory of the study of archaeology; relates archaeology to anthropological principles and the practice of science. Prerequisites: 101 and either 121L or 220. (A) (Yearly)

321/521. Southwest Archaeology. (3) Wills, Crown An intensive survey of Southwest prehistory including discussion of major interpretative problems. Covers the period from 11,000 years ago to historic times. (A)

322/522. Mesoamerican Prehistory. (3) Santley An advanced survey of the prehistory of Mexico, Guatemala and Belize from the origins of village farming to the Spanish conquest. (A)

323/523. Archaeology of Eastern North America. (3) Ramenofsky A survey of the archaeology of Eastern North America that begins with human entry into the East and terminates with European discovery and settlement. (A) (Alternate years)
324./524. American Archaeology: South America. (3)
Archaeology of South America from the Paleo-Indian to the European period. Emphasizes the origins and evolution of Andean civilization and associated interpretive problems. (A) (Alternate years)

325./525. Stone Age Europe. (3) Strauss
The prehistory of Europe with emphasis on hunter-gatherer adaptations of the Pleistocene and early Holocene, using primary data sources. Prerequisites: 101 and 220. (A) (Alternate years)

326./526. Late European Prehistory. (3) Boone
An intensive survey of the later prehistory of Europe, from the development of agricultural communities through the Roman Empire. (A) (Alternate years)

327./527. African Prehistory. (3) Strauss
The prehistory of Africa from the appearance of the first hominids to the development of complex societies. Prerequisites: 101 and 220. (A) (Alternate years)

328./528. Near Eastern Archaeology. (3) Boone
A survey of the Near Eastern culture area from the origins of agriculture to the development of Bronze Age civilization. (A) (Offered periodically)

329./529. Archaeology of Complex Societies. (3) Boone, Santley
Comparative approach to origin and development of stratified societies and pristine states as known from the archaeologi- cal record. (A)

330./534. Principles of Cultural Anthropology. (3)
Development of ideas and theories in sociocultural anthropol- ogy; focus on topics such as integration of human societies, sources of change in economic and cultural systems. (E)

331./531. Indigenous Peoples of North America. (3)
Major culture types and selected ethnographic examples of North American Indian cultures. (E) (Offered periodically)

332./532. Indigenous Peoples of South America. (3)
Culture and history of indigenous peoples of South America. Selected examples from lowland and highland regions. (E) (Offered periodically)

333./533. Ritual Symbols and Behavior. (3)
(Also offered as RELG 333.) Comparative analysis of ritual processes, symbolic systems and world views in the context of social structure. (E) (Offered periodically)

*337. Anthropology of New Mexico. (3 to a maximum of 9)
Topics will vary from instructor to instructor, but will deal with specific social and cultural matters of anthropological inter- est in New Mexico such as folklore and expressive culture; social relations; tourism; environmental issues. (E) (Offered periodically)

339./539. Human Rights in Anthropology. (3)
Nagengast
A description and analysis of competing theories about the content of human rights; the history, politics and economics of human rights situations. Emphasis on the interplay among power, difference, 'culture' and human rights abuses. (E)

340./540. Topics in Cultural Anthropology. (3, no limit)
Current topics in sociocultural anthropology to be explored in experimental courses. (E)

341. Culture Study of Indigenous Vidoes. (3) Singer
(Also offered as NAS 441.) Videos produced by indigenous peoples in the western hemisphere will be used to examine cultures within modern and historical contexts that address political, personal and social concerns which invite new questions about indigenous history and cultural understanding. (E)

343./543. Latin American Culture and Societies. (3)
Cultural and social institutions common throughout Latin America and their historical antecedents. Contemporary social movements and their prognosis for the immediate future. Analysis of the variations among selected Latin American societies. (E) (Offered annually)

344. Comparative Ethnic Relations. (3)
Ethnic and race relations are examined through focus on case studies from the Americas. Basic questions are pursued about the nature of and relationships among ethnicity, race, gender and class. (E) (Alternate years)

345./535. Spanish-Speaking Peoples of the Southwest. (3)
Analysis of the ethnohistory and modern culture patterns of Spanish-speaking peoples of the Southwest. (E) (Alternate years)

346. Expressive Culture. (3)
The comparative study of selected verbal, visual, musical, dra- matic and cultural arts as cultural and aesthetic expressions. (3) (Alternate years)

*350. Human Biology. (3) Pearson, Hurtado
Human heredity, variation and adaptation within and between different ecological and cultural settings; genetics; quantita- tive variation; elements of human population biology and human ecology. Prerequisites: 150 or BIOL 110, or BIOL 123, or BIOL 201, or BIOL 202. (B) (Spring)

*351L. Anthropology of the Skeleton. (4) Powell
A laboratory course in the identification of human skeletal materials with attention to problems in the evolution of primates. Three lectures, 2 hrs. lab. (B) (Fall)

357. Human Origins. (3) Pearson
The events and processes involved in the emergence and evolution of the human lineage—from the origins of Australopithecus, through the emergence of the genus Homo, to the evolution of early modern humans—based on the human fossil record. Prerequisite: 220 or 150. (B) (Alternate years)

360./567. Human Behavioral Ecology. (3) Hill
Introduces students to the fundamental principles of evolu- tionary theory and their application to human behavior. It surveys current research on human sexuality, mate choice, reproduction and parenting from the perspective of human evolutionary ecology. Prerequisite: (150, or 160, or BIOL 110, or BIOL 123, or BIOL 201, or BIOL 202) and MATH 121. (B, HEE)

361./661. Behavioral Ecology and Biology of Sex Roles. (3) Lancaster
Uses the perspective of evolutionary biology to examine the diversity of sex roles played by men and women in the histori- cal and cross-cultural record. Restriction: upper division standing. (HEE) (Alternate years)

362./662. Great Apes: Mind and Behavior. (3) Lancaster
Explores recent research in both captivity and the wild on cognition and behavior of great apes (chimpanzees, gorillas, bonobos, orangutans), the closest living relatives of humans. Restriction: upper division standing. (HEE) (Alternate years)

363./563. Primate Social Behavior. (3) Lancaster
Special emphasis will be on strategies of survival, reproduc- tion, mating and rearing, in the complex social systems of apes and monkeys. The costs and benefits of alternative strategies are used to understand individual life histories. 352L highly recommended. Restriction: upper division standing. (HEE) (Alternate years)

364. Topics: Human Evolutionary Ecology. (3, no limit)
This course offers specific, in-depth discussions of topics of current faculty interests and student demand including collective action, single parenthood and child health, hunter- gatherers, psychological anthropology and conservation of resources. (HEE)
356./568. Anthropology of Health. (3) Hurtado Analysis of systems of health, curing and disease in aboriginal, western and pluralistic societies. (B, HEE) (Offered periodically)

366./566. Tropical Conservation and South American Indians. (3) Examines resource use patterns by Amazonian Indians and recent collaboration or conflict with conservation organizations. (B, HEE) (Offered periodically)

368./565. Modern Hunter-Gatherers. (3) Hill Examination of behavioral variation in modern foraging populations from a comparative and ecological perspective. Includes traditional societies of Africa, Asia, Australia, North and South America. (B, HEE) (Alternate years)

369./564. Observing Primate Behavior. (4) Lancaster Various methods of observational data collection on human and nonhuman primates will be examined. Student designed research on campus or at the zoo will focus on the importance of determining appropriate data collection methods. Recommended: Upper division standing and 360 or 362 or 363. Can be taken concurrently with 363. (HEE) (Alternate years)

372./572. Analytic Methods in Anthropology. (4) Introduction to basic qualitative and quantitative analytic methods in anthropology. (A)

*373. Technical Studies in Archaeology. (3 to a maximum of 6) Technical course with variable content dealing with such issues as dating, paleoenvironmental and subsistence studies in archaeology. (A) (Offered periodically)

375./575. Archaeology Field Session. (Summer Archaeology Field Session.) (2-6 to a maximum of 12) Intensive instruction in archaeological field and laboratory techniques and the opportunity for independent student research. Restriction: permission of instructor. (A)

*380. Women Culture & Society. (3) (Also offered as WMST 380.) An overview of women's and men's experience in our own and other cultures. We will read case studies about gender relations in Native North America, Mexico, Africa, the Middle East and differing ethnic and class segments of the U.S. Issues to be covered include reproduction, the family, work and colonialism. (E)

381./581. Ethics in Anthropology: A Four Field Approach. (3) The class examines topical issues such as human rights, indigenous rights, researcher rights, and professional and scientific responsibility that face the various subfields of anthropology in its everyday practice. (Spring)

384./584. Peoples of Mexico. (3) Emergence of the modern Indian and Mestizo cultures of Mexico and Guatemala. Persistence and change in social institutions and cultural patterns. (E) (Alternate years)

385./585. Images of the Indian in American Culture. (3) Analysis of literary, historical, ethnographic and contemporary texts, written by both Indians and non-Indians, to understand Native American peoples' reaction and adjustment to conquest and domination. (E) (Offered periodically) Prerequisite: 317.

387./587. Peoples and Cultures of the Circum-Caribbean. (3) (Also offered as AFAM 386.) Outlines the sociocultural transformation of the region since 1492. Emphasis upon cultural legacies of and resistance to colonialism, the Afro-Caribbean and Hispanic heritages, and the contemporary trans-nationalization of island identities. (E)

390./590. Archaeology of the Southern Great Plains. (3) This course provides an introduction to the environment, physiography, and human cultures of the Southern Great Plains of Northern America from its earliest peopling to the time of European exploration of the region. (Alternate years)

393. Ancient New Mexico I. (3) Stuart Ancient New Mexico is Part I of a two-semester general survey on the archaeology of New Mexico. The period of New Mexico's earliest settlement at 10,000 B.C. to the advent of early pithouse villages at about A.D. 500 is covered each fall semester. (A) (Alternate years)

394. Ancient New Mexico II. (3) Stuart Ancient New Mexico is Part II of a two-semester general survey on the archaeology of New Mexico. The period from the advent of early pithouse villages (A.D. 500) through the rise and fall of Chacoan Society, to the arrival of Spanish settlers in 1595. (A) (Alternate years)

399. Introduction to Field & Laboratory Research. (1-6, no limit) Directed study under the supervision of a faculty member. Restriction: permission of instructor. (A, B, E, HEE) (Offered upon demand)

401./501. Native American Art I. (3) Szabo (Also offered as ARTH 402.) Prehistoric and historic art forms of the Arctic, Northwest Coast and the eastern woodlands of North America. (E) (Fall)

402./582. Museum Practices. (3 to a maximum of 9) (Also offered as MSST, ARTH 407.) History, philosophy and purposes of museums. Techniques and problems of museum administration, education, collection, exhibition, conservation and public relations. (E)

403./503. Native American Art II. (3) Szabo (Also offered as ARTH 406.) Prehistoric and historic art forms of the Plains, Southwest and western regions of North America. (E) (Spring)

410./510. Topics in Linguistic Anthropology. (3 to a maximum of 15) Topics from various areas of anthropological linguistics including, but not limited to, ethnosemantics, the ethnography of communication and the biology of language. (E)

413./512. Linguistic Field Methods. (3) Gorbet (Also offered as LING 413.) Practice in transcribing from oral dictation, phonemic analysis, introduction to problems of morphology. Prerequisite: 317. Restriction: permission of instructor. (E) (Offered upon demand)

415./515. Native American Languages. (3) (Also offered as LING 415.) Survey of Indian languages of North America, with special emphasis on languages of New Mexico. Topics: linguistic structure in particular languages and language families; relationship of languages and cultures; and language loss, maintenance and preservation. (E)

416./516. Introduction to Language Change. (3) (Also offered as LING 446.) Theories and methods of comparative and historical linguistics, emphasizing change in English, Indo-European and Native American languages. Prerequisite: 317. (E) (Alternate years)

*420. Topics in Archaeology. (3 to a maximum of 15) Topics of archaeological interest including gender in archaeology, European contact and post-processualism. (A)

*421. Historical Archaeology of the Spanish Borderlands. (3) Ramenofsky Using archaeology and history, this course focuses on change and continuity of native populations that occurred with Spanish colonization across the Borderlands. Topics include demography, missionization, technologies and settle-
ment organization. Format includes lecture and discussion. (A) (Offered periodically)

444./544. Anthropology of World Beat. (3) Feld
(Also offered as MUS 444.) The study of musical globalization, concentrating on the 100 year background of indigenous and ethno music traditions. Students are introduced to the creation of the “World Music” genre in the late 20th Century. (E)

448./548. The Anthropology of Music and Sound. (3) Feld
(Also offered as MUS 448./548.) The cultural study of music and sound. Course materials are drawn from written and audio music ethnographies of contemporary indigenous, diaspora, refugee, exile, and industrial communities. (E)

449./549. New Guinea Representations. (3) Feld
Through writings, films, radio, and Internet, the course explores how the island of New Guinea has been represented, both by indigenous New Guineans, and by visiting explorers, adventurers, colonizers, missionaries, tourists, scientists and artists. (E)

*450. Topics in Biological Anthropology. (3-4 to a maximum of 15) ∆
(B)

451./551. Bioarcheology. (3)
The analysis of the skeletal remains from past human populations, oriented at the mortality, morbidity and genetic affinities of those extinct populations. Prerequisite: 351L. (B) (Alternate years)

453./553. Advanced Forensic Anthropology. (3) Komar
Medicolegal applications of biological anthropology. Students will become familiar with operations of the New Mexico Medical Investigators Office, participating in ongoing casework and review and re-analysis of past cases. Prerequisites: 351L or BIOL 237. (B)

454./554. Human Paleopathology. (3)
Ancient disease through the study of normal and abnormal bone remodeling processes and dental conditions. Population health evaluated by descriptive and radiologic analyses of human remains. Prerequisite: 351L. (B) (Alternate years)

455./555. Human Genetics. (3)
Fundamentals of human transmission, cellular, molecular, developmental and population genetics. Prerequisite: 150 or BIOL 110 or BIOL 123 or BIOL 201 or BIOL 202. (B) (Alternate years)

456./556. Field School in Biological Anthropology. (3-6 to a maximum of 12) ∆
A course in the field and laboratory techniques used in Biological Anthropology. The focus varies by instructor to include human osteology, primate and human evolution, or genetics. Prerequisite: 150 or BIOL 110 or BIOL 123 or BIOL 201 or BIOL 202. (B) (Intersession and Summer)

457./557. Paleonthropology. (3) Pearson
Events and processes leading from the appearance of the human lineage to the beginnings of agriculture, with discussions of Australopithecus and the genus Homo through Homo sapiens. Prerequisite: 351L. (B) (Alternate years)

458. Reconstructing Life from the Skeleton. (3) Pearson
A variety of advanced topics in human osteology including what the skeleton can reveal about a person’s life, habits, habitual activity, profession, diseases and appearance. Prerequisite: 351L or BIOL 237. (B) (Offered periodically)

462. Human Evolutionary Ecology. (3) Kaplan
The capstone course for Anthropology concentrators in Human Evolutionary Ecology. Provides students with a broad, but deep, overview of the major theoretical issues in HEE and of empirical data brought to bear on them. Prerequisite: 360. (HEE)

473L./573L. Archaeological Measurement and Laboratory Analysis. (4) Ramenofsky
Emphasizes the methods and techniques employed to construct and analyze archaeological materials. Style, function and technology of flaked and ground stone and ceramics are considered. Course work includes readings, discussions and laboratory exercises. Exercises focus on the construction, analysis and interpretation of data. Prerequisite: 320. (A) (Alternate years)

480./580. Ceramic Analysis. (3) Crown
Basic concepts, methods and approaches used in the analysis of archaeological pottery. Lectures cover concepts and strategies. Labs give practical experience with techniques of analysis. (A) (Spring)

482L./582L. Geoarchaeology. (3) Smith, Huckell
(Also offered as EPS 482L.) Application of geological concepts to archaeological site formation with emphasis on pre-ceramic prehistory of the southwestern United States. Quaternary dating methods, paleoenvironment, landscape evolution, depositional environments. Quaternary stratigraphy, soil genesis, sourcing of lithic materials, site formation processes. Required field trip. (A) (Alternate years)

485./585. [485.] Seminar in Museum Methods. (3 to a maximum of 6) ∆
(Also offered as MSST, ARTH 485.) Theoretical and practical work in specific museum problems. Prerequisite: 402 or ARTH 407. (E)

486./586. [486.] Practicum: Museum Methods. (3 to a maximum of 6) ∆
(Also offered as MSST, ARTH 486.) Practicum in museum methods and management. Prerequisite: 402 or ARTH 407. (E)

491./591. Population Genetics. (3)
(Also offered as BIOL 491.) This course investigates how genetic variation is patterned within and between and how these patterns change over time. Topics include neutral theory, population structure, phylogenetics, coalescent theory, molecular clock, and laboratory methods.

497. Individual Study. (1-3 to a maximum of 6) ∆
Directed study of topics not covered in regular courses. (A, B, E, HEE)

498. Honors Seminar. (3)
Readings and discussions concerning anthropological research methods, sources, goals and professional ethics. Open to upper division majors and concentrators whose applications for the honors program have been approved. (A, B, E, HEE) Restriction: permission of instructor. (Fall)

*499. Field Research. (2-6, no limit) † ∆
Field research for qualified advanced undergraduate or graduate students with previous experience in archaeology, biological anthropology, human evolution, linguistics or general ethnology. Problems are selected on the basis of student-faculty interest and field research opportunities. Restriction: permission of instructor. (A, B, E, HEE) (Offered upon demand)

Graduate Courses

501./401. Native American Art I. (3) Szabo
(Also offered as ARTH 502.) Prehistoric and historic art forms of the Arctic, Northwest Coast and the eastern woodlands of North America. (Fall) (E)

503./403. Native American Art II. (3) Szabo
(Also offered as ARTH 503.) Prehistoric and historic art forms of the Plains, Southwest and western regions of North America. (Spring) (E)
504/304. Current Research in Anthropology. (1-3)
This course familiarizes students with current, active research in Anthropology by the University of New Mexico faculty and visiting scholars. It also teaches students to critically assess and discuss research questions. (A, B, E, HEE)

509. Seminar in Native American Art. (3, no limit) Δ
Szabo
(Also offered as ARTH 559.) Restriction: permission of instructor. (E) Prerequisites: 501 and 503. (Offered upon demand)

510/410. Topics in Linguistic Anthropology. (3 to a maximum of 15) Δ
Topics from various areas of anthropological linguistics including, but not limited to, ethnosyntax, the ethnography of communication and the biology of language. (E)

511/310. Language and Culture. (3)
(Also offered as CJ 519 and LING 559.) Examination of the interrelations of language and speech with other selected aspects of culture and cognition. Prerequisites: 110 or LING 101 or LING 292. (E) (Spring)

512/413. Linguistic Field Methods. (3) Gorbet
(Also offered as LING 513.) Practice in transcribing from oral dictation, phonemic analysis, introduction to problems of morphology. Prerequisites: 317. Restriction: permission of instructor. (E) (Offered upon demand)

513. Functional Syntax. (3)
(Also offered as LING 523.) Description and explanation of morphological, syntactic and discourse phenomena, both in language-specific and topological perspective, in terms of their cognitive representations and the cognitive and interac-
tional processes in which they function. Prerequisite: LING 322. (E)

514. Seminar: Linguistic Theory. (3)
(Also offered as LING 554.) Current topics and issues in phonology, syntax or semantics. (E)

515/415. Native American Languages. (3)
(Also offered as LING 515.) Survey of Indian languages of North America, with special emphasis on languages of New Mexico. Topics: linguistic structure in particular languages and language families; relationship of languages and cultures; and language loss, maintenance and preservation. (E)

516/416. Introduction to Language Change. (3)
(Also offered as LING 546.) Theories and methods of comparative and historical linguistics, emphasizing change in English, Indo-European and Native American languages. Prerequisite: 317. (E) (Alternate years)

517/317. Phonological Analysis. (3) Gorbet
(Also offered as LING 504.) Phonetic principles and phono-
logical theory, descriptive analysis of phonological sys-
tems, transcriptional practice and problems from selected languages. Prerequisite: LING 303. (E) (Fall)

520/320. Strategy of Archaeology. (3) Boone, Ramenofsky
The purpose and theory of the study of archaeology; relates archaeology to anthropological principles and the practice of science. Prerequisites: 101 and either 121L or 220. (A) (Yearly)

521/321. Southwest Archaeology. (3) Wills, Crown, Chapman
An intensive survey of Southwest prehistory including discussion of major interpretative problems. Covers the period from 11,000 years ago to historic times. (A) (Fall)

522/322. Mesoamerican Prehistory. (3) Santley
An advanced survey of the prehistory of Mexico, Guatemala and Belize from the origins of village farming to the Spanish conquest. (A)

523/333. Archaeology of Eastern North America. (3) Ramenofsky
A survey of the archaeology of Eastern North America that begins with human entry into the East and terminates with European discovery and settlement. (A) (Alternate years)

524/334. American Archaeology: South America. (3) Archaeology of South America from the Paleo-Indian to the European period. Emphasizes the origins and evolution of Andean civilization and associated interpretive problems. (A) (Alternate years)

525/335. Stone Age Europe. (3) Straus
The prehistory of Europe with emphasis on hunter-gatherer adaptations of the Pleistocene and early Holocene using primary data sources. Prerequisites: 101 and 220. (A) (Alternate years)

526/336. Late European Prehistory. (3) Boone
An intensive survey of the later prehistory of Europe, from the development of agricultural communities through the Roman Empire. (A) (Alternate years)

527/337. African Prehistory. (3) Straus
The prehistory of Africa from the appearance of the first homi-
nids to the development of complex societies. Prerequisites: 101 and 220. (A) (Alternate years)

528/338. Near Eastern Archaeology. (3) Boone
A survey of the Near Eastern culture area from the origins of agriculture to the development of Bronze Age civilization. (A) (Offered periodically)

529/339. Archaeology of Complex Societies. (3) Boone, Santley
Comparative approach to origin and development of stratified societies and pristine states as known from the archaeologi-
cal record. (A)

530. Topics in Ethnology. (3, no limit) Δ
Current topics in ethnology to be explored in experimental seminars. (E)

531/331. Indigenous Peoples of North America. (3) Major culture types and selected ethnographic examples of North American Indian cultures. (E) (Offered annually)

532/332. Indigenous Peoples of South America. (3) Culture and history of indigenous peoples of South America. Selected examples from lowland and highlands regions. (E) (Offered periodically)

533/333. Ritual Symbols and Behavior. (3) (Also offered as RELG 533.) Comparative analysis of ritual processes, symbolic systems and world views in the context of social structure. (E) (Offered annually)

534/330. Principles of Cultural Anthropology. (3) Development of ideas and theories in sociocultural anthropology; focus on topics such as integration of human societies, sources of change in economic and cultural systems. (E)

535/345. Spanish-Speaking Peoples of the Southwest. (3) Analysis of the ethnohistory and modern culture patterns of Spanish-speaking peoples of the Southwest. (E) (Alternate years)


537. Seminar: Southwestern Ethnology. (3) Examination of data and theories relevant to study of Indian, Hispanic and dominant society cultures in southwestern U.S. and northwestern Mexico. Student research generated from students professional interests. Non-majors admitted. (E)

539/339. Human Rights in Anthropology. (3) A description and analysis of competing theories about the content of human rights; the history, politics and economics

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of human rights situations. Emphasis on the interplay among power, difference, "culture" and human rights abuses. (E)

540./340. Topics in Cultural Anthropology. (3, no limit) \( \Delta \)
Current topics in sociocultural anthropology to be explored in experimental courses. (E)

541. Problems and Practice in Ethnography. (3) A practicum in ethnographic methods and theory. (E)

542. Seminar: Urban Anthropology. (3) Historical overview of urban anthropology development. Introduction to research on contemporary urban issues. Focus on cases from Brazil, Mexico, Japan, Germany and Vietnam. Recent research on U.S. cities that examines industrial decline, immigration and homelessness. (E)

543./343. Latin American Cultures and Societies. (3) Cultural and social institutions common throughout Latin America and their historical antecedents. Contemporary social movements and their prognosis for the immediate future. Analysis of the variations among selected Latin American societies. (E) (Offered annually)

544./444. Anthropology of World Beat. (3) Feld (Also offered as MUS 544.) The study of musical globalization, concentrating on the 100 year background of indigenous and ethnic sound recordings that led to the creation of the "World Music" genre in the late 20th Century. (E)

546. Theory in Ethnology I. (3) Early history of anthropology from 19th-century cultural evolutionists to anthropology of the mid-20th Century. Contributions of Historical School, Structural Functionalists and Neo-evolutionists. (E) (Fall)

547. Theory in Ethnology II. (3) Recent trends in ethnological theory including processual analysis, structuralism, cognitive and symbolic anthropology, Marxist, feminist and interpretive approaches. (E) (Spring)

548./448. The Anthropology of Music and Sound. (3) Feld (Also offered as MUS 548./448.) The cultural study of music and sound. Course materials are drawn from written and audio music ethnographies of contemporary indigenous, diasporic, refugee, exile, and industrial communities. (E)

549./449. New Guinea Representations. (3) Feld Through writings, films, radio, and Internet, the course explores how the island of New Guinea has been represented, both by indigenous New Guineans, and by visiting explorers, adventurers, colonizers, missionaries, tourists, scientists and artists. (E)

550. Topics in Biological Anthropology. (3-4 to a maximum of 15) (E) (B)

552. Quantitative Methods in Biological Anthropology. (3) Powell Basic overview of quantitative methods, including randomization, multivariate statistics, ordination and cladistics, used to explore problems in systematics, functional morphology, population genetics and skeletal biology. Restriction: permission of instructor. (B) (Alternate years)

553./453. Advanced Forensic Anthropology. (3) Komar Medicolegal applications of biological anthropology. Students will become familiar with operations of the New Mexico Medical Investigators Office, participating in ongoing case-work and review and re-analysis of past cases. Restriction: permission of instructor. (B)

554./454. Human Paleopathology. (3) Ancient disease through the study of normal and abnormal bone remodeling processes and dental conditions. Population health evaluated by descriptive and radiologic analyses of human remains. Prerequisite: 351L. (B) (Alternate years)

555./455. Human Genetics. (3) Fundamentals of human transmission, cellular, molecular, developmental and population genetics. Prerequisite: 150 or BIOL 110 or BIOL 123 or BIOL 201 or BIOL 202. (B) (Alternate years)

556. Inferring Behavior from the Skeleton. (3) Pearson A detailed analysis of what can be learned about activity and behavior from the skeleton. The course covers concepts in biomechanics, functional morphology, bone biology and focuses on their applications in biological anthropology. (B) (Offered periodically)

557./457. Paleanthropology. (3) Pearson Events and processes leading from the appearance of the human lineage to the beginnings of agriculture, with discussions of Australopithecus and the genus Homo, through Homo sapiens. Prerequisite: 351L. (B) (Alternate years)

559. Advanced Osteology. (3) This course is to further develop the skills of graduate and senior undergraduate students in human osteology and to introduce advanced methods of skeletal analysis. Both lecture and laboratory components. Prerequisites: 351L or equivalent, upper division standing or consent of instructor. (B)

560. Advanced Topics in Human Evolutionary Ecology. (3 to a maximum of 15) \( \Delta \) Topics of interest including Critical reading, Anthropological economics, Life history strategies, Primate reproductive strategies, Game theory. (HEE)

561. Seminar: Human Reproductive Ecology and Biology. (3) Lancaster Investigates relationships between ecology, ontogeny and reproduction in terms of energy allocation trade-offs faced by individuals and age/sex/group-specific behavioral/physiological solutions which together describe human life history strategy variation. (B, HEE) (Alternate years.)

562. Human Life History. (3) Kaplan In-depth treatment of human life history evolution. Covers basic population demography; mortality, senescence, menopause, mating, reproduction, parental investment with additional focus on brain evolution. Experiences in evaluation and building mathematical models of fitness trade-offs. Prerequisite: (360, or BIOL 300) and MATH 121. (B, HEE)

563./363. Primate Social Behavior. (3) Lancaster Special emphasis will be on strategies of survival, reproduction, mating and rearing in the complex social systems of apes and monkeys. The costs and benefits of alternative strategies are used to understand individual life histories. 352L highly recommended. Restriction: upper division standing.(HEE) (Alternate years)

564./369. Observing Primate Behavior. (4) Lancaster Various methods of observational data collection on human and nonhuman primates will be examined. Student designed research on campus or at the zoo will focus on the importance of determining appropriate data collection methods. (HEE) (Alternate years)

565./368. Modern Hunter-Gatherers. (3) Hill Examination of behavioral variation in modern foraging populations from a comparative and ecological perspective. Includes traditional societies of Africa, Asia, Australia, North and South America. (B, HEE) (Alternate years)

566./366. Tropical Conservation and South American Indians. (3) Hill Examines resource use patterns by Amazonian Indians and recent collaboration or conflict with conservation organizations. (B, HEE) (Offered periodically)
567./360. Human Behavioral Ecology. (3) Kaplan
Introduces students to the fundamental principles of evolutionary theory and their application to human behavior. It surveys current research on human sexuality, mate choice, reproduction and parenting from the perspective of human evolutionary ecology. (B, HEE)

568./365. Anthropology of Health. (3) Hurtado
Analysis of systems of health, curing and disease in aboriginal, western and pluralistic societies. (B, HEE) (Offered periodically)

570. Advanced Topics in Archaeology. (3 to a maximum of 15) ∆ (A)

572./372. Analytic Methods in Anthropology. (4)
Introduction to basic qualitative and quantitative analytic methods in anthropology. (A) (Fall)

573. Advanced Technical Studies in Archaeology. (3) (A)

573L./473L. Archaeological Measurement and Laboratory Analysis. (4) Ramenofsky
Emphasizes the methods and techniques employed to construct and analyze archaeological materials. Style, function and technology of flaked and ground stone and ceramics are considered. Course work includes readings, discussions and laboratory exercises. Exercises focus on the construction, analysis and interpretation of data. Prerequisite: 320. (A) (Alternate years)

574. History and Theory of Archaeology. (3) Ramenofsky
Advanced review of development of prehistoric archaeology and Old and New Worlds until the 1960s, emphasizing culture history, social evolution, diffusion, culture areas, etc. (A) (Fall)

575./375. Archaeology Field Session. [Summer Archaeology Field Session] (2-6 to a maximum of 12) ∆ Wilks, Huckell, Ramenofsky
Intensive instruction in archaeological field and laboratory techniques and the opportunity for independent student research.
Restriction: permission of instructor. (A)

576. Seminar: Southwestern Archaeology. (3) Wilks, Crown
In-depth analysis of current research issues and topics in Southwest archaeology. (A)

577. Seminar: European Prehistory. (3) †† Straus
Explores critical issues and debates in different periods of European prehistory, based on primary sources. (A)

579. Current Debates in Archaeology. (3)
Advanced discussion of current theoretical debates in archaeology, including Processual and Post-processual paradigms, formation processes; middle-range, optimal foraging, evolutionary, hunter-gatherer mobility theories; cultural ecology; and origins of agriculture and complex society. (A)

580./480. Ceramic Analysis. (3) Crown
Basic concepts, methods and approaches used in the analysis of archaeological pottery. Lectures cover concepts and strategies. Labs give practical experience with techniques of analysis. (A)

581./381. Ethics in Anthropology: A Four Field Approach. (3)
The class examines topical issues such as human rights, indigenous rights, researcher rights, and professional and scientific responsibility that face the various subfields of anthropology in its everyday practice. (Spring)

582./402. Museum Practices. (3) Szabo
(Also offered as MSST, ARTH 507.) History, philosophy and purposes of museums. Techniques and problems of museum administration, education, collection, exhibition, conservation and public relations. (Offered upon demand) (E)

582L./482L. Geoarchaeology. (3) Smith, Huckell
(Also offered as EPS 592L.) Application of geological concepts to archaeological site formation with emphasis on pre-ceramic prehistory of the southwestern United States. Quaternary dating methods, paleoenvironment, landscape evolution, depositional environments. Quaternary stratigraphy, soil genesis, sourcing of lithic materials, site formation processes. Required field trip.
Prerequisites: (ANTH 121L and 220) or (EPS 101 and 105L). Restriction: at least junior standing. (Spring) (A)

584./384. Peoples of Mexico. (3)
Emergence of the modern Indian and Mestizo cultures of Mexico and Guatemala. Persistence and change in social institutions and cultural patterns. (E) (Alternate years)

585./485. [585.] Seminar in Museum Methods. (3 to a maximum of 6) ∆
(Also offered as MSST, ARTH 585.) Theoretical and practical work in specific museum problems.
Prerequisite: 402 or ARTH 407. (E)

586./486. [586.] Practicum: Museum Methods. (3 to a maximum of 6) ∆
(Also offered as MSST, ARTH 586.) Practicum in museum methods and management. (E)
Prerequisite: 585 or ARTH 585. (Offered upon demand)

587./387. Peoples and Cultures of the Circum-Caribbean. (3)
Outlines the sociocultural transformation of the region since 1492. Emphasis upon cultural legacies of, and resistance to, colonialism, the Afro-Caribbean and Hispanic heritages and the contemporary trans-nationalization of island identities. (E)

588./385. Images of the Indian in American Culture. (3)
Analysis of literary, historical, ethnographic and contemporary texts, written by both Indians and non-Indians, to understand Native American peoples’ reaction and adjustment to conquest and domination. (E)
Prerequisite: 331. (Offered periodically)

590./390. Archaeology of the Southern Great Plains. (3)
This course provides an introduction to the environment, physiography, and human cultures of the Southern Great Plains of Northern America from its earliest peopling to the time of European exploration of the region. (Alternate years)
Prerequisite: 331.

591./491. Population Genetics. (3)
(Also offered as BIOL 591.) This course investigates how genetic variation is patterned within and between and how these patterns change over time. Topics include neutral theory, population structure, phylogenetics, coalescent theory, molecular clock, and laboratory methods.

597. Problems. (1-3 to a maximum of 6)
Limited to graduate majors in the master’s program. (A, B, E, HEE)

598. Advanced Research. (3, no limit) ∆
Limited to graduate majors in the master’s program. (A, B, E, HEE)

599. Master’s Thesis. (1-6)
Offered on a CR/NC basis only. (A, B, E, HEE)

651./451. Bioarchaeology. (3)
The analysis of the skeletal remains from past human populations, oriented at the mortality, morbidity and genetic affinities of those extinct populations.
Prerequisite: 351L. (B)

656./456. Field School in Biological Anthropology. (3-6 to a maximum of 12) ∆
A course in the field and laboratory techniques used in Biological Anthropology. The focus varies by instructor to

Symbols, page 611.
include human osteology, primate and human evolution, or genetics.
Prerequisite: 150 or BIOL 110 or BIOL 123 or BIOL 201 or BIOL 202. (B) (Intersession and Summer)

661./361. Behavioral Ecology and Biology of Sex Roles. (3) Lancaster
Uses the perspective of evolutionary biology to examine the diversity of sex roles played by men and women in the historical and cross-cultural record.
Restriction: upper division standing. (HEE) (Alternate years)

662./362. Great Apes: Mind and Behavior. (3) Lancaster
Explores recent research in both captivity and the wild on cognition and behavior of great apes (chimpanzees, gorillas, bonobos, orangutans), the closest living relatives of humans.
Restriction: upper division standing. (HEE)

663. Human Evolutionary Ecology Research Methods and Design. (3) Kaplan
Provides an overview of research design and methods utilized in the social/behavioral sciences and public health. It introduces a 'top-down,' problem-oriented approach to question development, sample selection, design decisions, specific methods, data analysis. (B, HEE) (Alternate years)

664. Human Evolutionary Ecology Data Analysis. (3) Kaplan
Utilizes existing datasets (student- or instructor-generated), provides 'hands-on' training in data analysis with goal of publishable article. Focuses on data issues, selection of appropriate models and problems of interpretation. (B, HEE)
Prerequisite: ECON 509 or ECON 510 or STAT 527 or STAT 528 or STAT 574. Restriction: permission of instructor.

667. The Evolution of Sociality. (3) Boone
This course focuses on a survey of the recent literature on the evolution and behavioral ecology of human social behavior. Topics include kin selection, social group formation, cooperation, territoriality, status, strivng behavior, costly signaling, ethnic and inter-group violence. (HEE) (Offered periodically)

Exploration and evaluation of practical anthropological research designs. Exhaustive preparation of realistic grant proposals for specific student-generated projects, with intensive group criticism.
Prerequisite: M.A. or semester in which M.A. will be received. (A, B, E, HEE)

697. Problems. (1-3 to a maximum of 6) (A, B, HEE)
Limited to graduate majors in the doctoral program. (A, B, E, HEE)

698. Advanced Research. (3) (A, B, E, HEE)
Limited to graduate majors in the doctoral program. (A, B, E, HEE)

699. Dissertation. (3-12) (A, B, E, HEE)
Offered on a CR/NC basis only.

ARTS AND SCIENCES

Mark Ondrias, Associate Dean
Ortega Hall, Room 201
MSC03 2120
1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 277-3046

Arts & Sciences (ARSC)

198. Introduction to Undergraduate Study. (3)
Variable content in an academic discipline. Develops academic skills through study of the content areas including scholarship, research, comprehension, analysis, synthesis, evaluation, application, critical thinking and communication of ideas.
Corequisites: some sections may require coregistration in another specified course. Restriction: freshman standing. (Fall, Spring)

ARTS AND SCIENCES COOPERATIVE EDUCATION PROGRAM (ASCP)

Career Services
Cooperative Education, SSC 220
MSC06 3710
1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 277-2531

To enroll in the following courses, please contact:
UNM Career Services Cooperative Education
Student Services Center, Room 220
(505) 277-2531

Students enrolled in the Cooperative Education Program are required to register in AS COP 105 while on work phase. Students also are encouraged to enroll in one of the appropriate evaluation courses in the semester immediately following each work phase.

105. Arts and Sciences Co-op Work Phase. (0)
A mechanism for registered work phase students from the College of Arts and Sciences as full-time students while working. Offered on a CR/NC basis only.

409. Evaluation of Arts and Sciences Co-op Work Phase V. (1-3)
Offered on a CR/NC basis only.

410. Evaluation of Arts and Sciences Co-op Work Phase VI. (1-3)
Offered on a CR/NC basis only.

ASIAN STUDIES

See International Studies.

ASTRONOMY

See Physics and Astronomy

BIOCHEMISTRY

Jeffrey K. Griffith, Ph.D., Chairperson
Basic Medical Sciences Building, Room 249
MSC11 6120
1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 272-3333

Professors
Robert H. Glew, Ph.D., University of California (Davis)
Jeffrey K. Griffith, Ph.D., Purdue University
Tudor I. Oprea, M.D., Ph.D., University of Medicine and Pharmacy, Timisoara, Romania
David L. Vander Jagt, Ph.D., Purdue University

Associate Professor
William L. Anderson, Ph.D., University of Minnesota

Assistant Professors
Chien-An Andy Hu, Ph.D., Ohio State University
Robert A. Orlando, Ph.D., University of California (Irvine)
Marcy P. Osgood, Ph.D., Rensselaer Polytechnic Institute
Biochemistry (BIOC)

201. Current Issues in Human Reproduction. (3)
Interdisciplinary course on the principles of human reproduction and the associated clinical, social and ethical issues, taught by faculty of the Division of Women's Health Research, School of Medicine.

423. Introductory Biochemistry. (3)
Introductory course into metabolic reactions within the cell with emphasis on a chemical understanding of the way the cell integrates and controls intermediary metabolism; also included are quantitative problems in pH control, enzyme kinetics and energetics. BIOC 423 should not be taken by students who anticipate majoring in Biochemistry. Prerequisite: CHEM 302 or 308. (Fall, Spring)

445L. Intensive Introductory Biochemistry I. (4)
An introduction into the physical and chemical properties of proteins and enzymes; enzymic catalysis; structure, synthesis and processing of nucleic acids and proteins. Prerequisite: CHEM 302 or 308. Graduate students see 545L. (Fall)

446L. Intensive Introductory Biochemistry II. (4)
An introduction to intermediary metabolism and hormonal control of catabolic and anabolic pathways. Prerequisite: 445L. Graduate students see 546L. (Spring)

448L. Biochemical Methods. (3)
Biochemical techniques including chromatographic and electrophoretic purification of enzymes, determination of enzyme parameters (Vm, Km), fractionation of subcellular organelles, isolation of chromatin, biosynthesis of protein, analysis of DNA. Pre- or corequisite: 446L. (Spring)

A quantitative physical chemical approach to analyzing macromolecular structure and function; electrophoretic and hydrodynamic methods; mass spectrometry; optical and vibrational spectroscopic methods; nuclear magnetic resonance; diffraction methods; and computational techniques. Prerequisite: 445 and (CHEM 311 or 315). (Spring)

463L/563. Biochemistry of Disease I. (3)
Five three-week topics, each designed to develop some basic concepts of biochemistry, cell and molecular biology in the context of disease states. Prerequisite: 423 or 446L. Graduate students see 563. (Fall)

464L/564. Biochemistry of Disease II. (3)
Five three-week topics, each designed to develop some basic concepts of biochemistry, cell and molecular biology in the context of states. Prerequisite: 423 or 446L. Graduate students see 564. (Spring)

*465. Biochemistry Education. (3)
Seminars and readings in current methods of Biochemistry education. The course includes a practical experience in Biochemistry education techniques and practices. Prerequisite: minimum grade of B in BIOC 446. Restriction: permission of instructor.

497. Senior Honors Research. (1-3 to maximum of 6)
Senior thesis based on independent research. Restriction: permission of instructor. (Summer, Fall)

498. Senior Honors Research. (1-3 to a maximum of 3)
Senior thesis based on independent research. Restriction: permission of instructor. (Spring)

499. Undergraduate Research. (1-3 to a maximum of 3)
Offered on a CR/NC basis only. Prerequisite: permission of instructor. (Summer, Fall, Spring)
BIOLOGY 153

521. Neurochemistry. (3) (Also offered as BIOM 532.) An introduction to neurochemistry and neuropharmacology, with heavy emphasis on student participation, by reading and evaluating current publications. Prerequisite: permission of instructor. (Spring)

545L. Intensive Introductory Biochemistry I. (4) (Also offered as BIOM 511L.) An introduction into the physical and chemical properties of proteins and enzymes; enzymatic catalysis; structure, synthesis and processing of nucleic acids and proteins; structure and control of genetic material. Prerequisite: CHEM 302 or 308. Corequisite: CHEM 311 or 315. (Fall)

546L. Intensive Introductory Biochemistry II. (4) (Also offered as BIOM 512L.) An introduction to intermediary metabolism and hormonal control of catabolic and anabolic pathways. Prerequisite: 545L. (Spring)

563/463. Biochemistry of Disease I. (1-3 to a maximum of 25) \^ (Also offered as BIOM 553.) Five three-week topics, each designed to develop some basic concepts of biochemistry, cell and molecular biology in the context of disease states. Prerequisite: 423 or 546L. (Fall)

564/464. Biochemistry of Disease II. (1-3 to a maximum of 25) \^ (Also offered as BIOM 554.) Five three-week topics, each designed to develop some basic concepts of biochemistry, cell and molecular biology in the context of disease states. Prerequisite: 423 or 546L.

Introduction

Students majoring in Biology learn about the basic organization, processes and dynamics of the living world. The program of study provides students with a liberal education emphasizing the life sciences. The many subdisciplines of biology can prepare students for a wide range of careers and professional schools.

Museum of Southwestern Biology

The Museum of Southwestern Biology (MSB) is an integral part of the University of New Mexico Department of Biology. It contains collections of plants and animals of national and international significance. The MSB also maintains a division devoted to frozen tissues, which is among the largest in the world. The western research collections of the National Biological Service are integrated with those of the MSB. The museum concentrates on research and teaching and is not open to the public except by appointment. The MSB publishes two scholarly periodicals, Occasional Papers and Special Publications.

Major Study Requirements

Majors in biology seeking a Bachelor of Science degree must satisfy the requirements given in sections A, B, and C. Majors in biology seeking a Bachelor of Arts degree must satisfy the requirements given in sections D and E. (Biol. 110, 112L, 123, 124L and 239L are not allowed for biology major credit.)
A. The B.S. Program requires a minimum of 37 credit hours earned in biology courses. These courses must include [201, 202, 203L, 204L]; at least one of the following: 351 and 352L, 360L, 371L, 386L. The remainder of hours are to be earned in elective biology courses. (BIOC 423 may be included.)

B. In order to satisfy an upper-division breadth requirement for the Biology major, a total of two of the 400-level courses that are specifically listed below must be successfully completed. In addition, the chosen courses must be taken from two different categories (i.e., completing two courses that are both grouped within a single category will NOT satisfy this requirement).

1) Cell/Molecular (410, 412, 425, 428, 429, 444, 446, 449, 450, 466, 490, 497)
2) Physiology (416L, 435L, 443, 447, 456, 460, 471, 478L)
3) Organismal (448, 463L, 474L, 482L, 485L, 486L, 487L, 488L, 489L)

C. Required Supportive Courses for the B.S.: MATH 180-181 or 162-163; PHYC 151-152 or 160-161; CHEM 121L-122L (or 131L-132L) and 301-303L (or 212). (For those interested in microbiology, molecular/cellular biology, physiology or medicine, CHEM 301-303L and 302-304L are recommended.)

D. The B.A. Program requires a minimum of 32 credit hours earned in biology courses. These courses must include [201, 202, 203L, 204L]. The remainder of the total required credit hours is to be earned in elective biology courses. The elective courses must include two upper division courses (300 or 400 level) each of which carries at least 3 credit hours and is exclusive of BIOL 400, 402, and 499. (BIOC 423 may be included.) (BIOL 110, 112L, 123L and 239L are not allowed for biology major credit.)

E. Required Supportive Courses for the B.A.: [MATH 180 or MATH 162 and STAT 145 or CS 150L ] or (MATH 180-181); PHYC 102 and one of the following: EPS 101 (or PHYC 151-152); CHEM 121L-122L (or 131L-132L) and CHEM 301-303L (or 212).

For both the B.A. and B.S., a grade of C or better is required for: i) the Biology core ([201, 202, 203L, 204L]); ii) all required support courses in Computer Sciences, Chemistry, Earth and Planetary Sciences, Mathematics, and Physics; and iii) all elective courses in Biology. No credit toward the major will be given for courses completed with a grade of C- or below. Transfer students must obtain 19 Biology credits at UNM for the B.S., or 16 credits for the B.A. Only Biology courses completed within the previous ten years will apply.

Areas of Emphasis

The courses offered by the Biology Department can be used to pursue specialized programs in the following areas: Botany, Computational Biology, Evolution/Ecology, Microbiology, Molecular/Cellular Biology, Physiology, Systematics, and Zoology. Departmental advisement is recommended for students who wish to complete one of these informal specializations. A formal concentration in conservation biology is also offered (see below).

Concentration in Conservation Biology*

The growing emphasis on Conservation in the biological sciences supports this concentration. Students may receive either the Bachelor of Science or Bachelor of Arts degree in Biology with a concentration in Conservation Biology. The concentration provides students with a strong background in biology as well as the complementary interdisciplinary skills critical to understanding and addressing contemporary conservation questions.

Major in biology seeking a Bachelor of Science degree with a concentration in Conservation Biology must satisfy the requirements given in sections A, B, C and F. Majors in biology seeking a Bachelor of Arts degree must satisfy the requirements in sections D, E, and F.

A. The B.S. Program with a Concentration in Conservation Biology requires a minimum of 45 credit hours earned in biology courses. These courses must include: [201, 202, 203L, 204L], 310L, 360L, 379; at least one of following: 351 and 352L, 371L, 386L; A minimum of 3 credit hours must be from the Conservation Biology Seminar 402; this 1 credit course must be taken at least once a year in the second through fourth years of the degree program. The remainder of the total required credit hours are to be taken from a list (available from the Biology Department) of restricted elective courses.

B. In order to satisfy an upper-division breadth requirement for the Biology major, a total of two of the 400-level courses that are specifically listed below must be successfully completed. In addition, the chosen courses must be taken from two different categories (i.e., completing two courses that are both grouped within a single category will NOT satisfy this requirement).

1) Cell/Molecular (410, 412, 425, 428, 429, 444, 446, 449, 450, 466, 490, 497)
2) Physiology (416L, 435L, 443, 447, 456, 460, 471, 478L)
3) Organismal (448, 463L, 474L, 482L, 485L, 486L, 487L, 488L, 489L)

C. Required Supportive Courses for the B.S.: MATH 180-181 or 162-163; PHYC 151-152 or 160-161; CHEM 121L-122L (or 131L-132L) and 301-303L (or 212). (For those interested in microbiology, molecular/cellular biology, physiology or medicine, CHEM 301-303L and 302-304L are recommended.)

D. The B.A. Program with a concentration in Conservation Biology requires a minimum of 36 credit hours earned in biology courses. These courses must include: [201, 202, 203L, 204L], 310L, 360L, 379; and at least one of the following: 351 and 352L, 371L, 386L, and at least one of the following: 435L, 460, 478L; A minimum of 3 credit hours must be from the Conservation Biology Seminar 402; this 1 credit course must be taken at least once a year in the second through fourth years of the degree program. The remainder of the total required credit hours are to be taken from a list (available from the Biology Department) of restricted elective courses.

E. Required Supportive Courses for the B.A.: [MATH 180 or MATH 162 and STAT 145 or CS 150L ] or (MATH 180-181); PHYC 102 and one of the following: EPS 101 (or PHYC 151-152); CHEM 121L-122L (or 131L-132L) and CHEM 301-303L (or 212).

F. Candidates for both the B.A. and the B.S. degrees in Biology with a concentration in Conservation Biology must take a minimum of 6 credit hours to be taken from the following list of complementary interdisciplinary electives: ANTH 261; ECON 203, 342; EPS 203, 333; PHIL 363; POLS 475.

Grade of C or better required in all of the above courses.

*NOTE: Departmental advisement is required for students who wish to complete the concentration in Conservation Biology.

Minor Study Requirements

BIOL [201, 202, 203L and 204L], plus 6 additional hours of biology. (BIOL 110, 112L, 123L, 239L, and 499 are not allowed for biology minor credit.)

Grade of C or better required in all courses counted for the minor. Transfer students must obtain 6 Biology credits at UNM.
Curricula Preparatory to Health Sciences
See School of Medicine.

Graduate Program

Graduate Advisor
Eric L. Charnov
Donald O. Natvig

Application Deadline
January 15

Degrees Offered

M.S. and Ph.D. in Biology

Concentrations: and land ecology, behavioral ecology, botany, cellular and molecular biology, community ecology, comparative immunology, computational biology, conservation biology, ecology, ecosystem ecology, evolutionary genetics, evolutionary biology, genomics, microbiology, molecular genetics, parasitology, physiology, physiological ecology, population biology, systematics, vertebrate and invertebrate zoology.

Admission

Students considering applying for graduate study are encouraged to write to the Department of Biology or consult our Web site for information and application material. Each applicant’s course background is evaluated and emphasis is placed on the applicant’s scholarship and research potential. Letters of reference are particularly important. The General Graduate Record Test scores are required and the Subject test in biology or in another relevant major discipline is required. Each applicant must include a letter of intent stating the reasons for attending, goals and tentative academic area in which he/she hopes to work. All applicants must be sponsored by at least one member of the graduate faculty before admission to graduate study can be recommended by the Graduate Student Selection Committee.

The Department of Biology offers the Ph.D., M.S. I and M.S. II degrees. The M.S. II is not a research degree and normally does not lead to work in the doctoral program. It is intended primarily for individuals who wish to supplement their baccalaureate programs with additional course work. The M.S. I is a research degree with the same philosophy as the Ph.D. It is not a prerequisite for the Ph.D. but may lead to work on that degree. Students whose ultimate goal is a Ph.D. are encouraged to consult with potential advisors within the department about applying directly to the Ph.D. program. The research degree is the heart of the graduate program. The candidate for a graduate minor in biology should consult the chairperson of the department before declaring the minor. The Biology Department Graduate Handbook gives additional information on all aspects of the graduate program. The Department of Biology Graduate Handbook should be consulted by all students considering applying directly to the Ph.D. program. Tool skill requirements may also be met by demonstrating proficiency in consultation with a student’s major advisor.

Non-Biological Skills. Candidates for both M.S. degrees are required to satisfy one non-biological skill, while Ph.D. candidates must satisfy two skill areas. Areas of non-biological tool skills include advanced training in mathematics and/or statistics, computer science, chemistry or biomedical instrumentation. A minimum of 6 credits per skill with a grade point average of 3.0 (B) or better can satisfy the requirement. Courses taken to meet the non-biological skill requirements cannot be counted toward semester hour credits required for graduate degrees. Tool skill requirements may also be met by demonstrating proficiency in consultation with a student’s graduate committee.

Biology (BIOL)

Biology 121, 122, 219 and 221 can substitute for Biology 201, 202, 203L and 204L as prerequisites for upper division courses.

110. Biology Non-Majors. (3) Frankis Biological principles important for the non-major in today’s world. Ecological, evolutionary and molecular topics. Three lectures. (Credit not allowed for both 110 and 123/124L.) Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science (NMCCN 1114). (Fall or Spring)

112L. Biology Laboratory for Non-Majors. (1) Council-Garcia An optional laboratory which may be taken concurrently with or subsequent to 110. One 3-hour lab per week including plant and animal diversity, techniques and investigation of current issues. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science (NMCCN 1114). (Fall, Spring) Pre- or corequisite: 110.

123. Biology for Health Related Sciences and Non-Majors. (3) Frndrick, Howe Principles of cell biology, genetics and organismic biology. (Credit not allowed for both 123 and 110. Not accepted toward a Biology major.) (Fall, Spring)

124L. Biology for Health Related Sciences and Non-Majors Lab. (1) Council-Garcia One credit optional laboratory to accompany 123. Pre- or corequisite: 123.

201. Molecular and Cell Biology. (4) Altenbach, Frankis, Hofkin, Howe, Loker, Natvig, Stricker, Vebach, Vogel The scientific method, the role of water in cell biology, carbon and molecular diversity, macromolecules, introduction to metabolism, tour of cell structures and functions, membrane structure and function, cellular respiration, photosynthesis, cell communication and the cell cycle. Three lectures, 1 discussion section. Pre- corequisite: CHEM 121L or 131L. (Credit not allowed for both BIOL 201 and 219.) (Fall, Spring)

202. Genetics. (4) Berghorsson, Cadavid, Cripps, Hofkin, Howe, Miller, Natvig, Nelson
Mitosis, meiosis, Mendelian genetics, chromosomes and inheritance, molecular basis of inheritance, genes to proteins, genetic models (viruses and bacteria), eukaryotic genomes, genetic basis of development and overview of genomes. Three lectures, 1 discussion section.
Prerequisites: 201 and (CHEM 121L or 131L). Pre- or corequisites: CHEM 122L or 132L. (Credit not allowed for both BIOL 202 and 221.) (Fall, Spring)

203L. Ecology and Evolution. (4) Collins, Cook, Dahm, Milne, Poe, Sinsabough, Snell, Thomhill, Turner
Darwinian principles, origin of the earth, the fossil record and diversification of ancient life, evolution of populations, origin of species, phylogenetics, introduction to ecology and the biosphere, behavioral ecology, population ecology, community ecology, ecosystem ecology and conservation biology. Three lectures, 3 hours lab. Lab material includes a survey of the diversity of life.
Prerequisites: 202 and (CHEM 122L or 132L) Pre- or corequisites: MATH 162 or 180. (Fall, Spring)

204L. Plant and Animal Form and Function. (4) Hanson, Marshall, Pockman, Stricker, Toolson, Wolf
Introduction to plant systems including: structure, growth, transport, nutrition, reproduction, development, and control systems. Introduction to animal systems including: nutrition, circulation, reproduction, development; and immune, control and nervous systems. Three lectures and 3 hours lab.
Prerequisites: 202 and (CHEM 122L or 132L). Pre- or corequisites: 203L and (MATH 180 or MATH 162). (Fall, Spring)

237. Human Anatomy and Physiology I for the Health Sciences. (3) Swan
An integrated study of human structure and function to include histology, skeletal, muscular and nervous systems.
Prerequisites: (123 and 124L) or 201 and (CHEM 111L or 121L). Three lectures. (Fall, Spring)

238. Human Anatomy and Physiology II for the Health Sciences. (3) Swan
A continuation of 237 to include cardiovascular, respiratory, digestive, excretory, reproductive and endocrine systems.
Prerequisite: 237. Three lectures. (Fall, Spring)

239L. Microbiology for Health Sciences and Non-Majors. (4) Couch
Introduction to microbiology with emphasis on principles of infection and immunity. Not accepted toward a Biology major or minor.
Prerequisites: (123 and 124L) and (CHEM 111L or 121L). (Credit not allowed for both 239L and 351–352L.) (Fall, Spring)

247L. Human Anatomy and Physiology Laboratory I. (1) Lab work using cadavers. Anatomy stressed with appropriate physiological work. Topics integrated with 237. Pre- or corequisite: 237. Three hrs. lab. (Fall, Spring)

248L. Human Anatomy and Physiology Laboratory II. (1) Continuation of BIOL 247L. Topics integrated with 238. Pre- or corequisite: 238. Three hrs. lab. (Fall, Spring)

249L. Human Anatomy Laboratory. (1) Accelerated human anatomy course using cadavers for students who have completed 8 hours of anatomy and physiology with labs but lack cadaver study.
Prerequisites: (237 and 247L) and (238 and 248L). Restriction: permission of instructor. Three hrs. lab. (Spring)

300. Evolution. (3) Thomhill
Basic principles, and contemporary issues of evolution.
Prerequisites: 203L and 204L. Three lectures. (Spring)

A comprehensive survey of the ecology of individuals, populations, communities and ecosystems.
Prerequisites: 203L and 204L. Three lectures, 3 hrs. lab or field exercise. (Fall, alternate Springs)

324L. Natural History of the Southwest. (4) Shepherd
(Also offered as UHON 324–324L.) Biogeography, natural history and ecological processes of the Southwest. Focusing on the land, climate, flora and fauna of the region. Field trips and labs.
Prerequisites: 203L and 204L. (Fall)

**351. General Microbiology.** (3) Barton, Sinsabough, Vesbach
Anatomy, physiology and ecology of microorganisms. Principles of bacterial techniques, host-parasite relationships and infection and immunity.
Prerequisites: 203L and 204L. Three lectures. (Credit not allowed for both 351–352L and 239L.) (Fall, Spring)

**352L. General Microbiology Laboratory.** (1) Methods and techniques used in microbiology. Pre- or corequisite: 351. 1 hr. lab. (Fall, Spring)

360L. General Botany. (4) Marshall
Overview of plant anatomy, physiology, classification, evolution and ecology. Covers both higher and lower plants.
Prerequisites: 203L and 204L. Two lectures, 4 hrs. lab. (Fall)

365. Evolution of Human Sexuality. (3) Thomhill
An examination of how natural selection has shaped the sexual psychologies of men and women and how evolutionary theory can guide the study of sexual psychology and behavior.
Prerequisites: 203L and 204L. (Spring)

**371L. Invertebrate Biology.** (4) Hofkin, Loker, Stricker
Survey of the major invertebrate groups with emphasis on evolutionary and ecological relationships, and the correlation of structure with function.
Prerequisites: 203L and 204L. Three lectures, 4 hrs. lab. (Fall)

379. Conservation Biology. (3) Snell, Turner
Importance of biological diversity from ecological, aesthetic, economic and political viewpoints. Extinction as a past, present and future process, and the roles of genetics, levels of biological organization, reserves and laws in the protection and recovery of endangered organisms.
Prerequisites: 203L and 204L. (Spring)

386L. General Vertebrate Zoology. (4) Altenbach, Poe, Snell, Turner
Ecology, behavior, sociology, adaptations, and evolution of the vertebrates.
Prerequisites: 203L and 204L. Three lectures, 3 hrs. lab. (Fall, Spring)

400. Senior Honors Thesis. (1-3, unlimited repetition)
Original theoretical and/or experimental work under supervision. Work for the thesis is carried on throughout the senior year. A maximum of 4 hours credited towards a biology major; credits over 4 contribute to upper level Arts and Sciences requirements. (Summer, Fall, Spring)

402/502. Topics in Biology. [Special Topics in Biology.] (1-3, unlimited repetition)
Maximum of 4 hours credited towards the biology major and 2 hours towards the biology minor; credits over 2 contribute to upper level Arts and Sciences requirements. Restriction: senior standing and permission of instructor. (Summer, Fall, Spring)

405/505. Ecosystem Dynamics. (3) Collins
Understand structure and function of diverse ecological systems of North America; use of on-line Long-term Ecological Research databases.
Prerequisites: 203L and 204L. (Spring)

407L/507L. Bosque Biology. (3) Molles
Long-term study of Rio Grande riparian woodland; hands-on field ecology emphasizing different biotic features and interactions each semester. Three hrs. field/lab/discussion/lecture plus extensive independent study weekly.
Prerequisites: 203L and 204L. (Fall)
408L./508L. Bosque Internship. (3 to a maximum of 9) 
Crawford
UNM students trained as interns to mentor citizens (mainly K–12 students) and teachers in monthly data collection at similar Bosque Ecosystem Monitoring Program sites along the Rio Grande. Weekly on- and off-campus meetings. Prerequisite: 407L. (Summer, Fall, Spring)

410./510. Genome and Computational Biology. (3) Wagner
This course focuses on methods, both experimental and computational, to study the structure of genomes and to analyze gene expression and protein function on a genome-wide scale. Computational topics include graph approaches in sequence assembly; discriminant analysis in gene finding; dynamic programming in sequence comparison; and clustering techniques in the analysis of gene expression data. Prerequisites: 203L and 204L. Three lectures.

*412. Developmental Biology. (3) Cripps, Stricker
Comparative biology of animal development emphasizing regulatory mechanisms. Prerequisites: 203L and 204L. (Spring)

*416L. Histology. (4) Stricker
Microscopic structure of vertebrate tissues, emphasizing correlation of structure and function. Prerequisites: 203L and 204L. Three hrs. lecture, 3 hrs. lab. (Fall)

418./518. Ecological Genomics. (3)
Emerging role of genomics in ecological sciences; genomic approaches to ecological research; application of ecological theory to genomics. Prerequisites: 203L and 204L and (MATH 162 or 180). (Fall)

*425. Molecular Genetics. (3) Nelson
Molecular biology of the gene. Prerequisites: 203L and 204L. (Spring)

*428. Human Heredity. (3)
Genetic principles applied to humans. Prerequisites: 203L and 204L. (Fall)

*429. Molecular Cell Biology I. (3) Cadavid, Vogel
Cellular processes with emphasis on membranes; includes reading original landmark papers in cell biology. Prerequisites: 203L and 204L and (CHEM 212 or 301–303L). (Fall)

430./530. Conservation and Indigenous Peoples. (3) Trotter
(Also offered as NAS 430.) Cultural diversity fosters biodiversity. Students work on conservation projects initiated by native ecologist on Southwestern native lands. Short field trips and Fall break field trip.

*435L. Animal Physiology. (4) Altenbach, Toolson, Wolf
The function of organ systems in animals, emphasizing neuromuscular, cardiovascular, gastrointestinal and renal physiology. Prerequisites: 371L or 386L. Three lectures, 3 hrs. lab. Restriction: permission of instructor. (Every other Spring)

436L./536L. Phylogenetics. (4) Poe
Principles of phylogenetic inference using morphological and molecular data. Applications of phylogeny to ecology, systematics and molecular evolution. Prerequisites: 203L and 204L. Three hrs. lecture, 2 hrs. lab. (Spring)

437./537. Evolutionary Genetics. (3) Wagner
Mutation, natural selection, genetic drift; how evolutionary forces shape population structure. Mechanisms of speciation. Macroevolution of biochemical processes essential to higher organisms, such as signal transduction pathways, developmental genes and complex organs. Prerequisites: 203L and 204L. (Spring)

440./540. The Soil Ecosystem. (3) Sinsabaugh
Interrelationship between the abiotic and biotic factors in soils; influence of soils on above-ground biota. Prerequisites: 201, 202, 203L, 204L, CHEM 121L–122L or 131L–132L. (Fall)

*443. Comparative Physiology. (4) Toolson, Wolf
Comparative treatment of physiological processes in animals, with emphasis on osmoregulation, metabolism, circulation and thermobiology. Restriction: permission of instructor. Three lectures, 3 hrs. lab. (Offered upon demand)

444./544. Genomes and Genomic Analyses. (3) Werner-Washburne
Overview of genomic analyses from DNA sequence to gene expression and proteomics. Prerequisites: 203L and 204L. Restriction: permission of instructor. (Fall)

445. Biology of Toxins. (3) Toolson
Principles of toxicology; pharmacology and biotransformation of xenobiotics. Mechanism of action, medical uses, and evolutionary ecology of biological toxins. Prerequisite: 204L. (Spring)

446./546. Laboratory Methods in Molecular Biology. (4) Cripps, Hanson, Natvig, Vesbach
Principles of DNA and RNA purification, enzymatic manipulation of nucleic acids, molecular cloning, gel electrophoresis, hybridization procedures and nucleotide sequencing. Restriction: permission of instructor. Two hrs. lecture, 5 hrs. lab. (Fall)

*447. Prosection. (3) Swan
Human gross anatomy, dissection of human cadaver. Anatomy topics integrated with Biology 237 and 238. Prerequisites: 237 and 247L. Restriction: permission of instructor. (Fall, Spring)

*448. Microbial Evolution and Diversity. (3) Advanced course surveying microbial diversity (bacteria, archaea and protist eukaryotes) and examining the evolutionary mechanisms responsible. A central theme is the molecular evolutionary mechanisms of microbes (especially those differing from macro-organisms).

450. General Virology. (3) Hofkin, Miller
Structure, properties and chemistry of viruses; virus-host interactions, multiplication, serological properties, used as probes in molecular biology; effects of physical and chemical agents, classification. Prerequisites: 351, 352L and either 429, BIOC 423 or BIOM 511L. (Spring)

*451. Microbial Ecology. (3) Sinsabaugh, Vesbach
Role of microorganisms in terrestrial and aquatic ecosystems. Emphasis on biogeochemistry and nutrient cycling. Prerequisites: 203L and 204L. Three lectures. (Fall)

*455. Ethology: Animal Behavior. (3) Kodric-Brown
A survey of behavior patterns in animals, with emphasis on adaptive significance. Prerequisites: 203L and 204L. (Spring)

456./556. Immunology. (3) Cadavid, Hofkin, Miller
Immunoglobulin structure, antigen-antibody reactions, immunity and hypersensitivity; experimental approach will be emphasized. Prerequisites: 203L and 204L. Three lectures. (Fall, Spring)

*457L. Ethology Laboratory: Animal Behavior. (1)
Kodric-Brown
Special laboratory and field projects in animal behavior. Pre- or corequisite: 455. Three hrs. lab. (Spring)

*460. Microbial Physiology. (3) Barton
Physiological and biochemical activities of bacteria and fungi with emphasis on cell energetics. Prerequisites: 351, 352L. Three lectures. (Spring)
461L. Introduction to Tropical Biology. (3) Duszynski, Lowrey
Marine and terrestrial tropical environments, primarily in the
Caribbean; topics stressed may include organisms, communi-

ties, structure, function, distribution, geology, history, poli-
tics, ecology and others. Two lectures, 2 hrs. lab, one-week
field trip to the Caribbean and field trip fee is required. Open
to majors and/or non-majors.
Prerequisites: 203L and 204L. (Spring)

*463L. Flora of New Mexico. (4) Lowrey
Identification, classification, nomenclature, and geography of
vascular seed plants in New Mexico. Survey of adapta-
tions and evolutionary trends in plants of the Southwest.
Field trips.
Prerequisites: 203L and 204L. Three lectures, 3 hrs. lab.
(Fall, Spring)

465/565. Sociobiology and Evolutionary Ecology. (3)
Charnov
Evolutionary and social biology; speciation, adaptation, popu-
lation ecology.
Prerequisites: 203L and 204L and (MATH 163 or 183). (Fall)

466/566. Immunogenetics. (3) Miller
Classical and molecular genetics of immune responses, presented
as a survey of the fundamental literature in immu-
nology. Genetics of histocompatibility and the generation of
diversity in the immune system.
Prerequisites: 456. (Spring, alternate years)

467/567. Evolutionary Plant Ecology. (3) Marshall
Evolutionary approach to the study of plants and plant
populations. Will cover plant life history strategies, plant
population biology and plant reproduction with an emphasis
on empirical studies.
Prerequisite: 310L.

471/571. Plant Physiological Ecology. (3) Pockman
Interaction of plants with their environment, covering plant
water relations, carbon gain and utilization and soil mineral
nutrition. Common research methodologies will be demon-
strated in class.
Prerequisites: 310L and 360L. (Spring, alternate years)

*474L. Plant Anatomy. (4) Hanson, Pockman
Structure of vascular plants; cellular, tissue and organ sys-
tems, their function and evolutionary relationships.
Prerequisites: 203L and 204L. Two lectures, 4 hrs. lab.
(Spring alternate years)

475/575. Plant Community Ecology. (3) Collins
Plant community structure and dynamics in North American
deserts and grasslands. Field trip to Sevilleta LTER
required.
Prerequisites: 203L and 204L. Restriction: permission of
instructor. (Spring)

*478L. Plant Physiology. (4) Hanson
Plant function examined from molecular to whole organism
levels. Core areas include: nutrition and water balance, pho-
tosynthesis and metabolism, and growth and development.
Prerequisite: 360L. Three lectures, 3 hrs. lab. (Spring)

482L/582L. Parasitology. (4) Duszynski, Hofkin, Loker
The protozoa and worms important in human and veterinary
medicine. Emphasis on life histories, epidemiology and ecol-
yogy of parasites with laboratory practice in identification and
experimentation.
Prerequisites: 203L and 204L. Three lectures, 3 hrs. lab.
(Spring)

485L/585L. Entomology. (4) Molles
Classification, phylogeny, natural history and literature of
insects.
Prerequisites: 203L and 204L. Three lectures, 3 hrs. lab.
(Spring)

*486L. Ornithology. (4) Wolf
Classification, phylogeny, natural history and literature of
birds. Field trips required.
Prerequisite: 386L. Three lectures, 3 hrs. lab. (Fall, alternate
years)

*487L. Ichthyology. (4) Turner
Classification, phylogeny, natural history and literature of
fishes. All-day field trips and one or more overnight field
trips required.
Prerequisites: 203L and 204L. Three lectures, 3 hrs. lab.
(Fall)

*488L. Herpetology. (4) Poe, Snell
Classification, phylogeny, natural history and literature of
reptiles and amphibians. All-day field trips and one or more
overnight field trips required.
Prerequisite: 386L. Two lectures, 6 hrs. lab.

*489L. Mammalogy. (4) Cook
Classification, phylogeny, natural history and literature of
mammals. All-day field trips and one or more overnight field
trips required.
Prerequisite: 386L. Three lectures, 3 hrs. lab. (Fall, alternate
years)

*490. Biology of Infectious Organisms. (3) Hofkin,
Loker
The full spectrum of infectious entities including prions,
viruses and parasitic prokaryotes and eukaryotes will be
discussed with respect to their transmissibility, interactions
with immune systems and their influences on evolutionary
processes and biodiversity issues.
Prerequisites: 203L and 204L. (Spring, alternate years)

491/591. Population Genetics. (3)
Brown
Geographical distributions of organisms: patterns and their
ecological and historical causes.
Prerequisites: 203L and 204L. (Spring, alternate years)

*494. Biogeography. (3) Brown
Geographical distributions of organisms: patterns and their
ecological and historical causes.
Prerequisites: 203L and 204L. (Spring, alternate years)

495. Limnology. (3) Dahm
Biological, physical and chemical interactions in fresh water
ecosystems.
Prerequisites: 203L and 204L and (CHEM 122L or PHYC 152
or 161). Three lectures. (Spring)

496L. Limnology Laboratory. (1) Dahm
Techniques for studying the biology, chemistry and physics of
aquatic ecosystems.
Pre- or corequisite: 495. (Spring)

497/597. Principles of Gene Expression. (3) Cripps,
Frankis
A detailed and critical study of how different genes are regu-
lated during the life of an organism, principally at the level
of transcription.
Prerequisites: 203L and 204L.

499. Undergraduate Problems. (1-3, unlimited repeti-
tion) ∆
Junior or senior status and permission of instructor required.
Maximum of 2 hrs. credited towards a biology major. Credit
not allowed toward a biology minor. (Summer, Fall, Spring)

500. New Graduate Student Seminar. (1)
Offered as a CR/NC basis only.

502/402. Topics in Biology. [Special Topics in Biology.]
(1-3, no limit) ∆
Maximum of 4 hours credited towards the biology major.
Restriction: permission of instructor. (Summer, Fall, Spring)

503. Biological Complexity Seminar. (3) ∆ Brown, Milne
Presentation and discussion of recent work in biological com-
plexity and related subjects. Repetition unlimited.
Restriction: permission of instructor.

Symbols, page 611.
505./405. Ecosystem Dynamics. (3) Collins
Understand structure and function of diverse ecological sys-
tems of North America; use of on-line Long-term Ecological Research
databases. (Spring)

507L./407L. Bosque Biology. (3) Molles
Long-term study of Rio Grande riparian woodland; hands-
on field ecology emphasizing different biotic features and interac-
tions each semester. Three hrs. field/lab/discussion/ lecture plus extensive independent study weekly. (Summer, Fall, Spring)

508L./408L. Bosque Internship. (3 to a maximum of 9)
Δ Crawford
UNM students trained as interns to mentor citizens (mainly
K–12 students) and teachers in monthly data collection at
similar Bosque Ecosystem Monitoring Program sites along
Prerequisite: 507L. (Summer, Fall, Spring)

510./410. Genome and Computational Biology. (3) Wagner
This course focuses on methods, both experimental and
computational, to study the structure of genomes and to
analyze gene expression and protein function on a genome-
wide scale. Computational topics include assembly, analysis in
sequence assembly; discriminant analysis in gene finding;
dynamic programming in sequence comparison; and clus-
tering techniques in the analysis of gene expression data.
Three lectures.

511. Community Ecology. (3) Brown
Structure and dynamics of assemblages of multiple species
of organisms. (Fall)

513. Physiological and Behavioral Ecology. (5) Snell,
Toolson
Ecological and evolutionary aspects of animal physiological
adaptation with emphasis on temperature, water, energy/nutri-
ents and organismal performance. Format includes lectures,
literature discussion, one field trip and a term paper. Three
lectures, 4 hrs. lab/discussion. (Fall)

514. Ecosystem Studies. (3) Collins, Dahm, Gosz
Study of biological communities emphasizing the interactions
between living and non-living parts and the flow of materials
and energy between these parts. Three lectures. (Fall)

515F. Research in Field Biology. (3) Collins, Pockman,
Wolf
Planning, execution and write-up of field research conducted
within Spring Recess. Twelve-day field trip, and lab fee
required. Three hrs. lecture/discussion. (Spring)

516. Basic Graduate Ecology. (4) Brown, Charnov,
Collins, Milne, Sinsabaugh, Wolf
Major themes in current ecological research, with in-depth
exploration of the theoretical and empirical literature of
individual, population, community, ecosystem and landscape
ecology. Recommended for all Biology Department graduate
students in any field of ecology, evolution and behavior. Three
lectures, 1.5 hours lab/discussion. (Fall)

517. Basic Graduate Evolution. (4) Cook, Kodric-Brown,
Natvig, Poe, Thornhill, Wagner
An in-depth coverage of the primary literature and ideas in
the major areas of evolutionary biology: adaptationism, social
evolution, phylogeny, molecular evolution, speciation.
Recommended for all Biology Department graduate students
in any field of ecology, evolution and behavior. Three lectures,
1.5 hours lab/discussion. (Spring)

518./418. Ecological Genomics. (3)
Emerging role of genomics in ecological sciences: genomic
approaches to ecological research; application of ecological
theory to genomics.
Prerequisites: 201, 202, 203L, 204L and calculus. (Fall)

521. Advanced Behavioral Ecology. (3) Kodric-Brown
Analysis of behavior and social systems in an ecological and
evolutionary context. (Fall, alternate years)

530./430. Conservation and Indigenous Peoples. (3)
Trotter
(Also offered as NAS 430.) Cultural diversity fosters biodi-
versity. Students work on conservation projects initiated by
native ecologist on Southwestern native lands. Short field
trips and Fall break field trip.

535. Freshwater Ecosystems. (3) Dahm
(Also offered as EPS 535.) Integration of physical and chemi-
cal components of drainage basins and groundwater systems
with biological metabolism, growth and reproduction along
functional gradients of stream, wetland, reservoir, lake and
groundwater ecosystems. (Spring)

536L./436L. Phylogenetics. (4) Poe
Principles of phylogenetic inference using morphological and
molecular data. Applications of phylogeny to ecology, system-
atics and molecular evolution.
Restriction: permission of instructor. Three hrs. lecture, 2 hrs.
lab. (Spring)

537./437. Evolutionary Genetics. (3) Wagner
Mutation, natural selection, genetic drift; how evolutionary
forces shape population structure. Mechanisms of speciation.
Macroevolution of biochemical processes essential to higher
organisms, such as signal transduction pathways, develop-
mental genes and complex organs.

540./440. The Soil Ecosystem. (3) Sinsabaugh
Interrelationship between the abiotic and biotic factors in
soils; influence of soils on above-ground biota.
Prerequisites: 201, 202, 203L, 204L, CHEM 121L–122L or
131L–132L. (Fall)

544./444. Genomes and Genomic Analyses. (3) Werner-
Washburne
Overview of genomic analyses from DNA sequence to gene
expression and proteomics. (Fall)

546./446. Laboratory Methods in Molecular Biology. (4)
Cripps, Hanson, Natvig, Vesbach
Principles of DNA and RNA purification, enzymatic manipula-
tion of nucleic acids, molecular cloning, gel electrophoresis,
hybridization procedures and nucleotide sequencing.
Restriction: permission of instructor. Two hrs. lecture, 5 hrs.
lab. (Fall)

547. Advanced Techniques in Light Microscopy. (4)
Stricker
Theory and practical methods of modern light microscopy
(e.g., photomicroscopy, DIC optics, immunofluorescence
microscopy, video microscopy, image processing, confocal
microscopy, microinjection). One lecture, 1 lab. (Spring)

551. Research Problems. (1-12, no limit) ††

556./456. Immunology. (3) Cadavid, Hofkin, Miller
Immunoglobulin structure, antigen-antibody reactions, immu-
nity and hypersensitivity; experimental approach will be
emphasized. Three lectures. (Fall, Spring)

558. Geomicrobiology. (3) Crossev, Dahm
(Also offered as EPS 558.) The role of microbes in min-
eral precipitation, dissolution and diagenesis; interactions
between microbes and geochemistry/mineralogy.

561. Tropical Biology. (3) Duszynski, Lowrey
Marine and terrestrial tropical environments, primarily in the
Caribbean; topics stressed may include organisms, commu-
nities, structure, function, distribution, geology, history, poli-
tics, ecology and others. Two lectures, 2 hrs. lab, one-week
field trip to the Caribbean and field trip fee is required. Open
to majors and/or non-majors. (Alternate years)

563L. Plant Biosystematics and Evolution. (4) Lowrey
Mechanisms of plant evolutionary processes important in
plant classification. Methods and techniques applied to
analysis of morphological, anatomical, genetic and molecular
variation in plants.
Restriction: permission of instructor. Two lectures, 6 hrs. lab.
(Spring alternate years)
565.665.  Sociobiology and Evolutionary Ecology.  (3)  Charnov, Thornhill
Evolutionary and social biology; speciation, adaptation, population ecology.  (Fall)

566.666.  Immunogenetics.  (3)  Miller
Classical and molecular genetics of immune responses, presented as a survey of the fundamental literature in immunology. Genetics of histocompatibility and the generation of diversity in the immune system.
Prerequisites: 556.

567.667.  Evolutionary Plant Ecology.  (3)  Marshall
Evolutionary approach to the study of plants and plant populations. Will cover plant life history and strategies, plant population biology and plant reproduction with an emphasis on empirical studies.  (Spring)

571.471.  Plant Physiological Ecology.  (3)  Pockman
(Spring, alternate years)

575.475.  Plant Community Ecology.  (3)  Collins
Plant community structure and dynamics in North American deserts and grasslands. Field trip to Sevilleta LTER required.  (Spring)

576.  Landscape Ecology and Macroscopic Dynamics.  (4)  Milne
Conceptual and methodological approaches to landscape ecology. Emphasis on climate, paleoecology and the quantitative representation, analysis and modeling of spatial complexity.  (Spring, alternate years)

581.  Advanced Molecular Biology.  (4)
(Also offered as BIOM 507.)  The course covers the structures and functions of nucleic acids and proteins, mechanisms and macromolecular synthesis and principles of enzymology.

582.  Advanced Cell Biology.  (4)
(Also offered as BIOM 508.)  Course covers advanced topics in cell biology, including microscopy, the nucleus, protein and membrane trafficking, cytoskeleton signal transduction, cell cycle and division and extracellular matrix.  Prerequisite: 581.  (Spring)

582L/482L.  Parasitology.  (4)  Duszynski, Hofkin, Loker
The protozoa and worms important in human and veterinary medicine. Emphasis on life histories, epidemiology and ecology of parasites with laboratory practice in identification and experimentation. Three lectures, 3 hrs. lab.  (Spring)

585L/485L.  Entomology.  (4)  Molles
Classification, phylogeny, natural history and literature of insects. Three lectures, 3 hrs. lab.  (Spring)

591.491.  Population Genetics.  (3)
(Also offered as ANTH 591.)  This course investigates how genetic variation is patterned within and between and how these patterns change over time. Topics include neutral theory, population structure, phylogenetics, coalescent theory, molecular clock, and laboratory methods.

597.497.  Principles of Gene Expression.  (3)  Cripps, Franklin
A detailed and critical study of how different genes are regulated during the life of an organism, principally at the level of transcription.

599.  Master's Thesis.  (1-6)
Offered on a CR/NC basis only.

644.  Mechanism of Gene Expression.  (3)
(Also offered as BIOM 644.) Molecular mechanisms of gene expression. Topics include: mechanisms of protein-nucleic acid recognition, transcription, regulation, messenger RNA, and translation.  (Spring, even years)

651.  Advanced Field Biology.  (4-8)
Approval of Committee on Studies required.

699.  Dissertation.  (3-12)
Offered on a CR/NC basis only.

CHEMISTRY

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Professors
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Richard W. Holder, Ph.D., Yale University
Richard Kemp, Ph.D., University of Texas
Martin L. Kirk, Ph.D., University of North Carolina
Patrick S. Mariano, Ph.D., University of Wisconsin
Cary J. Morrow, Ph.D., Tulane University
Mark R. Ondrias, Ph.D., Michigan State University
Robert T. Paine, Jr., Ph.D., University of Michigan

Associate Professors
James R. Brozik, Ph.D., Washington State University
Deborah G. Evans, Ph.D., University of Pittsburgh
David Keller, Ph.D., University of California (Berkeley)

Assistant Professors
Paul Bentley, Ph.D., Liverpool University, United Kingdom
David Tiemey, Ph.D., University of Michigan
Wei Wang, Ph.D., North Carolina State University

Professors Emeriti
Fritz S. Allen, Ph.D., University of Illinois
Roy D. Caton, Ph.D., Oregon State University
Ulrich Holstein, Ph.D., University of Amsterdam
William M. Litchman, Ph.D., University of Utah
Miriam Malm, M.S., The University of New Mexico
Donald R. McLaughlin, Ph.D., University of Utah
E. Paul Papadopoulos, Ph.D., University of Kansas
Riley Schaeffer, Ph.D., University of Chicago
Edward A. Walters, Ph.D., University of Minnesota

UNM/Sandia National Laboratory Professors
C. Jeffrey Brinker, Ph.D., Rutgers University

Also see Faculty Listings in Biochemistry.

Introduction
The program of the Department of Chemistry conforms to the standards prescribed by the American Chemical Society. The Department of Chemistry assigns prospective chemistry majors to faculty advisors and all undergraduate students planning to major in chemistry are encouraged to take advantage of this advisement program.

NOTE: The policy of the Department of Chemistry regarding enrollment under the pass/fail (CR/NC) grade option is that CR (credit) will be given only for grades of C or better.

The University has mandated that all graduating seniors take part in an outcomes assessment program designed by their major departments. In Chemistry, this involves taking one or more of the American Chemical Society area assessment examinations and also discussing your educational experiences in the department in an individual exit interview. All graduating seniors are required to take part in this program.

Major Study Requirements
The Bachelor of Arts degree requires a minimum of 28 credit hours earned in chemistry courses beyond CHEM 121L or its approved equivalent. The B.A. must also include the
Minor Study Requirements

The minor requires a minimum of 21 credit hours earned in chemistry courses. In addition to CHEM 121L and 122L, the student must fulfill the course requirements in two of the following areas (NOTE: some of the courses have math, physics, chemistry or other prerequisites) or must fulfill the requirements of the Pre-Medical/Pre-Pharmacy/Biology area, which includes all of the chemistry courses typically required of applicants to a medical, dental, or pharmacy school:

- **Analytical Chemistry**: CHEM 253L, 454L
- **Biological/Biochemistry**: two courses from CHEM 421, 471, BIOC 423
- **Inorganic/Physical Chemistry**: CHEM 315 (or 311, 312, credit is not allowed for both 311 and 315) and 431
- **Organic Chemistry**: CHEM 301, 302, 303L, 304L
- **Physical Chemistry**: CHEM 311, 312 (credit is not allowed for both 311 and 315)
- **Pre-Medical/Pre-Pharmacy/Biology**: CHEM 253L or 315, plus 301, 302, 303L, 304L, and BIOC 423.

Departmental Honors

The student enters the program at the beginning of the junior year. At this time the student’s grade point average must be at least 3.20 overall and 3.50 in chemistry. This minimum must be maintained throughout the junior and senior years. Course requirements for graduation with honors are as follows: 131L–132L (or 121L–122L, 253L) (or 121L–132L), 307–308 (or 301–302), 303L, 304L, 311, 312, 331L, 332L, 415L, 421, 431, 454L and 6 hours of additional courses from 325–498, including at least 3 hours of 497-498. A senior honors thesis will be written based on the senior honors research and submitted to the faculty. An oral presentation will also be made in a departmental or divisional seminar. Honors students will also take the Graduate Record Examination Advanced Test in Chemistry in their senior year and must obtain a satisfactory score.

Any deviation from the requirements prescribed above must be approved in writing.

Graduate Program

**Graduate Advisor**
Professor Richard A. Kemp

**Graduate Recruitment**
Professor Hua Guo

**Application Deadlines**
- **Fall semester**: May 1 (financial aid)
- **Spring semester**: November 1

**NOTE**: Applications for graduate students admission are considered on a rolling basis for the Fall term beginning on December 1 and for the Spring term beginning July 1. Recommendations for admission by the Department are made until all financial aid is exhausted. Typically, aid resources are committed by March 1 and August 1. The department does not generally recommend admission without financial aid. Exceptions to this policy must be negotiated with the department Chairperson and the Graduate Recruitment and Selection Committee.

Degrees Offered

**M.S. in Chemistry**
Concentrations: analytical, inorganic, organic, physical.

**Ph.D. in Chemistry**
Concentrations: analytical, inorganic, organic, physical.
The areas of chemistry available for advanced degree work are analytical, inorganic, organic and physical. The program in chemistry is designed to encourage a broad education while remaining flexible enough to permit students to pursue their own interests and to develop programs to satisfy their goals. The specific requirements for admission to the graduate program are a minimum of 28 semester hours of chemistry, including general, analytical, organic and physical chemistry. A general physics course and mathematics through differential and integral calculus are also required.

General requirements for the Master of Science and Doctor of Philosophy degrees are specified in earlier pages of this catalog. Departmental requirements are described below and discussed in detail in the department's Graduate Program Handbook (available upon request).

The department requires that each student take a set of placement examinations upon entrance into the graduate program. The tests are in the four traditional areas of chemistry: analytical, inorganic, organic and physical. The exams are taken approximately one week prior to the student's first semester in the program. Each student's performance is assessed and the results are used to place a student into courses at an appropriate level to rectify deficiencies in the student's preparation for graduate work, if any such deficiencies are found. In general, Masters students are expected to be proficient in three areas, while Ph.D. students are required to be proficient in all four areas. Proficiency in each area may be demonstrated by passing the applicable placement examinations or receiving a grade of B or better in a course or courses assigned to the student by the Graduate Studies Committee. The remainder of the student's academic program is formulated in consultation with his/her Committee on Studies. See Chemistry Graduate Handbook for details on course work requirements.

Each student's major advisor and his or her Committee on Studies will, in consultation with the student, determine the type and amount of additional research skills in which the student must exhibit competence (for example: computer programming, electronics, mathematics, etc.).

The department offers the master's degree under Plan I and Plan II. In addition to the general requirements delineated earlier in this catalog, the candidate for a Plan I degree must present a seminar on his or her research work and pass a series of cumulative examinations; the candidate for a Plan II degree must prepare and orally defend a research proposal or related paper and may need to pass a series of written cumulative examinations. CHEM 650 Research Readings may be applied toward the M.S. degree; up to 4 hours for Plan I and up to 6 hours for Plan II when the Plan II degree is earned enroute to the Ph.D. degree.

General requirements for the Ph.D. degree are given in the earlier pages of this catalog. A significant department modification is that the comprehensive examination has two constituent parts: 1) a research proposal and oral defense and 2) a series of written cumulative examinations. Further details are given in the department's Graduate Program Handbook mentioned above.

For additional biochemistry courses, see listings under Biochemistry.

Chemistry (CHEM)

111L. Elements of General Chemistry. (4)
One-semester course in general chemistry, especially for non-science majors in the health sciences except premedicine and medical technology. Three lectures, 3 hrs. demlab/recitation. (Credit not allowed for both 111L and 121L.) Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science (NMCCN 1114). (Summer, Fall, Spring)

121L. General Chemistry. (4)
Introduction to the chemical and physical behavior of matter. Prerequisite: completion of MATH 121 or 150 with a grade of C or better which qualifies the student for MATH 162 or 180. Three lectures, 3 hrs. lab. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science (NMCCN 1214). (Summer, Fall, Spring)

122L. General Chemistry. (4)
Continuation of 121L. Prerequisite: 121L or 131L with grade of C or better. Three lectures, 3 hrs. lab. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science (NMCCN 1224). (Summer, Fall, Spring)

131L. Principles of Chemistry. (4)
Chemical and physical behavior of matter, atomic and molecular structure and chemical periodicity. Introduction to quantitative laboratory techniques and chemical instrumentation. Strongly recommended for students intending to major in chemistry. Pre- or corequisite: MATH 162. Three lectures, 3 hrs. lab. (Credit not allowed for both 121L and 131L) [Fall]

132L. Principles of Chemistry. (5)
Thermodynamics, equilibria and kinetics in chemical systems. Lab is a continuation of CHEM 131L. Prerequisite: 131L or grade of A in CHEM 121L the previous semester. Pre- or corequisite: MATH 163 or 181. Three lectures, 6 hrs. lab. (Credit not allowed for both 122L/253L and 132L) [Spring]

151L. General Chemistry, Special, Lecture or Laboratory. (1-3)
Provides either lecture or laboratory credit for transfer students needing only the lecture or laboratory for CHEM 121L or 131L. Available only to transfer students with this special problem. Can be taken once. Lab is for 1 credit hour, lecture is for 3 credit hours. Prerequisite: permission of department chairperson only. (Offered upon demand)

152L. General Chemistry, Special, Lecture or Laboratory. (1-3)
Provides either lecture or laboratory credit for transfer students needing only the lecture or laboratory for CHEM 122L or 132L. Available only to transfer students with this special problem. Can be taken once. Lab is for 1 credit hour, lecture is for 3 credit hours. Prerequisite: permission of department chairperson only. (Offered upon demand)

212. Integrated Organic Chemistry and Biochemistry. (4)
Survey interrelating the major principles of organic chemistry and biochemistry with special emphasis toward interests of students in the health sciences. Prerequisite: 111L or 121L. (Credit not allowed for both 212 and 301L) (Summer, Fall, Spring)

253L. Quantitative Analysis. (4)
Theory and techniques of chemical analysis. Prerequisite: 122L. Three lectures, 4 hrs. lab. (Students should make every effort to complete 253L within two semesters of completion of 122L.) (Summer, Fall, Spring)

**301. Organic Chemistry. (3)
Chemistry of the compounds of carbon. Prerequisite: 122L or 132L. (Summer, Fall, Spring)

**302. Organic Chemistry. (3)
Continuation of 301. Prerequisite: 301. (Summer, Fall, Spring)

303L. Organic Chemistry Laboratory. (1)
To be taken concurrently with or following 301 or 307. Three hrs. lab. (Summer, Fall, Spring)

304L. Organic Chemistry Laboratory. (1)
To be taken concurrently with or following 302 or 308. Pre- or corequisite: 302 or 308. Three hrs. lecture, 1 hr. lab. (Summer, Fall, Spring)
**311. Physical Chemistry. (4)**
The quantitative principles of chemistry, including gases, thermodynamics, equilibrium, quantum systems, spectroscopy and kinetics, developed by numerous problems.
Prerequisites: (122L or 132L) and MATH 162 and 163 and (PHYC 151L or 161L). Corequisites: PHYC 262 and MATH 264. [Fall]

**312. Physical Chemistry. (4)**
Continuation of 311.
Prerequisite: 311. [Spring]

**315. Introductory Physical Chemistry. (4)**
Fundamentals of physical chemistry with primary emphasis upon biological and biochemical applications.
Prerequisites: (122L or 132L) and (MATH 162 or 181). (Cannot be used for credit toward a B.S.) [Credit not allowed for both 311 and 315.] [Fall]

**325. Special Topics for Undergraduates. (1-3, may be repeated up to 2 times) [1-3]**
Possible topics are: chemical literature, environmental chemistry, photochemistry, stereochemistry, macromolecules, C-13-NMR, natural products. Can be taken twice for a maximum of 6 credit hours. [Fall upon demand]

**326. Special Topics for Undergraduates. (1-3 to a maximum of 6) [Fall]**
Possible topics are: chemical literature, environmental chemistry, photochemistry, stereochemistry, macromolecules, C-13-NMR, natural products. [Spring upon demand]

**331L. Chemistry Laboratory III. (2)**
Integrated advanced analytical-physical-chemical laboratory, illustrating the techniques used to quantify the energetics, dynamics, composition and structure of matter.
Pre- or corequisite: 311. Six hrs. lab. [Fall]

**332L. Chemistry Laboratory III. (1-2)**
Two credits for chemistry majors, 1 credit for chemical engineers. Continuation of 331L.
Prerequisite: 331L. Corequisite: 312. Six hrs. lab. [Spring]

**391. Readings in Selected Topics. (1-3 to a maximum of 6) [Fall]**
Advanced topics not covered in general offerings. [Fall upon demand]

**392. Readings in Selected Topics. (1-3, may be repeated up to 2 times) [1-3]**
Advanced topics not covered in general offerings. Can be taken twice for a maximum of 6 credit hours. [Spring upon demand]

**415L. Synthesis and Structure Determination Laboratory. (2)**
An integrated advanced laboratory illustrating the tools and techniques of modern synthesis and providing experience with chemical and instrumental methods of structure determination in inorganic and organic chemistry.
Prerequisites: 302, 304L and 312. Corequisite: 431. Six hrs. lab. [Fall]

**421./521. Biological Chemistry. (3)**
Brings the fundamentals of general and organic chemistry to bear on the complex array of structures and chemical processes that occur in living organisms.
Prerequisite: 311 or 315. [Offered upon demand]

**431. Advanced Inorganic Chemistry. (3)**
Survey of electronics and molecular structures of inorganic compounds, coordination chemistry, bonding theory, physical methods, periodicity and reactions.
Prerequisite: 312 or 315. [Fall]

**433. Chemical Applications of Group Theory. (1-3)**
The role of symmetry in chemical problems. Areas to be treated include representation theory, vibrational and electronic spectroscopy, molecular orbital theory and orbital control of chemical reactions. [Fall]

**454L. Instrumental Analysis. (4)**
Instrumentation and applications of instrumental methods to chemical analysis, including spectrophotometric, electroanalytical, X-ray diffraction, neutron activation and chromatographic methods.
Prerequisite: 253L. Two lectures, 6 hrs. lab. [Spring upon demand]

**466. Scientific Computation. (3)**
The use of computers in science. Structured computer programming will be introduced and applied to scientific problem solving, data analysis, simulation, modeling and display.

**471. Advanced Topics in Chemistry. (2-3 to a maximum of 6) [Fall]**
Current topics requiring a background in physical chemistry such as spectroscopy, reaction mechanisms, advanced synthesis, polymer chemistry and materials chemistry.
Prerequisites: 302 and either 315 or 311–312. [Fall upon demand]

**495. Undergraduate Problems. (1-3) [Summer, Fall]**

**496. Undergraduate Problems. (1-3 to a maximum of 4) [Spring]**

**497. Senior Honors Research. (1-3 to a maximum of 4) [Senior paper based on independent research. [Summer, Fall]]**

**498. Senior Honors Research. (1-3 to a maximum of 4) [Senior paper based on independent research. [Spring]]**

**499. Chemistry Seminar–Research. (1) [Offered on a CR/NC basis only.**

**501. Molecular Structure Theory. (3)**
General introduction to quantum mechanics with emphasis on chemical applications. Topics covered include basic postulates of quantum mechanics, standard analytically solvable quantum systems (free electrons, particle in a box, harmonic oscillator, rigid rotor, hydrogen atom), approximation methods (perturbation theory and the variational method). An introduction to molecular quantum mechanics, molecular spectroscopy and time-dependent perturbation theory. [Spring]

**504. Chemical Dynamics. (3)**
A rapid review of chemical thermodynamics and kinetics. Usually for graduate students in areas outside of physical chemistry. [Fall]

**511. Mechanisms in Organic Chemistry. (3)**
An introduction to the methods used for determining reaction mechanisms in organic chemistry and the application of those methods for determining the mechanisms of reactions based on ionic processes. [Fall]

**513. Organic Molecular Structure Determination. (3)**
Determination of the structure of organic compounds using spectroscopic methods, especially hydrogen and carbon NMR, infrared and electronic spectroscopies and mass spectrometry. [Fall upon demand]

**514. Synthesis in Organic Chemistry. (3)**
Development of strategies for synthesizing organic compounds including stereochemical control; introduction to advanced reactions for carbon-carbon bond formation and functional group manipulation. [Spring]

**515. Topics in Organic Chemistry. (1-3 to a maximum of 6) [Fall upon demand]**

**516. Topics in Organic Chemistry. (1-3 to a maximum of 6) [Spring upon demand]**

**521./421. Biological Chemistry. (3)**
Brings the fundamentals of general and organic chemistry to bear on the complex array of structures and chemical processes that occur in living organisms.
Prerequisite: 311 or 315. [Offered upon demand]
524. X-Ray Crystallography. (3)  
Overview of x-ray crystallographic methods in structure determination and interpretation. (Spring upon demand)

534. Physical Methods in Inorganic Chemistry. (3)  
Survey of the theory and application principles of spectroscopic methods typically utilized in solving molecular and electronic structure problems in inorganic chemistry. This usually includes electronic spectroscopies, vibrational spectroscopies, magnetic resonance spectroscopies, x-ray diffraction analysis, mass spectrometry and surface spectroscopies.  
Prerequisites: 431 and 433. (Spring upon demand)

536. Synthesis and Mechanism in Inorganic Chemistry. (3)  
A general outline of synthesis methodologies and approaches for main group element and transition metal compounds is provided. In addition, the reactivity of these compounds is explored with particular emphasis on systematics in reaction mechanisms.  
Prerequisite: 431. (Spring upon demand)

537. Topics in Inorganic Chemistry. (1-3 to a maximum of 6)  
(Fall upon demand)

538. Topics in Inorganic Chemistry. (1-3 to a maximum of 6)  
(Spring upon demand)

540. Advanced Analytical Chemistry. (3)  
A study of the fundamental processes underlying the techniques of chemical analysis including thermodynamics, acid/base chemistry and electrochemistry. (Spring)

541. Separations. (3)  
Theory and practice of the chemical separation techniques used for chemical analysis including chromatography and electrophoresis. (Fall upon demand)

545. Topics in Analytical Chemistry. (1-3 to a maximum of 6)  
(Fall upon demand)

546. Topics in Analytical Chemistry. (1-3 to a maximum of 6)  
(Spring upon demand)

560. Biophysical Chemistry. (3)  
Prerequisite: 312 or 315. (Spring upon demand)

562. Quantum Chemistry II. (3)  
Second course in quantum chemistry covers advanced topics in quantum dynamics spectroscopy and time-dependent phenomena. Electron transfer processes, path integral methods and scattering theory will be examined in detail. (Spring upon demand)

565. Kinetics. (3)  
Molecular reaction dynamics and chemical reactivity, experiment and theory; phenomenology or rates of chemical reactions and the relationship to reaction mechanism; potential energy surfaces, transition state theory and other approaches.  
Prerequisite: 312. (Fall upon demand)

566. Spectroscopy. (3)  
A graduate physical chemistry course in spectroscopy. Covers theory of atomic and molecular absorption and emission as well as applications to Fluorescence and Raman.  
Prerequisite: 312. (Spring upon demand)

567. Topics in Physical Chemistry. (1-3 to a maximum of 6)  
(Fall upon demand)

568. Advanced Topics in Physical Chemistry. (1-3 to a maximum of 6)  
(Offered upon demand)

569. Master’s Thesis. (1-6)  
Offered on a CR/NC basis only.

623. Research Colloquium. (1 to a maximum of 10)  
Presentation and discussion of current research by faculty from other institutions.  
Offered on a CR/NC basis only.

625. Chemistry Divisional Seminar. (1)  
Student presentations and discussion of current research by students and faculty in the same traditional division of chemistry.  
Offered on a CR/NC basis only. (Fall, Spring)

627. Chemistry Instrumentation Seminar. (1 to a maximum of 2)  
Training and practice in use of research instrumentation required by a student’s graduate research.  
Offered on a CR/NC basis only.

650. Research/Readings. (2-12, no limit)  
Offered on a CR/NC basis only. (Summer, Fall, Spring)

699. Dissertation. (3-12)  
Offered on a CR/NC basis only.

COMMUNICATION & JOURNALISM

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Ilia Rodriguez, Ph.D., University of Minnesota  
Olaf Werder, Ph.D., University of Florida

Lecturers:  
Judith Hendry, Ph.D., University of Denver  
Dennis Herrick, M.A., University of Iowa  
Karolyn Cannata-Winge, M.A., University of Missouri-Columbia

Professors Emeritus:  
Fred V. Bales  
Jean M. Civikly-Powell  
Charles K. Coates  
John C. Condon, Regents’ Professor  
Kenneth D. Frandsen  
Anthony Hillerman

Major Study Requirements  
The department offers three undergraduate degrees:  
Bachelor of Arts in Communication, Bachelor of Arts in Journalism, and Bachelor of Arts in Mass Communication.
For admission to any degree program, a cumulative grade point average of 2.50 is required. Requirements of the degrees include:

1) Complete major courses as specified by the department.
2) Earn a grade of C (not C-) or better in each course used to fulfill major requirements.
3) Earn a 2.50 grade point average for all course work in the major, and
4) Have a cumulative grade point of 2.0 at graduation.

Departmental majors should choose a minor in other departments in the College of Arts and Sciences or in another college or unit of the University, such as Fine Arts or the Anderson Schools of Management or Education. A distributed minor is available and must be approved by the department chair before the beginning of the senior year.

**Communication Major**

To earn a degree in Communication, students must complete 36 credits in departmental courses, including 101, 300, 301, 332 or 333, and 400. Twenty-one of the required 36 credits must be taken in courses 300 level or above. Students must complete 101 with a C or better before being admitted as majors. 101 is a prerequisite for 300 and 301; 300 and 301 must be completed before taking 400.

Communication majors must also complete 9 credits in one of the concentrations in the department—intercultural communication, interpersonal communication, organizational communication, and public communication. The first course in the sequence—noted in bold type—is required. Students may select the remaining 6 units from the other courses in the track. Courses within the concentration may be taken in any order.

**Intercultural Communication**
- 314 Intercultural Communication
- 318 Language, Thought and Behavior
- 320 Mediation
- 323 Nonverbal Communication
- 413 Studies in Intercultural Communication
- 469 Multiculturalism, Gender and Media

**Interpersonal Communication**
- 221 Interpersonal Communication
- 318 Language, Thought and Behavior
- 320 Mediation
- 323 Nonverbal Communication
- 344 Interviewing
- 421 Interpersonal Communication Analysis

**Organizational Communication**
- 340 Communication in Organizations
- 225 Small Group Communication
- 314 Intercultural Communication
- 344 Interviewing
- 443 Current Developments in Organizational Communication
- 446 Organizational Analysis and Training

**Public Communication**
- 337 Rhetorical Theory
- 327 Persuasive Communication
- 331 Argumentation
- 334 Political Communication
- 335 Rhetoric of Dissent
- 435 Legal Communication

**Journalism Major**

To earn a degree in Journalism, students must complete 36 hours of course work, 27 hours in required course and 9 hours in electives. All Journalism majors must complete the following core requirements: 171, 268, 269, 465 and 468. Majors must take 80 or more semester hours in courses outside the department, with no fewer than 65 semester hours in the basic liberal arts and sciences.

Journalism majors must also complete 12 hours in either concentration—print or broadcast. The courses should be taken in order.

**Broadcast Journalism**
- 267 Writing for Broadcast Journalism
- 360 Broadcast News I
- 364 Broadcast News II
- 361 Broadcast Station Operations

**Print Journalism**
- 271 Writing for Print Journalism
- 372 Copy-Editing and Makeup
- 375 Intermediate Reporting
- 475 Advanced Reporting

**Mass Communication Major**

To earn a degree in Mass Communication, students must complete 36 hours of course work, 27 hours in required courses and 9 hours in electives. All Mass Communication majors must complete the following core requirements: 110, 171, 269, 327 and 465.

Mass Communication majors must also complete 12 hours in one of three concentrations—advertising, mass media, and public relations. The courses should be taken in order.

**Advertising**
- 380 Introduction to Advertising
- 381 Advertising Media Planning
- 384 Advertising Copy Writing
- 482 Advertising Campaigns

**Mass Media**
- 268 Mass Communication Theory and Effects
- 365 History of the Media
- 368 Media Criticism
- 467 Mass Communication International Perspectives

**Public Relations**
- 281 Writing for Public Relations
- 385 Introduction to Public Relations
- 485 Public Relations Case Studies
- 489 Public Relations Campaigns

**Minor Study Requirements**

Students who declare a minor in Communication must complete 21 credits in departmental courses, including 101, and 12 credits in 300–400 level courses. All departmental courses used to fulfill requirements in the minor must be completed with a grade of C or better.

A minor in Journalism and Mass Communication consists of 21 hours, including 171L, 268 or 269, 271 and 465; all with a C or better.

**Departmental Honors**

Students seeking departmental honors should obtain guidelines from the department office and make application to the chairperson or the director of Undergraduate Studies. Admission requires an overall grade point average of 3.5 or better. An honors thesis must be completed during the senior year.

**Graduate Program**

**Review of Applications Begins**

Fall semester: January 15 (M.A. and Ph.D.)
Spring semester: October 1 (M.A.)
Degree Requirements

M.A. in Communication

Concentrations: interpersonal communication, intercultural communication, organizational communication, rhetorical communication, mass communication and health communication.

The Master of Arts in Communication is offered under three options—Plan I (thesis), Plan II (project) and Plan III (comprehensive exam)—according to regulations set forth in earlier pages of this catalog.

Students are required to complete 500, 501, 507, 538 or 608 and one seminar course in their chosen area of concentration, which includes 514, 521, 531, 544, 550 and 561.

NOTE: Students are required to complete 500 and 501 during the earliest semesters they are available following admission. All plans require a minimum of 36 credit hours, with at least 27 hours in communication. A tentative plan of study form should be submitted by the second semester, so as to reflect the student’s major and minor interests. Contact the director of graduate studies for additional information.

Each candidate is assisted by a committee of at least three faculty members, one of whom must be from outside the department, for Plan I. Candidates must prepare a detailed prospectus and have it approved by their committee prior to proceeding with research for the thesis (Plan I) or beginning work on a project (Plan II). Candidates must submit a written thesis or project report to their committee for examination.

Candidates in Plans I and II are required to complete a Master’s Examination. These examinations are conducted by the candidate’s committee following completion of the thesis or project. This examination emphasizes the thesis or project and assesses the candidate’s ability to relate his or her formal course of study to the thesis or project. Candidates must submit their Program of Studies for approval for a master’s degree prior to completing this examination. Candidates should consult with their thesis or project advisor concerning deadlines and specific procedures.

Candidates in Plan III must complete 36 hours of course work and a comprehensive exam. In order to take the comprehensive exams students must have completed 30 units and have taken all the required courses.

Minor in Communication for Master’s Students

Students getting a Master’s degree in other departments may select a minor in Communication. The minor requires 12 credit hours of graduate course work. CJ 500 is required and should be taken as soon as possible. Students must consult with the CJ Graduate Director for advisement before taking 500. There is a 3 credit maximum on Graduate Problems (CJ 693).

Ph.D. in Communication

Graduate study in the Department of Communication and Journalism aims to prepare students to become scholars and professionals who are conversant with one or more areas in the field of communication. Departmental faculty offer courses in rhetorical and communication theory; interpersonal; organizational and public communication; mass communication; language and behavior; health communication; and intercultural communication. Because of the wide diversity of disciplinary approaches represented in the work of the department, the graduate program is open to students with undergraduate preparation in communication, journalism, the humanities, the social sciences and other fields related to the study of human communication. For all candidates, admission must be approved by the departmental committee on graduate studies.

Academic requirements for the Ph.D. in Communication consist of an intensive program of course work, research and professional development. The doctoral degree requires a minimum of 48 graduate credit hours with at least 36 graduate credit hours of course work beyond the Master's degree.

Course work requirements include the following: nine departmental course credit hours in research methods (these hours may be obtained by taking any three of the following four courses: 507, 538, 607 and 608. However, if the student has not taken 507 or an acceptable equivalent, 507 must be one of the three courses chosen); two 600-level courses in communication theory (including both the history and philosophy of communication study and theory construction); one 600-level course in intercultural communication theory. In addition to these core courses, Ph.D. candidates will select elective courses from any of the Communication & Journalism courses marked for graduate credit in this catalog.

Ph.D. candidates also will be required to satisfy a research skills requirement by demonstrating competency in two languages (one of which is English) or, alternatively, in a computer language or in a computer-related data-analysis skill as determined by the candidate's committee on graduate studies.

Communication and Journalism (CJ)

101L. Introduction to Communication. (3)
Principles and concepts of various types of human communication including interpersonal, small group, organizational, public and mass communication. Two hrs. lecture, 1 hr. lab.

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

115. Communication Across Cultures. (3)
(Also offered as AFAM 115.) An introduction to communication among people from different cultural backgrounds, emphasizing intercultural relations. The class seeks to identify, honor and enhance the strengths of different cultural perspectives.

130. Public Speaking. (3)
A performance course that deals with the analysis, preparation and presentation of speeches. Meets New Mexico Lower Division General Education Common Core Curriculum Area I: Communications (NMCCN 1113).

171L. Writing for the Mass Media I. (3)
Practical introduction to journalism, emphasizing journalistic conventions and the gathering and writing of news for the print and broadcast media. Language and typing skills required.
Prerequisites: 15 hrs., 2.00 GPA, ENGL 102.

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

221. Interpersonal Communication. (3)
Analysis of a variety of interpersonal communication concepts, with special emphasis on the application of communic-
cation skills in different situations. Meets New Mexico Lower Division General Education Common Core Curriculum Area I: Communications.

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

261. News Photography/Lab. (3) Camera and darkroom techniques for newspapers and magazines; editing of photos, including preparation of cutlines; production of all varieties of photos for publication, including photo stories.

262. Radio/Television Performance. (3) Verbal and nonverbal performance and message preparation skills related to both the audio and video components of the mass media. Emphasis on fundamentals of prepared, extemporaneous and interpretive speaking for radio and television.

264. Broadcast Practice. (1 to a maximum of 3) Open to staff members of KUNM-FM. May be taken three times.

267. Writing for Broadcast Journalism. (3) Continuation of 171L, with increased emphasis on writing for radio and television. Prerequisite: 171L, or consent of instructor.

268. Media Theory and Influence. (3) Introduction to theories of mass media and their influences.

269. Introduction to Visual Communication. (3) Exploration of visual images in the mass media, with emphasis on the design and theory of mediated imaging. Includes some practical training in still photography and video. Prerequisite: 171L.

271. Writing for Print Journalism. (3) Continuation of CJ 171L with increased emphasis on gathering news from original sources and writing for the various print journalism outlets. Prerequisite: 171L.

273. Newspaper Practice. (1 to a maximum of 3) Open to staff members of the New Mexico Daily Lobo. May be taken three times.

281. Writing for Public Relations. (3) Continuation of 171L with increased emphasis on writing tasks required for public relations, such as news releases, position papers, backgrounders, newsletters and more. Prerequisite: 171L, consent of the instructor.

293. Topics. (1-3 to a maximum of 6) Study of the nature of communication theories and theory development, theories of meaning, information processing and influence with applications to selected communication contexts. Prerequisite: 101.

301. Communication Research Methods. (3) Quantitative and qualitative methods useful in investigation of communication processes and effects; concepts and techniques used in research design, data analysis, reporting and critically evaluating research. Prerequisite: 101.

303. English Phonetics. (3) An introduction to the physiological mechanisms underlying speech production, the linguistic classification and transcription of speech sounds, the acoustic properties of speech sounds, the relationship between phonetics and phonology and applications to speech pathology.

314. Intercultural Communication. (3) Examines cultural influences in communication across ethnic and national boundaries.

318. Language, Thought and Behavior. (3) Examination of the influence of language on perception, evaluations, mass media, creativity and interpersonal relations.

319. Language and Culture. (3) (Also offered as ANTH 310 and LING 359.) Examination of the interrelations of language and speech with other selected aspects of culture and cognition. Prerequisites: ANTH 110 or LING 101 or LING 292.

320. Mediation. (3) Includes an introduction to conflict-management techniques with workplace, classroom and personal applications. The basic mediation skills presented prepare students to mediate in a variety of situations.

323. Nonverbal Communication. (3) Theory, analysis and practice of a variety of nonverbal messages, including body movement and appearance, vocal cues and environmental cues.

326. Gender and Communication. (3) (Also offered as WMST 326.) Study of the relationship between gender and communication with specific attention to how gender affects language, verbal and nonverbal communication practices and how women's movements have attempted to transform gendered communication practices.

327. Persuasive Communication. (3) Analysis, practice and evaluation of principles of attitude change for a variety of interpersonal and public communication situations.

331. Argumentation. (3) Examines historical and contemporary theories of argumentation. Emphasis placed on development of effective advocacy and criticism of arguments.


333. Professional Communication. (3) Focuses on the written and presentation skills needed to succeed in a professional environment. Lessons emphasize writing reports and proposals, acquiring social information, social interaction skills, the influence of audience on message design and business etiquette.

334. Political Communication. (3) Focuses on the theory and practice of political communication in speech making, campaigns, debates and town meetings, as reported through the mass media and via new technologies.

335. Sociology of Mass Communication. (3) (Also offered as SOC 335.) Mass communication in society with emphasis on Western industrial societies, the impact of mass communication on social movements and on sectors of the social structure and the social psychology of mass communication.

336. Rhetoric of Dissent. (3) Study of the rhetoric of agitators, demagogues and representatives of the establishment including analysis of the rhetoric of controversial issues.

337. Rhetorical Theory. (3) Historical survey of major contributors and contributions to the development of contemporary rhetorical theory.

339. Rhetoric and the Environment. (3) The course examines the ways we communicate about the environment and how this, in turn, impacts the way we view and treat the natural world.
340. Communication in Organizations. (3)
Examines current theories of organizational behavior with emphasis on communication patterns and practices. Attention to superior-subordinate communication, formal and informal communication networks, authority and power.

344. Interviewing. (3)
Theory and practice of interviewing for informational, journalistic, employment and decision-making purposes.

360. Broadcast News I. (3)
Gathering and reporting news for television. Instruction in shooting and editing videotape; writing to picture; and writing, producing and anchoring short news programs.
Prerequisite: 268 or 269. Pre or corequisite: 271.

361. Photojournalism II. (3-6)
Continues with greater emphasis on camera reporting, color photography, weekly news assignments, scaling photos for reproduction and advanced black and white darkroom techniques. For majors only.
Prerequisite: 261. Restriction: CJ major.

362. Broadcast Station Operations. (3)
Examination of media production units and outlets from an organizational perspective. Study of the roles of management and administrative personnel, market analysis and advertising sales.

364. Broadcast News II. (3)
Continuation of CJ 360. Students create longer, more elaborate programs with their own documentary segments, essays and in-studio interviews.
Prerequisite: 360.

365. Social Foundations of Media. (3)
The course will examine the development of communication media in the United States and the social and cultural contexts within which media emerged and evolved over time.

368. Media Criticism. (3)
evaluation of radio/television programming content from the perspective of the journalistic and academic critic. Examination of theoretical issues and production elements as they affect programming genres.

371. Persuasive Writing. (3)
Writing the editorial essay, the column and other interpretative matters.
Prerequisite: 271.

372. Copy-Editing and Makeup. (3)
Practice in editing and presenting news copy by headlines, typography, page makeup and video display terminal.
Pre- or corequisite: 271.

373. Magazine Writing. (3)
The process of writing and marketing fiction and non-fiction for magazines.

374. Desktop Publishing. (3)
Introduction to writing, editing and designing newsletters and other short publications using personal computers and desktop publishing software. Emphasis will be on the layout and design of newsletters with special attention to readability. Basic competency in the use of personal computers is required.

375. Intermediate Reporting. (3)
Emphasis on reporting complex affairs, the news feature story, developing and covering beats and specialized interests.
Prerequisite: 271.

376. Media Management. (3)
This course is designed to provide insights into the management and ownership aspects of running a media company. Attention will be given to leadership skills and the complex operations of media companies.

380. Introduction to Advertising. (3)
Theory, strategy and techniques of advertising and advertising campaigns.
Prerequisite: 271.

381. Advertising Media Planning. (3)
Development of media strategy for integrated marketing communications and the appropriate media for specific advertising messages to target audiences. The fundamentals of media evaluation, selection, cost, scheduling, and media audience research.

384. Advertising Copywriting. (3)
The theory, strategy and practice of developing advertising copy for use in a variety of print and electronic media formats.
Prerequisite: 380.

385. Introduction to Public Relations. (3)
Techniques and strategies employed by public relations practitioners. Emphasis upon history, theory and skills necessary to enter the professional arena.
Prerequisite: 271.

393. Topics in Communication and Journalism. (1-3 to a maximum of 6) [1-3 to a maximum of 12]

400. Senior Seminar: Perspectives on Communication. (3)
In this capstone course, seniors assess the theories, concepts and skills learned throughout their communication major and apply them to real-world situations as well as to the fulfillment of professional, personal and social goals.
Prerequisites: 300 and 301 and (332 or 333).

413. Studies in Intercultural Communication. (3 to a maximum of 6)
Intensive study of theory and research in intercultural communication concerning interactions between members of specific cultures chosen by the instructor. Content varies from semester to semester, may be repeated with different content.
Prerequisite: 314.

421. Interpersonal Communication Analysis. (3)
Advanced analysis of theories and research in interpersonal communication with emphasis on communication processes, relational development and conflict resolution.
Prerequisite: 221.

425. Theories of Small Group Communication. (3)
Major concepts, theories and research in small group communication with attention given to decision-making, group formation and development, and communication processes and networks. Consideration of applications in a variety of contexts.
Prerequisite: 225.

*430. American Religious Communication. (3)
(Also offered as RELG 430.) The role of religious communication during the Puritan period, the first and second awakenings and the period of media evangelism. The course examines various types of communicators, messages, audiences and channels of persuasion.

*435. Legal Communication. (3)
Using historical trials as case studies, the course investigates the various communicative functions of litigation including media coverage, opening statements, direct and cross-examination, closing arguments, judge’s instructions and appellate arguments.

441. Advanced Organizational Communication. (3)
Intensive study of current organizational communication issues with an emphasis on decision making and problem solving. Students learn and apply advanced critical thinking and analytical skills to organizational case studies.

443. Topics in Organizational Communication. (Current Developments in Organizational Communication.) (3 to a maximum of 6)
Intensive study of one area of theory and research in organizational communication chosen by the instructor, e.g., conflict and negotiation, information technology, organizational cultures. Content varies from semester to semester; may be repeated with different content.
Prerequisite: 340.
446. Organizational Analysis and Training. (3) Identification and analysis of communication problems in organizations. Attention to problems and requirements of communication training and development in organizational settings.

450. Health Communication. (3) Concepts and strategies for preventive health communication in such contexts as provider-patient interaction, health campaigns, social marketing, health images in the mass media and communication in health care organizations.

454. Diffusion of Innovations. (3) The spread of new ideas, especially technological innovations, among the members of a system. Sources of innovations, importance of interpersonal networks in diffusion and consequences of technological innovations.

463. Topics in Mass Communication. [Current Developments in Mass Communication.] (3 to a maximum of 6) Intensive study of one area of theory and research in mass communication chosen by the instructor, e.g., rating systems, programming, economics, regulation, social effects. Content varies from semester to semester; may be repeated with different content.

464. News Documentaries. (3) Advanced ENG production and television programming, with emphasis on investigation of subject matter and visual approaches to reporting in series and in longer, in-depth segments. Prerequisite: 364.

*465. Mass Media Ethics. (3) The power and problems of communications media and the fields of advertising and public relations with emphasis on evolving ethical standards.

467. Mass Communication: International Perspectives. (3) The structure and role of international and national media in molding public attitudes and in policy making. Development of opinion on central issues in international relations and in nations other than the U.S.

*468. Mass Media Law and Regulation. (3) First Amendment, sources of law, law of defamation, invasion of privacy, Freedom of Information Act, copyright, advertising regulations, broadcasting and the FCC. Emphasis on laws and policies that directly affect news gathering and dissemination.

469. Multiculturalism, Gender and Media. (3) (Also offered as WMST 469.) Exploration of how gender, race, class, sexual orientation, ethnicity and other social positions affect media coverage, portrayals, production and reception. The course focuses on theories, methods of analysis and topics of current interest.

475. Advanced Reporting. (3) Interpretive reporting of public affairs with emphasis on investigation of subject matter, presentation and publication. Prerequisite: 375.

479. Electronic Publishing. (3) Introduction to writing and designing electronic publications using personal computers and online publishing software. Emphasizes use of graphics and text to communicate with users of the Internet. Competency with personal computers required.

482. Advertising Campaigns. (3) Theory, strategy and techniques applied to advertising campaigns. Prerequisite: 384.

485. Public Relations Case Studies. (3) Introduction to techniques in analyzing and judging public relations cases. Public relations objectives, policies and materials are covered. Students will learn how to review, criticize and suggest policy alternatives and develop a substantive specialty. Prerequisite: 385.

*489. Public Relations Campaigns. (3) Concepts and principles of public relations techniques and application of those techniques in campaigns. Attention to history, evolution and present structure of public relations. Prerequisite: 485.

490. Undergraduate Problems. (1-3 to a maximum of 6) Restriction: permission of department chairperson.

*491. Internship in Communication Education. (3) Review of recent developments in course content, teaching materials and instructional strategies; simulated classroom experience with analysis of teaching behavior using media. Restriction: permission of department chairperson.

492. Internship in Communication. (1-3 to a maximum of 6) Internships in communication and/or journalism arranged with individual faculty members. Prerequisites: completion, with a minimum grade point average of 2.5, of 9 hours in C & J, with at least one 300-level course and one course in the area of the internship. Restriction: permission of instructor. Offered on CR/NC basis only.

494. Senior Thesis. (3)

500. Foundations of Communication Theory. (3) Survey and analysis of concepts, models and perspectives in the development of theories of communication; attention to philosophical, critical, historical and scientific bases for the study of communicative processes. Required of all M.A. students.

501. Foundations of Communication Research. (3) Review and evaluation of various forms of research and scholarly writing in the field of communication; identification of conceptual and paradigmatic problems in interpretation of research results; attention to skills in writing and reporting research.

507. Quantitative Data Analysis. (3) Designing empirical research in communication, with special reference to applications of experimental design to communication research, methods of data analysis and developing a research report.

512. Topics in Intercultural Communication. [Studies in Intercultural Communication.] (3 to a maximum of 6) Intensive study of theory and research in intercultural communication concerning interactions between members of specific cultures chosen by the instructor. Content varies from semester to semester, may be repeated with different content.

514. Seminar: Intercultural Communication. (3) Theories and evidence on factors that facilitate and inhibit communication between representatives of different cultural groups, across national boundaries and among people of different ethnic backgrounds.

516. [536.] Seminar: Culture and Discourse. (3 to a maximum of 6) This course studies the ways culture is created, maintained and changed through discursive practices. Content varies from semester to semester; may be repeated with different content.

518. Seminar: Language Behavior. (3) Theories and evidence on relationships among speech, language and behavior; special focus on the pragmatic dimension of semiotics, including general semantics, socio- and psycho-linguistics and communication systems.

519. Language and Culture. (3) (Also offered as ANTH 511 and LING 559.) Examination of the interrelations of language and speech with other selected aspects of culture and cognition. Prerequisites: 110 or LING 101 or LING 292.
521. Seminar: Interpersonal Communication. (3) Theories and research on the components and dynamics of interpersonal interaction and comparative analysis of approaches to the study of interpersonal communication.

522. Topics in Interpersonal Communication. [Studies in Interpersonal Communication.] (3 to a maximum of 6) \( \Delta \) Intensive study of theory and research in one area of interpersonal communication chosen by the instructor. Content varies from semester to semester, may be repeated with different content.

531. Contemporary Rhetoric. (3) Approaches of different rhetorical theorists to the analysis of rhetorical discourse.

532. Studies in Rhetoric. (3 to a maximum of 6) \( \Delta \) Intensive study of theory and research in one area of rhetorical communication chosen by the instructor. Content varies from semester to semester, may be repeated with different content.

538. Seminar: Rhetorical Criticism. (3) Survey of methods for analyzing symbols rhetorically as an approach to answering research questions in communication.

542. Topics in Organizational Communication. [Current Developments in Organizational Communication.] (3 to a maximum of 6) \( \Delta \) Intensive study of one area of theory and research in organizational communication chosen by the instructor, e.g., conflict and negotiation, information technology, organizational cultures. Content varies from semester to semester, may be repeated with different content.

544. Seminar: Organizational Communication. (3) Intensive survey of classical and contemporary organizational communication theory emphasizing current research trends. Advanced readings in such topics as organizational innovation, intercultural organizations, critical theory applications to organizations, computer mediated communication and employee participation.

550. Health Communication. (3) Concepts and strategies for preventive health communication in such contexts as provider-patient interaction, health campaigns, social marketing, health images in the mass media and communication in health care organizations.

552. Topics in Health Communication. [Studies in Health Communication.] (3 to a maximum of 6) \( \Delta \) Intensive study of theory and research in one area of health communication chosen by the instructor. Content varies from semester to semester, may be repeated with different content.

554. Diffusion of Innovations. (3) The spread of new ideas, especially technological innovations, among the members of a system. Sources of innovations, importance of interpersonal networks in diffusion and consequences of technological innovations.

555. Multiculturalism, Gender and Media. (3) Exploration of how gender, race, class, sexual orientation, ethnicity and other social positions affect media coverage, portrayals, production and reception. The course focuses on theories, methods of analysis and topics of current interest.

558. Teaching the Basic Course. (1) Current issues associated with teaching introductory courses focusing on the role of graduate teaching assistants.

559. Graduate Problems. (1-3 to a maximum of 6) \( \Delta \) Independent study on questions and issues beyond those covered by regularly approved seminars. Plan must be prepared and approved by a faculty member who agrees to direct the study. Approval by department chairperson required.

562. Topics in Mass Communication. [Current Developments in Mass Communication.] (3 to a maximum of 6) \( \Delta \) Intensive study of one area of theory and research in mass communication chosen by the instructor, e.g., rating systems, programming, economics, regulation, social effects. Content varies from semester to semester, may be repeated with different content.

565. Multiculturalism, Gender and Media. (3) Exploration of how gender, race, class, sexual orientation, ethnicity and other social positions affect media coverage, portrayals, production and reception. The course focuses on theories, methods of analysis and topics of current interest.


608. Communication Research Methods: Qualitative. (3) Advanced study of methods, techniques and procedures useful in investigations that employ qualitative analysis of human communication processes.

614. Advanced Intercultural Communication. (3) The relationship between culture and communication with implications for intercultural encounters, historical roots of intercultural communication and theories of intercultural communication.

699. Dissertation. (3-12) Having registered for the dissertation, the student must continue to register for a minimum of 1 hour of 699 during each regular semester (exclusive of summer) until the project is completed and approved. Restriction: permission of advisor. Offered on CR/NC basis only.

CRIMINOLOGY

The Sociology Department serves as the administrative unit for the criminology program. See Sociology for program requirements and course descriptions.
EARTH AND PLANETARY SCIENCES

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John W. Geissman, Ph.D., University of Michigan
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Karl E. Karlstrom, Ph.D., University of Wyoming
Barry S. Kues, Ph.D., Indiana University
Leslie D. McFadden, Ph.D., University of Arizona
Jane Silverstone, Ph.D., Massachusetts Institute of Technology
Zachary D. Sharp, Ph.D., University of Michigan
Gary A. Smith, Ph.D., Oregon State University

Associate Professors
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Peter J. Fawcett, Ph.D., Pennsylvania State University
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Mousumi Roy, Ph.D., Massachusetts Institute of Technology

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Matthew Nyman, Ph.D., Virginia Polytechnic Institute and State University

Senior Research Professors
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Wolfgang E. Elston, Ph.D., Columbia University
Cornelia Klein, Ph.D., Harvard University
Lee A. Woodward, Ph.D., University of Washington

Research Professors
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Senior Research Scientists III
Viorel Atudorei, Ph.D., University of Lausanne (Switzerland)
Lars Borg, Ph.D., University of Texas at Austin
David Draper, Ph.D., University of Oregon, Eugene
Horton Newsom, Ph.D., University of Arizona
Charles K. Shearer, Jr., Ph.D., University of Massachusetts

Senior Research Scientists I
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Victor Polyak, Ph.D., Texas Tech University

Senior Research Assistant
Barbara Cohen, Ph.D., University of Arizona

Adjunct Faculty
Bruce Allen, Ph.D., The University of New Mexico
W. Scott Baldridge, Ph.D., Caltech University
M. Susan Barger, Ph.D., Pennsylvania State University
John D. Bloch, Ph.D., University of Calgary
David Coblenz, Ph.D., University of Arizona
Fraser E. Goff, Ph.D., University of California, Santa Cruz
Andrew Heckert, Ph.D., The University of New Mexico
Adrian Hunt, Ph.D., The University of New Mexico
Spencer G. Lucas, Ph.D., Yale University
Sean McKenna, Ph.D., Colorado School of Mines
Duane M. Moore, Ph.D., University of Illinois
V. Rama Murthy, Ph.D., Yale University
Aurora Pun, Ph.D., The University of New Mexico
Walter C. Riese, Ph.D., The University of New Mexico
John Shomaker, Ph.D., University of Birmingham, United Kingdom
Thomas E. Williamson, Ph.D., The University of New Mexico
Kenneth H. Wohletz, Ph.D., Arizona State University

Professor Emeritus
Rodney C. Ewing, Ph.D., Stanford University
Stephen P. Huestis, Ph.D., University of California San Diego

Introduction
Students are advised to check with the department for information on new or changed requirements.

Earth and Planetary Sciences is the study of the Earth and other bodies in the solar system. It involves the study of the formation, composition and history of rocks; the large- and small-scale processes that modify them after they form (including the effects of water, the atmosphere and human activities); and the useful materials (metals, petroleum, coal, etc.) that may be obtained from them. Earth and Planetary Sciences is a multidisciplinary science that utilizes chemistry, physics, biology, meteorology, oceanography and other disciplines to achieve a comprehensive understanding of the evolution of our planet and the solar system and to enhance the stewardship of our planet’s natural resources. Prospective majors are encouraged to begin their lower-division requirements in math, chemistry and physics as early as possible and visit with the Departmental Undergraduate Advisor to assist in curriculum planning. The B.S. degree is the recommended route for preparation for graduate study in the Earth Sciences. B.S. students do not need to select a minor: completion of degree requirements fulfills requirements for a Distributed Minor. Students wishing to concentrate in Geoscience fields (such as Environmental, Hydrology, Mineralogy/Materials, Quaternary, Geology, Geophysics, among others) are encouraged to consult recommended ‘Track’ guidelines (available in the Department Office or through the Departmental Undergraduate Advisor) for elective EPS and supporting science courses. Petitions for course substitutions in the degree programs are welcome and should be made in consultation with a department advisor.

Major Study Requirements
For the degree of Bachelor of Science: EPS required courses: 101, 105L (or ENVS 101 and 102L), 201L, 301, 302L, 303L, 304L, 305L, 319L, 401, 490 and 12 additional hours in Earth and Planetary Sciences above 299 (excluding 300, 491–492, 493 and 495). Total credits for the Earth and Planetary Sciences sequence = 43.

Non-Earth and Planetary Sciences Required Courses: CHEM 121L and 122L; MATH 162 and 163, and either STAT 345 or EPS 433; PHYC 160 and 161; and 7 additional hours from Chemistry, Math or Physics above the required levels, or BIOL 123/124L or higher, or ASTR 270 or above, or (with permission from the EPS Undergraduate Committee) from selected Anthropology, Engineering (including Computer Science) or Geography courses. Total Credits of Supporting Science = 32.

Symbols, page 611.
ENGL 219, 220 or 290 is required as an A&S Group Requirement.

Note that EPS 319L (Introductory Field Geology) is taught as a 3-week course immediately after the completion of the Spring semester.

Students completing the B.S. program will fulfill the requirements for a distributed minor, although an alternative minor or second major may be selected.

For the degree of Bachelor of Arts: EPS required courses: 101, 105L (or ENV 101 and 102L), 201L, 301, 302L, 303L, 304L, 307L, 310L (or 319L), 401, 490 and 6 additional hours in Earth and Planetary Sciences above 299 (excluding 491-492, 493 and 495). Total credits for the Earth and Planetary Sciences sequence=37.

Non-Earth and Planetary Sciences required courses: CHEM 121L and either PHYC 151 or 160; and 9 additional hours from Chemistry or Physics above the required levels, or from MATH 162 or above, BIOL 123/124L or higher, or ASTR 270 or above, or (with permission from the EPS Undergraduate Committee) from selected Anthropology, Engineering or Geography courses. Total Credits of Supporting Science=16.

EPS 319L (Introductory Field Geology) is taught as a 3-week course immediately after completion of the Spring semester.

Minor Study Requirements

The minor in Earth and Planetary Sciences will consist of 20 credit hours, of which 12 must be above the 299 level (excluding 401, 493 and 495). No more than 3 credit hours of problems may be applied to the Earth and Planetary Sciences minor (491-492).

Departmental Honors

Students seeking honors in Earth and Planetary Sciences should consult with the department honors advisor no later than two full semesters prior to graduation. EPS 493 and 495 are required, as is a written senior thesis that will be orally defended.

Graduate Program

Graduate Advisors
Grant Meyer
Jane Selverstone

Application Deadlines
Fall semester: January 31 (with financial aid)
April 1: (without financial aid)
Spring semester: November 1

Degrees Offered

M.S. in Earth and Planetary Sciences
Ph.D. in Earth and Planetary Sciences

The Department of Earth & Planetary Sciences offers the M.S. and Ph.D. degrees. In addition to the application form and fee and official transcripts for all college study required by the Office of Graduate Studies, the Department requires three letters of recommendation, a letter of intent, unofficial transcript copies, and general GRE scores for admission consideration. Application instructions and forms for admission, financial aid, and letters of recommendation are available from the Department of Earth & Planetary Sciences via our Web site: http://epswww.unm.edu.

The Department of Earth & Planetary Sciences has several graduate “tracks.” For the general geoscience track, qualified students must have a background equivalent to the require-ments for the B.S. degree in Earth & Planetary Sciences at the University of New Mexico. Students holding degrees in other areas may also be admitted with the understanding that they may be required to remove deficiencies in Earth & Planetary Sciences courses and the supporting sciences. Earth & Planetary Sciences courses required for the B.S. degree are mineralogy, petrology, structural geology, stratig-raphy/sedimentology and introductory field geology. Work in the supporting sciences for the B.S. degree includes mathematics through calculus (MATH 264 or equivalent), one semester of statistics and computer science, one year of general chemistry and one year of calculus based physics (PHYC 161 or 262 or equivalent). For other graduate tracks, required background courses in geosciences and in the supporting sciences differ; please consult the Department of Earth & Planetary Sciences.

General requirements for the M.S. and Ph.D. degrees are stated in the earlier pages of this catalog. Each candidate will meet with a temporary advisor, identified by the Chairperson, during the first week or so of the first semester of enrollment. The results of this interview will determine in part the student’s ensuing schedule. M.S. candidates are required to pass an examination involving the preparation and defense of a thesis proposal during the second semester of enrollment. Ph.D. candidates are required to pass a Comprehensive Examination, during the third semester of post-M.S. enrollment, involving the preparation and defense of two dissertation proposals.

Earth and Planetary Sciences (EPS)

101. How the Earth Works—An Introduction to Geology. (3)
A fascinating tour of our active planet. Explore earth materials (rocks and minerals), the continents’ motions and related origins of earthquakes, volcanoes, mountain building, oceans, landscapes, natural energy and economic resources, global warming and other topics. Students are encouraged but not required to enroll concurrently in 105L. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science (NMCCN 1114).

105L. Physical Geology Laboratory. (1)
Minerals, rocks and topographic and geologic maps; field trips. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science (NMCCN 1114). Pre- or corequisite: 101. (Fall, Spring)

106. Evolution and Age of the Earth. (2)
Sharp The scientific method applied to determination of the age of the earth, origin of life, evolution of the Earth and of life, extinction, life on other worlds and related topics. Intended for non-science majors.

110. Topics in the Earth Sciences. (1-3 to a maximum of 3)
Eight- to 16-week courses on selected topics relating directly to the human experience, e.g., Volcanoes, Extinctions, Weather, Earthquakes, New Mexico’s Water, Soils, Nuclear Hazards, Geomagnetism, Albuquerque Field Geology and the Geology of Everyday Life. (Fall, Spring)

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

201L. Earth History. (4) Elrick, Smith
Origin and history of the Earth including age of the planet and dating of rocks, changing configurations of oceans and continents as a result of plate tectonics, records of climate change, history of formation and erosion of mountain chains, origin and evolution of life and causes of extinction. Required field trip and lab exercises permit understanding of how Earth
history is interpreted from the geologic rock record. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science. Prerequisite: 101 or ENVS 101; Pre- or corequisite: 105L or ENVS 102L. (Fall, Spring)

203. Earth Resources and Environment. [Earth Resources and Man.] (3) Geologic context for the occurrence of metals, industrial minerals, water, and energy resources on Earth. Environmental ramifications of resource exploration, exploitation and use and local, national and global environmental laws and treaties governing those activities. Prerequisite: 101 or ENVS 101 recommended.

210. Life in the Universe. (3) Brearley This course will examine scientifically the plausibility of life occurring elsewhere in the universe including possible environments and conditions for life and the recent debate over the evidence for life in Martian meteorite, ALH 84001.

211. Dinosaurs and Their World. (3) Lucas, Williamson Survey of the fossil record, evolution, paleobiology and extinction of dinosaurs, and the animals they shared the earth with. (Spring)

225. Oceanography. (3) Understanding physical, chemical, and biological processes in the world oceans. (Fall, Spring)

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

251. Meteorology. (3) Gutzler (Also offered as GEOG 251.) Description of weather phenomena, principles of atmospheric motion, weather map analysis and weather prediction.

252. Volcanoes! (3) Fischer Types of volcanoes and eruption products, role of volcanism in planetary evolution, volcanoes as sources of geothermal energy and mineral deposits, volcanic hazards and disasters, environmental effects of volcanic eruptions. Prerequisite: 101 or ENVS 101.

**300. Topics in Geology. (1-4 to a maximum of 6) △** Summary of specific areas of geology, designed especially for earth science teachers and other nontraditional students. Subjects may vary from year to year; lectures normally supplemented by laboratory exercises.

**301. Mineralogy/Earth and Planetary Materials. (3)** Introduction to crystallography, crystal chemistry and their relation to physical and chemical properties of materials. Overview of major structure types and crystal chemistry/occurrence of common rock-forming minerals. EPS majors must enroll in 301 and 302L in the same semester. Prerequisite: CHEM 121L. (Fall)

**302L. Mineralogy Laboratory. (2)** Laboratory exercises in crystallography and crystal chemistry. Hand specimen identification of the common rock-forming minerals. (Fall)

**303L. Igneous and Metamorphic Petrology. (4)** Selverstone Introduction to processes leading to formation of igneous and metamorphic rocks. Emphasis on plate tectonic settings and interactions between physical and chemical processes. Prerequisites: 301 and 302L and (MATH 162 or CHEM 121L). (Spring)

**304L. Sedimentology and Stratigraphy. (4)** Erick Introduction to origin, petrology and stratigraphic occurrence of sedimentary rocks. Prerequisites: 201L and CHEM 121L, 303L. (Fall)

**307L. Structural Geology. (4)** Geissman, Karlstrom Nature and origin of rock structures and deformation; map and stereographic projection problems; stress and strain. Prerequisites: 303L, 101L, and PHYC 151 or 160. (Spring)

310L. New Mexico Field Geology. (4) Geissman, Karlstrom Scientific method based on field observation, analysis of geologic phenomena and geologic history of New Mexico. Written report for each 4-hour field trip to outcrops in the Albuquerque area. Prerequisites: 101 or ENVS 101, and EPS 105L, or ENVS 102L.

**319L. Introductory Field Geology. (4)** Geissman Principles and techniques of basic field mapping, layout, preparation, and presentation of maps and cross-sections; construction of geologic reports. Prerequisites: 304L and 307L. Offered as a 3-week summer course (20 consecutive days).

**333. Environmental Geology. (3)** Smith Earth processes and anthropogenic environmental factors and their cycles. Physical and chemical aspects of environmental change will be considered. Prerequisite: 101 or ENVS 101, or better in MATH 150.

352. Global Climate Change. (3) Gutzler (Also offered as GEOG 352.) Comparison of natural and anthropogenic causes of large-scale climate change. Factors influencing development of mitigation of adaptation policies. Restriction: permission of instructor.

**365. Exploring the Solar System. (3)** Agee Survey of space exploration past, present, and future. Detailed overview of solar system formation, the Sun, the planets and their moons, asteroids, comets, meteorites and astrolology. Recommended: 101 or ENVS 101.

**400. Topics in Earth & Planetary Sciences. (1-4 to a maximum of 6) △** 401./501. Colloquium. (1 to a maximum of 2) † Current topics in geology. For graduate students, may be repeated once for credit towards degree. See description for 490. Restriction: junior standing. Offered on CR/NC basis only.

405L./505L. Stable Isotope Geochemistry. (3) Sharp Examinations of principles governing the distribution of stable isotopes in geological materials and their applications in understanding geochemical processes. Prerequisite: CHEM 121L and MATH 163.

407L./507L. Thermodynamics and Physical Foundations of Geochemistry. (4) Sharp Thermodynamics and application to geologic systems, phase equilibria, phase rule, ideal and nonideal solutions. Prerequisite: 303L and CHEM 121L and MATH 163.


**411L. Invertebrate Paleontology. (4)** Kues General principles and familiarization with diagnostic features of fossils. Introduction to environmental implications. 8 hrs. of EPS or BIOL recommended.

415./515. Geochemistry of Natural Waters. (3) Crossey Principles of aqueous chemistry and processes controlling the composition of natural waters: streams, lakes, groundwater and the oceans. Prerequisites: 304L, or CHEM 122L.
420L./520L. Advanced Field Geology. (4) Karlstrom
Advanced geological field techniques; special field problems concentrating on the tectonic evolution of the Rocky Mountain region.
Prerequisite: 319L. Offered as a 3-week course (20 consecutive days). (Summer)

421L./521L. Metamorphism. (4) Selverstone
Metamorphic petrology and its applications to interpretation of tectonics processes. Discussions include thermochemistry, phase equilibria, thermobarometry, P-T paths and behavior of metamorphic fluid phase.

427./527. Geophysics. (3) Geissman, Huestis, Roy
(Also offered as PHYC 327.) Applications of gravity, magnetism, seismology, heat flow to the structure, constitution and deformation of earth. Related aspects of plate tectonics and resource exploration.
Prerequisites: (101 or ENVS 101) and MATH 163 and PHYC 161.

433./533. Statistics and Data Analysis in Earth Science. (3)
Selected mathematical methods of geological data analysis, including elementary statistics, matrix algebra, multivariate data analysis and Fourier analysis.
Prerequisites: MATH 163, knowledge of a computing language.

436./536. Climate Dynamics. (3) Gutzler
A quantitative introduction to the Earth's climate system, emphasizing processes responsible for maintaining the current climate and governing climate change on global and regional scales, including interactions between the atmosphere, ocean and biosphere.
Prerequisites: MATH 162, PHYC 160.

*439. Paleoclimatology. (3) Fawcett
History of the Earth's climate. Examination of methods in climatic reconstruction and mechanisms of climatic change. Emphasis on Pleistocene and Holocene climatic records.
Prerequisites: 101 or ENVS 101.

443./543. [443L.] Aquifers and Reservoirs. [Subsurface Geology.] (3)
Approaches of describing, evaluating, and modeling aquifer and reservoir character, focusing primarily on sedimentary systems. Techniques include well log analysis, cross-section construction, structure and isopach map contouring, and geostatistical simulation.
Prerequisite: 101. Recommended: 304L.

445./545. Topics in Sedimentology and Stratigraphy. (1-4 to a maximum of 6) Smith, Elrick
Variable course content depending on student interest. Topics may include physical sedimentology, sequence stratigraphy, basin analysis, cycle stratigraphy and chem stratigraphy.

450L./550L. Volcanology. (4) Fischer
Characteristics and mechanism of volcanic systems, volcanism in various continental and marine tectonic settings. Laboratory to include field and laboratory examination of volcanic rocks and structures and models of volcanic processes.
Prerequisite: 303L.

453L./553L. Field Studies in Volcanology. (4) Fischer, Goff, Smith
Field interpretations of volcanic and pyroclastic rocks; applications to petrology, economic geology, geothermal energy. Base: Young Ranch, Jemez volcanic field.
Prerequisite: 319L. [Three summer weeks]

455L./555L. Computational and GIS Applications in Geomorphology. (3) Scuderi
Techniques in acquisition, processing, analysis and display of digital, aerial photo and remote-sensing data; regional quantitative morphometry; use of topography and geology with GIS in landscape evolution and analysis.
Prerequisites: (101 or ENVS 101) and 433 and 481L.

457L./557L. Mathematical Modeling in the Geosciences. (3) Fawcett
Introduction to basic numerical modeling techniques with broad application to dynamic systems in the geosciences including sedimentology, geochemistry, hydrology, climatology and paleoclimatology.
Prerequisites: MATH 163 and PHYC 160.

462./562. Hydrogeology. (3) Campana, Weissmann
Hydrologic and geologic factors controlling groundwater flow, including flow to wells. The hydrologic cycle; interactions between surface and subsurface hydrologic systems; regional flow systems. Groundwater geochemistry and contaminants transport.
Prerequisites: (105L or ENVS 102L) and MATH 162 and CHEM 121 and PHYS 160.

465./565. Mars Evolution. (3) Agee

467./567. Environmental Mechanics. (3)
Introduction to stress and strain, dimensional analysis, fluid flow and heat transfer with applications to problems in the earth and environmental sciences.
Prerequisites: MATH 163 and PHYC 160.

472./572. Subsurface Fate and Transport Processes. (3)
Physicochemical, hydrogeological, biological and mathematical aspects of chemical fate and transport in subsurface porous and fractured media. Introduction to multiphase and nonaqueous phase flow.
Prerequisites: (462 or C E 441) and (MATH 163 or 181). [Spring]

476./576. Physical Hydrology. (3)
Quantitative treatment of the hydrologic cycle—precipitation, evapotranspiration, runoff and subsurface flow; global change and hydrology; catchment and hillslope hydrology; hydrologic system—ecosystem interactions; hydrology and water resources management.
Prerequisites: MATH 163 and PHYC 160. Restriction: junior or senior standing. [Fall]

481L./581L. Geomorphology and Surficial Geology. (4) Meyer
Origin and development of landforms with emphasis on weathering, soils, hillslope processes, fluvial systems and surficial geology; occasional field trips.
Prerequisites: (101 and 105L) or (ENVS 101 and 102L).

482L./582L. Geoarchaeology. (3) Smith
(Also offered as ANTH 482L.) Application of geological concepts to archaeological site formation with emphasis on pre-ceramic prehistory of the southwestern United States. Quaternary dating methods, paleoenvironment, landscape evolution, depositional environments. Quaternary stratigraphy, soil genesis, sourcing of lithic materials, site formation processes. Required field trip.
Prerequisites: (101, and 105L and ANTH 121L, and ANTH 220, and at least junior standing. [Spring]

485L./585L. Soil Stratigraphy and Morphology. (3) McFadden
Application of soils studies to stratigraphic analysis and mapping of Quaternary deposits and geomorphic surfaces; survey of soil classifications; field description of soil profiles; development of soil chronologies and catenas.
Prerequisite: 101 or ENVS 101.

*488L. Scanning Electron Microscopy. (3) Spilde
Introduction to the theory and operation of the scanning electron microscope. Topics covered: basic electron optics, electron-specimen interaction, image formation and interpretation, digital image analysis, X-ray spectroscopy and introductory energy dispersive analysis.
Prerequisite: PHYC 161.

491–492. Problems. (1-3, 1-3)


501./401. Colloquium. (1 to a maximum of 2) † ∆ Current topics in geology. For graduate students, may be repeated once for credit towards degree. See description for 490. Offered on CR/NC basis only.

503. Organic Geochemistry. (3) Crossey Fundamentals of organic geochemistry; global carbon cycle; formation of hydrocarbons; environmental fate of organic compounds in the surface environment.

505L./405L. Stable Isotope Geochemistry. (3) Sharp Examinations of principles governing the distribution of stable isotopes in geological materials and their applications in understanding geochemical processes. Prerequisite: CHEM 121L and MATH 163.

506L. Mathematical Crystallography. (4) Basic principles of crystallographic calculations including the derivation of point groups and space groups. Prerequisite: MATH 314.

507L./407L. Thermodynamics and Physical Foundations of Geochemistry. (4) Sharp Thermodynamics and application to geologic systems, phase equilibria, phase rule, ideal and nonideal solutions. Prerequisite: 303L and CHEM 121L and MATH 163.

508L. Paleomagnetism and Applications to Geological Problems. (3) Geissman Discussion of the source, origin and application of geologically important magnetizations in rocks. Experience in field sampling and data collection and analysis. Prerequisites: 307L, and PHYC 152L.

509. Environmental Geochemistry. (3) Asmerom, Crossey Topical examination of geochemical aspects of environmental issues, with emphasis on critical phenomena of societal relevance. Restriction: permission of instructor.


511. Sedimentary Geochemistry. (3) Crossey The application of geochemical principles to surface and subsurface processes in sedimentary systems.

512L. High-temperature Geochemistry. (3) Applications of thermodynamics to the study of metamorphic and igneous processes and of high-temperature gases. Pre- or corequisites: 304L, 407L.

513. Planetary Materials and the Evolution of the Solar System. (3) Discussion of the origin and evolution of the planets, including planet Earth, based on study of lunar samples, terrestrial samples and meteorites; theory; earth based observations; and space missions.

514. Proterozoic Geology. (3) An interdisciplinary course which evaluates the first 3,500 million years of earth history. Initial lectures focus on methodology (geochemistry, geochronology, petrology, structure), followed by discussion of specific Archean and Proterozoic geologic terrains. Prerequisite: 307L.


516. Selected Topics in Geomorphology. (3, no limit) ∆ McFadden, Meyer

517L. Instrumental Methods in Geochemistry. (2-4 to a maximum of 8) [2-4] † ∆ Principles and applications of selected instrumentation methods in analytical geochemistry. Instrumentation methods discussed each year may vary. This is a hands-on course that is designed to train scientists in instrumentation use applicable to their research and to provide them valuable tools for future employment. Prerequisite: permission of instructor.

518L. Electron Microprobe Analysis. (3) Theory and practice of electron microprobe analysis emphasizing geological materials. Prerequisite: permission of instructor and a demonstrated need for the use of instrument.

519L. Selected Topics in Geochemistry. (2-4 to a maximum of two times) ∆ Prerequisite: permission of instructor. (Offered upon demand)

520L./420L. Advanced Field Geology. (4) Karlstrom Advanced geological field techniques; special field problems concentrating on the tectonic evolution of the Rocky Mountain region. Prerequisite: 319L. Offered as a 3-week course (20 consecutive days). (Summer)


522. Selected Topics in Geophysics. (3, no limit) ∆ Geissman, Roy Prerequisite: permission of instructor.

523. Topics in Tectonics. (3, no limit) ∆ Prerequisite: permission of instructor.

526L. Advanced Structural Geology. (4) Karlstrom Study of the processes and products of rock deformation at all scales: lithosphere, mountain belts and microstructures. Prerequisite: 307L.

527L./427L. Geophysics. (3) Geissman, Roy (Also offered as PHYC 327.) Applications of gravity, magnetics, seismology, heat flow to the structure, constitution and deformation of earth. Related aspects of plate tectonics and resource exploration. Prerequisites: (101 or ENVS 101) and MATH 163 and PHYC 161.

531L. Igneous Petrology. (4) Discussion of the properties, generation, emplacement and differentiation of magma; applications of physical/chemical principles to the study of igneous rocks. Prerequisite: 303L.
533/433. Statistics and Data Analysis in Earth Science. (3)
Selected mathematical methods of geological data analysis, including elementary statistics, matrix algebra, multivariate data analysis and Fourier analysis.
Prerequisites: knowledge of a computing language.

534. Radiogenic Isotope Geochemistry. (3) Asmerom
Examination of principles governing the abundance of naturally occurring radiogenic isotopes and their use in the study of global geochemical processes.

535. Freshwater Ecosystems. (3)
(Also offered as BIOL 535.) Integration of physical and chemical components of drainage basins and groundwater systems with biological metabolism, growth and reproduction along functional gradients of stream, wetland, reservoir, lake and groundwater ecosystems.
Prerequisites: (MATH 162 or 180) and CHEM 122L and BIOL 495. (Spring)

536/436. Climate Dynamics. (3) Gutzler
A quantitative introduction to the Earth’s climate system, emphasizing processes responsible for maintaining the current climate and governing climate change on global and regional scales, including interactions between the atmosphere, ocean and biosphere. MATH 162 and PHYC 160 recommended.

538L. Analytical Electron Microscopy. (3)
Principles and practical techniques of transmission and analytical electron microscopy for materials characterization. Topics covered include: diffraction and phase contrast image formation, selected area and convergent beam electron diffraction; energy-dispersive x-ray spectroscopy.
Prerequisites: 587 and 518L.

540. Carbonate Sedimentology and Stratigraphy. (4) Elrick
Carbonate depositional processes (ancient and modern), facies patterns, associated rock types, and basin analysis. Includes laboratories covering skeletal and grain types, cements and carbonate digenesis.
Prerequisite: 304L.

543/443. Aquifers and Reservoirs. [Subsurface Geology.] (3)
Approaches of describing, evaluating, and modeling aquifer and reservoir character, focusing primarily on sedimentary systems. Techniques include well log analysis, cross-section construction, structure and isopach map contouring, and geostatistical simulation.
Prerequisite: 101. Recommended: 304L.

544L. Sedimentary Petrology. (4) Crossey
The mineralogy and chemistry of clastic sedimentary rocks. Examination of provenance and diagenesis through field and laboratory exercises.
Prerequisite: 304L.

545/445. Topics in Sedimentology and Stratigraphy. (1-4 to a maximum of 6) Smith, Elrick
Variable course content depending on student interest. Topics may include physical sedimentology, sequence stratigraphy, basin analysis, cycle stratigraphy and chemostratigraphy.

547–548. Seminar. (2-3, 2-3, no limit) ∆

550L/450L. Volcanology. (4) Fischer
Characteristics and mechanism of volcanic systems, volcanism in various continental and marine tectonic settings. Laboratory to include field and laboratory examination of volcanic rocks and structures, models of volcanic processes.
Prerequisite: 303L.

551–552. Problems. (1-3, 1-3)
Maximum of three units of problems can count toward M.S. or Ph.D. course requirements.

553L/453L. Field Studies in Volcanology. (4) Fischer, Goff, Smith
Field interpretations of volcanic and pyroclastic rocks; applications to petrology, economic geology, geothermal energy. Base: Young Ranch, Jemez volcanic field.
Prerequisite: 319L. (Three summer weeks)

555L/455L. Computational and GIS Applications in Geomorphology. (3) Studer
Techniques in acquisition, processing, analysis and display of digital, aerial photo and remote-sensing data; regional quantitative morphometry; use of topography and geology with GIS in landscape evolution and analysis. EPS 101 or ENVS 101 and EPS 433 and 481 recommended.

557L/457L. Mathematical Modeling in the Geosciences. (3) Fawcett
Introduction to basic numerical modeling techniques with broad application to dynamic systems in the geosciences including sedimentology, geochemistry, hydrology, climatology and paleoclimatology.

558. Geomicrobiology. (3) Dahm, Crossey
(Also offered as BIOL 558.) The role of microbes in mineral precipitation, dissolution and diagenesis; interactions between microbes and geochemistry/mineralogy.

562/462. Hydrogeology. (3) Weissmann
Hydrologic and geologic factors controlling groundwater flow, including flow to wells. The hydrologic cycle; interactions between surface and subsurface hydrologic systems; regional flow systems. Groundwater geochemistry and contaminant transport.
Prerequisites: 105L or ENVS 102L, and MATH 162 and CHEM 121 and PHYS 160.

564. Geological Fluid Mechanics. (3)
Examination of fluid behavior within a geological context. Dimensional analysis and similitude; mass, momentum and energy conservation; inviscid and viscous flows; turbulence; and thermally-driven flows. Applications to problems in the earth and environmental sciences.
Prerequisites: MATH 264 and PHYC 161. (Spring)

565/465. Mars Evolution. (3) Agee
Recommended: 365

566. Selected Topics in Hydrogeology. (1-3 to a maximum of 6) ∆ Weissmann
Variable course content depending upon student demand and instructor availability.
Prerequisite: permission of instructor.

567/467. Environmental Mechanics. (3)
Introduction to stress and strain, dimensional analysis, fluid flow and heat transfer with applications to problems in the earth and environmental sciences. MATH 163 and PHYC 160 recommended.

570. Physical Climatology. (3) Gutzler
(Also offered as GEOG 570.) Theory and observation of the Earth’s climate system. Radiative transfer, conservation of heat and momentum, maintenance of circulation systems, mechanisms of climate change.
Prerequisites: (436 or 536 or GEOG 351) and MATH 163 and PHYC 161.

572/472. Subsurface Fate and Transport Processes. (3)
Physicochemical, hydrogeological, biological and mathematical aspects of chemical fate and transport in subsurface porous and fractured media. Introduction to multiphase and nonaqueous phase flow.
Prerequisites: (462 or CE 441) and (MATH 163 or 181). (Spring)
574L. Hydrogeology Laboratory. (1) Weissmann Laboratory and field exercises in subsurface hydrology: physical properties of porous media, flow net analysis, groundwater basin storage and recharge, pump and piezometer tests, well design, sampling. Pre- or corequisite: 462 or C E 441.

575. Advanced Volcanology. (3) Dynamics of volcanic eruptions, monitoring of volcanic hazards, geothermal energy, epithermal, numerical and analytical research techniques. Prerequisite: 450L.

576./476. Physical Hydrology. (3) (Also offered as WR 576.) Quantitative treatment of the hydrologic cycle—precipitation, evapotranspiration, runoff and subsurface flow; global change and hydrology; catchment and hillslope hydrology; hydrologic system—ecosystem interactions; hydrology and water resources management. Prerequisites: upper-division standing, MATH 163, PHYC 160. (Fall)

580. Advanced Hydrogeology. (3) Advanced treatment of subsurface fluid flow and other transport phenomena through granular and fractured media. Prerequisites: (462 or C E 441) and MATH 264.

581L./481L. Geomorphology and Surficial Geology. (4) Meyer Origin and development of landforms with emphasis on weathering, soils, hillslope processes, fluvial systems and surficial geology; occasional field trips. Intro to Geology or Environmental Science recommended.

582L./482L. Geoarchaeology. (3) Smith (Also offered as ANTH 582L.) Application of geological concepts to archaeological site formation with emphasis on pre-ceramic prehistory of the southwestern United States. Quaternary dating methods, paleoenvironment, landscape evolution, depositional environments. Quaternary stratigraphy, soil genesis, sourcing of lithic materials, site formation processes. Required field trip. Prerequisites: 101, 105L, ANTH 121L, ANTH 220 and at least junior standing in EPS or Anth. (Spring)

584. Soil Genesis. (3) McFadden Processes of physical and chemical weathering; influence of soil parent materials, climate topography and time on soil formation; application of soil studies to geologic problems. Prerequisites: 101 or ENVS 101, 481L.

585L./485L. Soil Stratigraphy and Morphology. (3) McFadden Application of soils studies to stratigraphic analysis and mapping of Quaternary deposits and geomorphic surfaces; survey of soil classifications; field description of soil profiles; development of soil chronosequences and catenas. EPS 481L recommended. Prerequisites: 101 or ENVS 101.

587. Advanced Mineralogy. (3) Brearley Crystallographic principles; structure, chemistry, physical properties of rock forming minerals. Prerequisites: 301, 302L, CHEM 122L.

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

699. Dissertation. (3-12) Offered on a CR/NC basis only.

Environmental Science

B.S. in Environmental Science

The B.S. in Environmental Science synthesizes quantitative studies of the interactions between the solid earth, oceans, atmosphere and biological processes taking place therein. The degree provides scientific training for environment-related occupations or graduate programs, including environmental sciences per se as well as peripheral fields such as Law and Medicine. Environmental Science covers a vast sweep of applied science. Students, therefore, have considerable flexibility in tailoring the major to their individual interests while pursuing a common core of supporting math and science. By taking courses from four out of seven disciplinary groups, a wide variety of approaches to environmental science can be accommodated. Students pursuing this degree are strongly encouraged to consult the Environmental Science undergraduate advisor in the Department of Earth and Planetary Sciences at an early stage in their program in order to design their curriculum in the disciplinary groups.

Required Environmental Science Core Courses:
ENVS 101 or EPS 101, ENVS 102L or EPS 105L, ENVS 330, ENVS 430, EPS 401, EPS 433 or STAT 345 or higher, and EPS 490

Thirty credits, of which at least 26 credits must be above 299, are to be selected from the following seven groups including at least 6 credits each from four of the groups:

a) Spatial Analysis: EPS 455L; GEOG 281L, 361L, 487L
b) Geochemistry: EPS 203, 407L, 410, 415, C E 437L
c) Geoscience: EPS 201L, 301, 302L, 310L, 333, 402, 467
d) Earth Surface Processes: EPS 304L, 481L, 485L
e) Hydroscience: EPS 462 or C E 441, EPS 472, 476
f) Climate: EPS 251, 352, 436, 439
g) Ecology: BIOL 203L, 310L, 403, 407L, 440L, 451, 463L, 475, 495, 496L

Supporting Science required courses:
MATH 162, 163; BIOL 123/124L or higher; CHEM 121L; PHYC 160.

Students can satisfy the requirements for a distributed minor completing CHEM 122L, PHYC 161 and 7 additional hours from Chemistry (above 122L), MATH (above 163), Physics (above 161), Biology 123/124L or higher (not including courses counted in the Ecology disciplinary group) or Astronomy 270 or above or, with permission, from selected Anthropology, Engineering or Geography courses.

A student may also choose to complete a minor outside of the EPS Department. Six credits from courses in disciplinary group (g), all of which require additional Biology courses as prerequisites, will satisfy the requirements for a Minor in Biology (if taken separately from requirements for the B.S. in Environmental Science).

Undergraduate Minor in Environmental Science

A total of at least 20 hours distributed as follows:

1. ENVS 101 and 102L (or EPS 101 and 105L), and ENVS 330.
2. Plus at least 13 additional hours selected from ENVS 430, EPS 433 or STAT 345 or higher) and from at least two of the Environmental Science disciplinary groups.

Only one course numbered 299 or below may count toward this requirement.
Environmental Science (ENVS)

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

102L. The Blue Planet Laboratory. (1)
Introductory environmental earth science laboratory. Includes minerals, rocks, and rock cycle, topographic maps, local geology and groundwater, weather and climate. Pre- or corequisite: 101.

330. Environmental Systems. (3)
Study of the human relationship to and impact on the physical environment. Sustainable development and management of resources. Global change and implications for ecosystems. Environmental law, policy, regulations and ethics. Prerequisites: (101 or EPS 101) and CHEM 121L and (MATH 162 or BIOL 123/124L or PHYC 160). (Fall)

430/530. Advanced Environmental Science. (3)
Application of basic science to the interdisciplinary study of environmental systems. Causes of and solutions to land, air, water and ecosystem degradation. Prerequisites: 330 and MATH 163 and PHYC 160 and CHEM 121L and BIOL 123/124L. (Spring)

530/430. Advanced Environmental Science. (3)
Application of basic science to the interdisciplinary study of environmental systems. Causes of and solutions to land, air, water and ecosystem degradation.

Natural Science (NTSC)

No major or minor offered.

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

262L. Life Science. (4)
For pre-service K-8 teachers only. An activity-based study of science topics including botany, cell biology, genetics, microbiology and zoology with emphasis on science processes, inquiry and the integration of technology. Various teaching methods are modeled and practiced by students; some field trips may be required. Prerequisite: 261L, MATH 112.

263L. Environmental Science. (4)
For pre-service K-8 teachers only. An activity-based interdisciplinary study of major issues in environmental science with emphasis on science process, scientific investigations and field-based activities and the integration of technology. Course topics include current issues on population, healthy ecosystems and natural resources. Various teaching methods are modeled and practiced by students. Prerequisites: 261L, 262L.

400*. Science Topics for Educators. (1-4 to a maximum of 6).
Topics in specific science content areas with a focus on scientific process and inquiry. Topics vary; lectures are normally supplemented with laboratory exercises. Restriction: permission of instructor.

ECONOMICS

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Donald Coes, Ph.D., Princeton University
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(Santa Barbara)
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Associate Professors
Melissa Binder, Ph.D., Columbia University
Janie Chemak, Ph.D., Colorado School of Mines
Kate Krause, Ph.D., University of Wisconsin
Richard Santos, Ph.D., Michigan State University

Assistant Professors
Matias Fontenla, Ph.D., University of Texas at Austin
Kristine Grimsrud, Ph.D., Washington State University
Jennifer Thacher, Ph.D., University of Colorado, Boulder

Affiliated Faculty
Lawrence Waldman, Ph.D., The University of New Mexico
(Economist III, BBER, UNM)

Professors Emeriti
Shaul Ben-David, Ph.D., Cornell University
F. Lee Brown, Ph.D., Purdue University
Albert Church, Ph.D., Claremont Graduate School
Ronald Cummings, Ph.D., University of Kansas
Micha Gisser, Ph.D., University of Chicago
Peter Gregory, Ph.D., Harvard University
David Hamilton, Ph.D., University of Texas
Chung Pham, Ph.D., University of Pennsylvania
Donald Talbity, Ph.D., Rutgers University
Paul Therkildsen, Ph.D., University of Colorado
Nathaniel Wollman, Ph.D., Princeton University

Introduction

Why is there pollution? Why are the rainforests vanishing? Is the federal budget deficit a problem? Will graduating seniors ever collect on Social Security? Will consumers benefit from increased competition in the electricity market? Why and how would people shop on the Internet? Can government policies reduce unemployment? Is crime an economic problem? Why are some countries rich and others poor? Does international trade help or hurt workers in the United States?

Economics provides answers to questions like these by analyzing how scarce resources are used and how goods and services are distributed. Students of economics learn how incentives shape human behavior and why people debate public policies. Majors develop analytical and quantitative skills, including modeling, econometrics and forecasting. They understand macroeconomic relationships that explain economic growth, unemployment and inflation and exchange rate fluctuations. They also study the microeconomics of government policies, work, industrial organization, labor and
human resources, health, natural resource use and the environment and trade and development.

The major is an excellent choice for those interested in public policy and market research and students wanting careers in business, government and other organizations. An economics major is also highly desirable for students wanting to go on to study law, business, public administration and international affairs.

Major Study Requirements

A major in economics requires a common core consisting of ECON 105 (Introductory Macroeconomics), 106 (Introductory Microeconomics), 300 (Intermediate Microeconomics I), 303 (Intermediate Macroeconomics I) and 309 (Introductory Statistics and Econometrics) plus 18 credit hours of electives in economics with a maximum of 3 credit hours from 200-level courses, for a total of 33 hours.

All economics majors are encouraged to complete one semester of calculus (MATH 162 or 180). Majors planning to attend graduate school should consult with the economics undergraduate advisor concerning additional requirements.

Students are encouraged to discuss the selection of electives with the economics undergraduate advisor. Most students select courses based on their career plans or interests. Please note that the following listings are not intended to limit the student’s choice.

Business economics for students planning to pursue a career in the business sector: suggested electives include ECON 315, 320, 332, 333, 350, 408, 424 and 429.

Government economics for students planning to pursue a career with a local, state or federal government agency: suggested electives include ECON 315, 320, 332, 333, 341, 342, 343, 350, 408, 409, 424, 429 and 445.

Pregraduate study preparation for students interested in pursuing a graduate degree in economics, business, public administration or other fields: suggested electives include ECON 315, 320, 342, 350, 400, 403, 407, 409, 424, 429 and 442. A two-semester calculus sequence and a semester of introductory statistics are essential for students planning graduate work in economics.

Pre-law preparation for students interested in attending law school: suggested electives include ECON 320, 332, 333, 335, 342, 350 and 445.

Electives for students who wish to focus their study on specific fields and current economic issues: suggested electives include courses in International and Latin American economics (ECON 321, 421, 422, 424 and 429), natural resources and environmental economics (ECON 342, 343 and 442), labor and human resources (ECON 320, 335, 410 and 427), public finance (ECON 350, 445 and 450) and economic modeling, forecasting and policy analysis (ECON 407, 408, 409 and 445).

Minor for Economics Majors

An interdisciplinary approach is useful in the study of economics. Economics majors are encouraged to seek a minor in disciplines such as Political Science, Sociology, History, Business, Math or Computer Science. Students should discuss the selection of a minor with the economics undergraduate advisor. Students with specialized interests may design a distributed minor and petition the Department Chairperson for approval.

Minor Study Requirements

Economics makes an excellent minor for students pursuing majors such as Management, Political Science, Journalism and Biology and for those building a pre-professional bachelor’s degree such as pre-law, pre-M.B.A. or pre-M.P.A. For example, a student with a political science major may consider, in addition to the core economics courses, electives in international economics, public finance or human resource economics. A student with a business major may consider economics electives in public finance and international economics. Students planning for a law degree might consider an economics minor with emphasis on environmental and natural resource economics.

A minor in economics requires a total of 18 credit hours consisting of 9 hours in required courses (ECON 105, 106 and either 300 or 303) plus 9 hours from elective courses with a maximum of 3 hours at the 200-level.

Departmental Honors

The departmental honors program is open to outstanding economics majors, typically in their junior year. After consulting with a faculty member willing to supervise their research, students must enroll in the department’s honors courses, Reading for Honors (ECON 497 and/or 498) and Senior Honors Thesis (ECON 499). These courses are in addition to those required for the major. University requirements for graduating with departmental honors include an overall grade point average of 3.20 and at least 7 credit hours in departmental honors courses. Interested students should contact the economics undergraduate advisor for further information.

Graduate Program

Application Deadlines for Admission

Spring Semester: August 1 (only under extreme circumstances)

Fall Semester: International Studies - March 1
Domestic with aid - March 1
Domestic without aid - July 12

Application Deadlines for Financial Aid

Financial aid decisions are made earlier than the application deadlines, so timely receipt of application materials is advisable if you are interested in financial aid.

Degrees Offered

The Department of Economics offers the M.A. degree in economics, with concentrations in environmental/natural resource economics, public finance, labor/human resources economics, international/development economics, econometrics or economic theory. The master’s degree is awarded under Plan I or Plan II.

The Department of Economics offers the Ph.D. degree with concentrations in environmental/natural resource economics, public finance, labor/human resources economics and international/development economics. The Ph.D. degree is awarded to students who have met the general requirements specified elsewhere in this catalog and have demonstrated competency in economic theory (micro and macro), econometrics and their concentration (9 hours). See the Economics Graduate Student Handbook for specific requirements.

Applicants to the Department of Economics M.A. and Ph.D. Programs:

Recommended undergraduate course work consists of 12 upper-division economic hours including one semester of intermediate micro theory and macro theory. Students are required to have completed one semester of calculus (preferably the equivalent of UNM’s MATH 162 or MATH 180). If you are considering a Ph.D., a course in Linear Algebra or Matrices is also strongly recommended. (e.g. UNM’s MATH 314 or MATH 321).

All applicants must submit their current (within the last three years) GRE-General Test Scores (Verbal, quantitative, and
analytical). All international students are required to submit their TOEFL scores.

Economics (ECON)


106. Introductory Microeconomics. (3) Exploration of individual consumer behavior, production decisions by the firm and supply and demand relationships in the marketplace. Examination of the international dimension of production and consumption choices. Meets New Mexico Lower Division General Education Common Core Curriculum Area IV: Social/Behavioral Sciences (NMCCN 2123). (Prerequisite for most upper division courses.)

203. Society and the Environment. (3) (Also offered as CRP 203.) Introduction to environmental and natural resource issues of both global and local scale. Investigates basic causes and consequences of environmental problems including interrelated physical and social science dimensions.

212. Personal Investing. (3) Investment options available to the individual will be analyzed in terms of economic theories of capital markets. Risk, value, returns and portfolio analysis.


**300. Intermediate Microeconomics I. (3) Intermediate analysis of microeconomic theory and concepts. Topics include consumer behavior and demand, production and costs, price and output under both perfect competition and pure monopoly. Prerequisites: 105 and 106.

**303. Intermediate Macroeconomics I. (3) Theories of national income determination in explaining business cycles; aggregate supply; and the role of expectations. Role of monetary and fiscal policies in stabilizing the economy. Prerequisites: 105 and 106.

**309. Introductory Statistics and Econometrics. (3) Introductory statistics, probability, probability distributions and hypothesis testing. Basic econometric techniques emphasizing estimation of economic relationships and the use of econometric models in forecasting. Prerequisites: 105 and 106 and STAT 145.

**315. Money and Banking. (3) Principles of money, credit and banking; organization and operation of the banking system; and the relationship between money, banking and the level of economic activity. Prerequisites: 105 and 106.

*320. Labor Economics. (3) Determinants of labor force, wage levels and structures, and employment; human capital theory and discrimination, economic consequences of trade union and government intervention. Prerequisites: 105 and 106.

*321. Development Economics. (3) Theories of development and growth. Problems facing developing countries and possible solutions. Historical case studies of some developing countries. Prerequisites: 105 and 106.

*330. Consumer Economics. (3) Introduces the theory of consumer behavior and demand analysis. Empirical applications of consumer theory will be explored. Possible topics include: consumer safety, family budgeting, marketing research and the household production function approach. Prerequisites: 105 and 106.

*331. Economics of Poverty and Discrimination. (3) Explores trends in income distribution especially across and within groups and examines theories explaining behavior and outcomes. Public policy concerning poverty and discrimination is studied and discussed. Prerequisites: 105 and 106.

*332. Economics of Regulation. (3) Nature of modern firms and markets: relationship of market structure, conduct and performance, including analysis of antitrust policy, public utility regulation and “deregulation” of some industries. Prerequisites: 105 and 106.

*333. Industrial Organization. (3) Firms and markets; interactions of firms in markets that are noncompetitive (oligopolistic and monopolistic); various government policies to control the behavior of firms with market power. Prerequisites: 105 and 106.


*341. Urban and Regional Economics. (3) Spatial nature of economics: housing markets, natural hazard and technological risks, local and regional public finance, transportation issues, environmental problems and the relationship of regional and urban economies to national and international economies. Prerequisites: 105 and 106.

342. Environmental Economics. (3) Introduction to economics of environmental management problems, conceptual tools and policy applications: resource scarcity and sustainability, efficiency and equity, property rights and externalities, benefit-cost analysis and discounting, provision of public goods and nonmarket valuation. Prerequisites: 105 and 106.

*343. Natural Resource Economics. (3) Use and management of natural resources and systems useful to humans. Issues include: why natural resources are important, economic growth impact, optimal exploitation and identification and management of environmental concerns. Prerequisites: 105 and 106.

*350. Public Finance. (3) (Also offered as POLS 350.) Taxation, governmental borrowing, financial administration and public expenditures. Prerequisites: 105 and 106 and 300.

*360. History of Economic Thought. (3) Development of the principle economic doctrines and schools of economic thought from the Physiocrats to Keynes. Prerequisites: 105 and 106.

395. Seminar in Current Economic Issues. (1-3, no limit) A Topics will vary. Offered on an occasional basis. For course content, consult the economics department. Prerequisites: 300 and 303.

*407. Mathematical Methods in Economics. (3) A survey course designed to develop those mathematical results and methods which find frequent use in economic analysis. Prerequisites: 300 and 303.

*408. Economic Forecasting Methods: A Time Series Approach. (3) Computer modeling of economic time series using univariate Box-Jenkins models and multivariate vector autoregressive models. Intervention models to assess policy impacts such as gun control, environmental law, tax changes and social programs. Prerequisite: 309.


*410. Topics in Health Economics. (3, no limit) Specialized topics in health care economics including medical education, national health insurance, comparative systems, drug industry and other contemporary issues. Emphasis on empirical applications in the study of health care issues. For course content, consult the economics department. Prerequisites: 300 and 335.

*421. Latin American Economics. (3) Analysis of recent and historical issues in Latin American economies, including inflation, debt, trade, regional integra-
tion, privatization, stabilization and structural reform. Prerequisites: 303.

*423. Topics in Latin American Development. (3) Analysis of economic development and its relation to poverty, schooling, the informal sector, agrarian issues and sustain-
able development using case studies from Latin America. Prerequisites: 300.

*424. International Trade. (3) Determinants of patterns of international trade and com-
parative advantage. Trade restrictions and gains from trade. International factor movements. Prerequisite: 300.

*427. Topics in Labor Economics. (3) Wage theory, industrial relations, migration, discrimination, comparative labor problems, special groups in the work force and other contemporary topics. Emphasis on economic policies and the role of public policy in these labor topics. Prerequisite: 320.


*442. Topics in Environmental and Natural Resource Economics. (3) Focus on public policy and regulation. Specialized issues such as development and management of water, mineral, energy, air quality, forest and fishery resources, resource scarcity, sustainability, non-stationary pollution, water quality and global resource distribution. Prerequisite: 300.

*445. Topics in Public Finance. (3) Intermediate public finance. Public economics topics: taxation, expenditure, welfare and distribution. Concentration on selected topics such as crime, education, health, regulations (EPA Acts), agreements (NAFTA) and the courts (Takings Clause). Prerequisites: 300 and 309 and 350.

451./551–452./552. Independent Study. (1-3, 1-3) For senior students wishing to study topics not covered in an existing course or in more detail. Requirements will be agreed upon between student and instructor. Prerequisites: 300 and 303.

*466. Public Sector Project Analysis. (3) (Also offered as CRP 466.) Product evaluation, cost-benefit analysis, capital budgeting, financing, federal-state relations-
ships, environmental and public welfare impacts of projects and other related issues. Prerequisites: 300 and 350.

*478. Seminar in International Studies. (3) (Also offered as POLS 478.) Designed to provide seniors from any discipline an opportunity to apply an international perspective to their undergraduate training. Each student will present a term project drawing upon his or her particular background and relating it to international matters. Open only to seniors. Restriction: senior standing.

497–498. Reading for Honors. (3, 3) Open to juniors or seniors with an overall grade point average of at least 3.2 and approval of the department. Restriction: junior or senior standing and permission of department.

499. Senior Honors Thesis. (4) Prerequisites: 497 or 498.

501. Microeconomics I. (3) Topics include producer and consumer theory, duality and welfare measures, competitive markets and monopoly and decision making under uncertainty. Prerequisites: 503 and 504.

503. Economic Theory. (3) Macro and micro theory with applications.

504. Mathematical Tools and Economic Models. (3) Calculus and matrix theory as applied to macro and micro models. Unconstrained and constrained optimization; static and comparative static analysis; introduction to dynamic analysis. Prerequisites: MATH 162 or MATH 180.

505. Applied Macroeconomics. (3) Basic macroeconomic theory applied to current economic problems and policy issues. Prerequisite: 303.


508. Statistics and Introduction to Econometrics. (3) Discrete and continuous probability distributions; expecta-
tions; joint, conditional marginal distributions; hypothesis test-
ing; least squares estimators; violation of the least squares principle. Econometric software with applications. Prerequisites: STAT 145 and MATH 162.

509. Econometrics I. (3) Theory and applications: ordinary and generalized least squares, hypothesis testing, dummy variable and distributed lag models; simultaneous equation and two stage least square models; forecasting. Emphasis on computer modeling. Prerequisites: 504 and 506.

510. Econometrics II. (3) Simultaneous equation methods, nonlinear least squares, maximum likelihood method, qualitative dependent variable models, asymptotic properties and test statistics. Emphasis on computer modeling. Prerequisite: 509.
513. Microeconomics II. (3)
Competitive equilibrium and welfare economics. Topics from imperfect competition, decision making under uncertainty, introduction to game theory and distribution theory. Prerequisite: 501.

514. Macroeconomics II. (3)
Dynamic macroeconomics. Optimal economic policy. Theories of economic growth. Prerequisites: 504 and 506.

517. Law and Economics. (3)
Economics provides an illuminating means of analyzing legal decisions and rulings. Topics in law: contracts, torts and administrative law. Applications: environmental economics, public finance and labor economics. Prerequisite: 501 or 503.

520. Labor Economics. (3)
Determination of optimal wage and employment. Demand and supply of labor, wage theory, education, migration, unions, labor market discrimination and full employment policies. Prerequisite: 503.

521. Comparative Labor Problems. (3)
Immigration issues, labor markets in Latin America, and other comparative labor issues. Prerequisite: 520.

522. Selected Groups in the Work Force. (3)
Employment problems of special groups (e.g., African-Americans, Hispanics, women, youth) in the work force. How economic theories explain their economic status. Economic models (education, school quality, occupational choice). Prerequisite: 520.

533. Seminars in Industrial Organization. (3)
Industrial organization is the study of firms and markets. Course covers firms internal organization and the interactions of firms in markets that are competitive, oligopolistic or monopsonistic. Prerequisite: 503.

534. Experimental Economics. (3)
Working markets in laboratory setting. Designing market experiments. Experimental investigations of simple market organization. Examination of more complex settings. Applications: theory, environmental, public finance and labor. Prerequisite: 501 or 503.

535. Evaluation of Public Programs. (3)
Use of benefit-cost analysis as the principal means of evaluating public sector programs such as bridges, dams, roads, reservoirs, consumer product safety regulation and environmental regulations. Prerequisite: 503.

538. Topics in Applied Economics. (3)
Special topics in applied economics as they pertain to the major fields and support courses. Available for use by visiting faculty. Restriction: permission of instructor.

540. Environmental and Natural Resource Modeling. (3)
Dynamic optimization and optimal control theory applications (deterministic and stochastic). Optimal resource utilization, pollutant stocks, principal agent problems, etc. Computer solution of models. Students will develop and solve a research problem. Prerequisite: 504.

541. Sustainable Development. (3)
Seminar of the political economy of sustainable development with emphasis on the management of large natural systems, particularly river basins. Restriction: permission of instructor.

542. Environmental and Natural Resource Economics: Survey. (3)
Overview of environmental and resource concepts, models and issues. Mass balance, property rights, common property, public policy, externality theory, non-market valuation, resource scarcity, renewable and nonrenewable resource management. Prerequisite: 503.

543. Natural Resource Economics. (3)
Models of natural resource utilization. Fossil fuels, hard rock minerals, fisheries, forest resources, groundwater and surface water. Prerequisites: 501 and 542.

544. Environmental Economics. (3)
Causes and consequences of environmental externalities. Design and implementation of alternative policy instruments. Theory and methods to measure economic value of market and non-market environmental services. Prerequisites: 501 and 542.

545. Water Resources II—Models. (4)
Also offered as WR 572. Use of technical models in water resources management addresses conceptual formulation and practical application of models from administrators perspective. Lab focuses on use of graphic aids to explain technical information. (Spring)

551/552. Independent Study. (2-3, 2-3)
An independent study course on economic problems or issues. The study is carried out under the supervision of an economics faculty member. Restriction: permission of instructor.

560. Introduction to Public Finance. (3)
An introduction to the advanced study of public finance. Issues covered include welfare theory, market failure, externalities and public goods, public choice, taxation and government expenditure. Prerequisite: 503.

562. Normative Theories of Public Finance. (3)
Welfare theories, general equilibrium, market failure, income distribution, optimal taxation, first best analysis and cost-benefit analysis. Prerequisite: 560.

565. Positive Theories of Public Finance. (3)
The behavior of politicians and bureaucrats, taxpayers, the distribution of tax burdens and government subsidies and the behavior of state and local governments. Additional topics as time allows. Prerequisite: 560.

570. Institutional Economics. (3)
Overview of institutional thought including comparing historical and evolving traditions (including early American institutionalism and “new” institutional economics) and connections to public policy. Examines institutional approaches relative to economic methodology and philosophy of science. Restriction: permission of instructor.

580. International Trade. (3)
Causes and patterns of trade; welfare and distributional effects of trade; effects and political economy of trade policies such as tariffs, quotas, export subsidies; regional economic integration; international factor movements. With empirical applications. Prerequisite: 503.

581. International Finance. (3)
Balance of payments adjustment; exchange rate determination, international financial flows, economic policies under alternative exchange rate regimes; regional monetary integration and the international monetary system. With empirical applications. Prerequisite: 503.
582. Topics in International and Development Economics. (3)
Examines issues in theory and policy in international and
development economics. Explores growth, trade policies,
exchange rate and international payments problems, public
finance, price stability, technology transfer, income distribu-
tion or other issues. Prerequisite: 503.

583. Development Economics. (3)
Applies economic development theories to country-wide stud-
ies, with an emphasis on Latin America and other developing
regions. Prerequisite: 503.

584. Interdisciplinary Seminar on Problems of
Modernization in Latin America. (3)
(Also offered as HIST 689, POLS, SOC 584.)

595. Workshop in Applied Economics. (1-3)
Research problems. Student presentations of methodology
and results. Research projects may be student-directed or
undertaken in conjunction with regular and/or visiting faculty.
Restriction: permission of instructor. Offered on CR/NC
basis only.

599. Master’s Thesis. (1-6)
Offered on a CR/NC basis only.

699. Dissertation. (3-12)
Offered on a CR/NC basis only.

ECONOMICS-PHILOSOPHY

Introduction
The combined major in economics and philosophy is an inter-
departmental major administered jointly by the two depart-
ments. Students interested in this program should consult the
Department of Economics or the Department of Philosophy.
This major is directed toward a deeper and fuller understand-
ing of the theoretical phases of economics and toward the
extension of philosophy into one of its traditional areas of
interest, namely that of value theory and its application.

Major Study Requirements

Students completing an economics-philosophy major are not
required to have a minor. The minimum requirement is
45 hours, including ECON 105, 106, 300, 303, 315 and 360
or 450, and 3 hours to be selected from 320, 332, 350 or
424; Philosophy—21 hours selected from courses chosen in
consultation with your advisor; and ECPH 485.

Minor Study Requirements
Not offered.

ECONOMICS-PHILOSOPHY (ECPH)

*485. Philosophical Foundations of Economic Theory. (3)
(Also offered as PHIL 485.) Philosophical backgrounds of
classical and neo-classical, socialist and communist and
institutionalist economics. Prerequisite: ECON 106.

ENGLISH

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Distinguished Professor
Gary Schamhorst, Ph.D., Purdue University

Endowed Chair
Joy Harjo, M.F.A., University of Iowa, Joseph M. Russo
Professor of Creative Writing

Professors
LynnDianne Beeene, Ph.D., University of Kansas
Helen Damico, Ph.D., New York University
Reed Way Dassenbrock, Ph.D., Johns Hopkins University
David K. Dunaway, Ph.D., University of California (Berkeley)
Barry J. Gaines, Ph.D., University of Wisconsin
Gary Harrison, Ph.D., Stanford University
Gail T. Houston, Ph.D., University of California
(Theseau)
David Richard Jones, Ph.D., Princeton University
Feroza Jussawalla, Ph.D., University of Utah
Mary Power, Ph.D., University of Wisconsin
Scott P. Sanders, Ph.D., University of Colorado
Peter L. White, Ph.D., Pennsylvania State University

Associate Professors
Jesse Alemán, Ph.D., University of Kansas
Lisa D. Chavez, M.F.A., Arizona State University
Finnie D. Coleman, Ph.D., University of Virginia
Wanda Martin, Ph.D., University of Louisville
Anita Obermeier, Ph.D., Arizona State University
Charles Paine, Ph.D., Duke University
Susan Romano, Ph.D., University of Texas
Jerome P. Shea, Ph.D., University of New Mexico
Julie Shigekuni, M.F.A., Sarah Lawrence
Diane Thiel, M.F.A., Brown University
Hector A. Torres, Ph.D., University of Texas
Sharon Oard Warner, M.A., University of Kansas
Carolyn Woodward, Ph.D., University of Washington

Assistant Professors
Elizabeth Archuleta, Ph.D., Pennsylvania State University
Stephen Brandon, Ph.D., University of North Carolina (Greensboro)
Matthew R. Hofer, Ph.D., University of Chicago
Myron Hunt, Ph.D., University of Chicago
Michelle Hall Kells, Ph.D., Texas A&M University
Gregory Martin, M.F.A., University of Arizona
Daniele Mueller, M.F.A., University of Iowa
Carmen Nocentelli, Ph.D., Stanford University

Lecturers
James Burbank, M.A., University of New Mexico
Kevin Cassell, M.A., Northeastern University
Michael B. Cabot, M.A., New Mexico State University
Marisa P. Clark, Ph.D., Georgia State University
Erin Lekaqz, M.A., University of New Mexico
Valerie Thomas, M.A., University of New Mexico
Jack Trujillo, M.F.A., University of Michigan

Professors Emeriti
Rudolfo A. Anaya, M.A., University of New Mexico
James F. Barbour, Ph.D., University of California
(Theseau)
Paul B. Davis, Ph.D., University of Wisconsin
Michael R. Fischer, Ph.D., Northwestern University
Robert E. Fleming, Ph.D., University of Illinois
Gene Frumkin, B.A., University of California (Theseau)
Patricia J. Gallagher, Ph.D., University of Illinois
Michael J. Hogan, Ph.D., University of Kansas
David M. Johnson, Ph.D., University of Connecticut
English 150, other literature courses numbered under 250, Writing Proficiency Portfolio. There are no prerequisites for literature surveys English 264, 265, and 294-297; students must have English 250 before enrolling in upper-division courses. English 150 is not required for students who are eligible to submit a Writing Portfolio, a collection of three nonfiction writing samples accompanied by a detailed cover letter. The portfolio option does not carry course credit; it allows stronger writers to move quickly into courses of their choice in the Writing and Speaking Core (see “Core Curriculum”). Students with ACT English scores of 26, 27, 28 or SAT Critical Reading scores between 19 and 25 or SAT Critical Reading scores between 450 and 600 should enroll in English 101. Students who have taken Advanced Placement examinations in English Language or Literature should refer to “Advanced Placement” for placement and credit information.

Writing Proficiency Portfolio

Students who earn a B- or better in English 101 or its equivalent transferred to the University of New Mexico from another institution need not take English 102 to satisfy the University of New Mexico’s minimum competence in English writing requirement. They may choose instead to complete a Writing Proficiency Portfolio, a collection of three nonfiction writing samples accompanied by a detailed cover letter. The portfolio option does not carry course credit; it allows stronger writers to move quickly into courses of their choice beyond English 102. For more information, call the English Department or consult our Web page at http://www.unm.edu/~english/

Prerequisites

A student must have credit for English 101 or its equivalent before registering for 102, 221, or 290, and credit for 102 before registering for 219, 220, or any course numbered 250 or above, with the exception of English 292 and 293. For enrollment in English 219, 220, or 290, the 102 prerequisite is waived for students who are eligible to submit a Writing Proficiency Portfolio and plan to do so to fulfill their University Writing Requirement. For enrollment in English 250 or literature surveys English 264, 265, and 294-297, students must have successfully completed either English 102 or the Writing Proficiency Portfolio. There are no prerequisites for English 150; other literature courses numbered under 250, and English 292 and 293. At least one lower-division course in literature is required for admission to a literature course numbered above 300. All English majors should complete English 250 before enrolling in upper-division courses. A few courses have special prerequisites listed after the course descriptions.

Major Study Requirements

There are several English major concentrations that offer different emphases or pre-professional preparation. All English major concentrations require work in courses numbered above English 102.

Liberal Arts Concentration (33 hours)

The Liberal Arts concentration offers a broad approach to the study of English, allowing students to elect 18 of the required 33 hours.

ENGL 250; two courses chosen from ENGL 264, 265, 292, 293, 294, 295, 296, 297; 352 or 353; 351 or 354; 9 hours at the 400 level and 9 additional hours, with no more than one course at the 200 level.

Pre-Graduate Concentration (36 hours)

A program for students planning to go on to graduate study in English or American Literature.

ENGL 250, 294; one course chosen from 295, 296, 297; 264 or 265; 351; 352 or 353; 354; one course chosen from 460, 461, 462, 463, 464, 465, 466, 468, 474; one course chosen from 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 470, 486; one course chosen from 410, 441, 442, 443, 445, 447; 6 additional hours at the 300 or 400 level.

Professional Writing Concentration (34 hours)

This concentration prepares students for careers as professional writers and editors in a variety of specific occupations in business, government and industry. The concentration requires courses in writing, language, and literature; an internship; and 9 hours of complementary course work in scientific, technical or professional disciplines.

Professional Writing Sequence. 219 or 220 or 240; 290; 12 hours from 320, 413, 414, 415, 416, 417, 418, 419, 420, 498, 499 (Internship, 1 hour minimum). 19 hours total.

Language, Rhetoric, and Literature Sequence. ENGL 250; one survey from 294, 295, 296, 297; 9 hours of courses in language, rhetoric or literature numbered 300 or above. 15 hours total.

Pre-Law Concentration (33 hours)

A program for students planning to go on to law school.

ENGL 250, 220 or 240; 9 hours from the following: 294, 295, 296, 297; 352 or 353; 3 hours from 460, 461, 462, 463, 470; 410 or 442 or 443; 320 or 413, 414, 415, 416, 418, 419, 420, 441; 6 additional hours at the 300 or 400 level. Outside the department, the following courses are strongly recommended: a course in public speaking, CJ 130 or 332; PHIL 156 (Logic and Critical Thinking) and POLS 315 or 316 or 317 (Constitutional Law: Powers/Liberties/Rights).

Creative Writing Concentration (33 hours)

Thirty-three hours in English, no more than 12 of which may be lower division (299 and below). ENGL 250; 3 hours from 292 through 297; 15 hours from 221, 222, 223, 321, 322, 323, 421, 422, 423 and 424 (students must take one course at each level); 12 hours in English Department courses numbered 300 or above, at least two of which must be in literature.

English-Philosophy Major

(See English-Philosophy which follows.)
Minor Study Requirements
(18 hours)

The English minor requires 18 hours of English courses numbered above 102. The minor program includes one survey course (294, 295, 296, 297), one course in Shakespeare (352, 353) and at least one 400-level course from the following list: 449, 450, 451, 452, 453, 454, 456, 457, 458, 459, 460, 461, 462, 463, 470, 486; and 9 more hours with no more than 6 below 300.

Professional Writing Minor (18 hours)

Requirements are: 219 or 220 or 240; 290; 320, 416, 417, 418, 419 or 420. Elective courses: 9 hours chosen from ENGL 219, 220, 240, 320, 413, 414, 415, 416, 417, 418, 419, 420, 441, 442, 443 or approved courses offered in other departments. ENGL 499 (Internship, 1 hour) is optional. At least 9 hours must be in courses numbered 300 and above.

Minor in Period Studies (21 hours)

A multidisciplinary program comprised of 21 hours: 12 hours in English courses numbered above 102 and 9 hours from at least two other disciplines. Each student’s program will focus on a particular historical period and be developed around the student’s individual interests after prior consultation with a minor advisor.

Medieval Studies Minor (21 hours)

A multidisciplinary program consisting of 21 hours of approved courses. Each student’s program will be developed around the student’s individual interests after approval by an advisor. A brochure of requirements is available from the Department of English and from the office of The Institute for Medieval Studies.

The distribution of requirements is as follows: 3 hours of English 315, the introductory course in Medieval Culture; 9 hours of courses in Medieval English Literature (ENGL 211, 315, 351, 411, 440, 448, 449, 450, 451); 9 hours from courses in Medieval Art (ARTH 202, 331, 404), Medieval History (HIST 302, 303, 304, 305, 314, 320, 323, 326, 328, 386, 401, 402, 411, 416), LATN 101, 102, 201, 202, 351, 352, GREK 101, 102, 301, 302, ITAL 475, MUS 261, PHIL 308, RLST 360, SPAN 301, 411). Interested students should contact the Director of The Medieval Studies Program in the Department of English.

English as a Second Language

Students who speak and write English as a Second Language may enroll in special sections of English 101 and 102 designed for international students, recent immigrants, and others who have limited experience with standard American English. For placement and scheduling, students should apply in person at the Rhetoric and Writing office in the English Department. ESL sections of English 101 and 102 are offered for full credit (3 credit hours each). Non-credit English courses are offered in the Center for English Language and American Culture (CELAC) in Mesa Vista Hall. Programs and courses in training to become an ESL teacher are offered by the College of Education.

Departmental Honors

Students who seek Departmental Honors in English should apply to the Director of Undergraduate Studies no later than the last semester of their junior year. Admission to honors requires 1) an overall GPA of 3.2, based on at least 75 hours of college credit, including a minimum of 9 hours of credit in English courses numbered 200 and above; 2) a cumulative GPA of 3.5 in English courses numbered 200 and above; and 3) a letter of recommendation from a regular faculty member from the Department of English. After being admitted to the program, honors candidates must 1) complete English 412 Capstone and Honors Seminar; 2) enroll in English 497, Individual Study, in the semester before graduation in order to write a prospectus for submission to the Undergraduate Committee no later than the end of the tenth week of the semester; and finally, 3) enroll in English 490, Senior Honors Thesis, to complete the Honors thesis for submission to the Undergraduate Committee no later than the end of the 12th week of the semester of graduation.

The English Department also sponsors a chapter of Sigma Tau Delta, an international honors society for English majors. To be eligible for membership in Sigma Tau Delta applicants must 1) be an English major or minor who has completed three semesters of college work, including 6 hours of English courses beyond English 102; 2) have an overall GPA of 3.0; and 3) a cumulative GPA of 3.2 in all English courses. To apply for membership in Sigma Tau Delta, contact the faculty advisor of the chapter or the Undergraduate Director for an application.

Graduate Degrees

For University requirements for the M.A., M.F.A., and Ph.D. degrees consult the appropriate pages of this catalog. The following are general department requirements for English graduate programs. Consult the English Department Graduate Studies Handbook and website for details about specific distribution requirements, examination procedures, foreign language requirements, and other regulations for all degree programs listed below.

Application Deadline
Fall semester: February 1

A Bachelor’s Degree is required for all applicants to the Master’s Programs in English and to the M.F.A. in Creative Writing. A Master’s Degree in English or Comparative Literature is required for all applicants to the Ph.D. program.

All applicants must provide full transcripts, a letter of intent, a writing sample, transcripts from all previously attended post-secondary institutions, GRE scores for the General Aptitude Test and the Advanced Subject Test in English Literature (for applicants to the MA in Language and Literature and to the Ph.D. program), and three letters of recommendation.

Early application is recommended (all paperwork must be received on or before the listed deadline). Decisions on applications received by February 1 are announced by April 15.

Teaching Assistantships

Applicants must apply for a Teaching Assistantship by completing the T.A. Application form and including a critical, analytical writing sample for evaluation by the Director of Rhetoric and Writing. The deadline for T.A. Applications is February 1.

First year Teaching Assistants are required to enroll in English 537, Teaching Composition, a practicum for teaching in the University of New Mexico’s writing program.

Required Enrollment

All graduate students in English must enroll for a minimum of 3 hours in English graduate courses per semester (excluding the summer session).

Degrees Offered

The Department of English offers the Ph.D.; the M.F.A. in Creative Writing; and an M.A. with concentrations in
Language and Literature and in Rhetoric and Writing. The M.A. concentration in Language and Literature, and the M.A. concentration in Rhetoric and Writing must be taken under Plan II, according to the regulations set forth in earlier pages of this catalog and in accordance with the requirements set forth below.

Graduate Minor

Students who wish to declare a graduate minor in English must notify the Director of English Graduate Studies before completing 6 of the required 15 hours in English graduate work. Students must complete the following requirements for the English Graduate Minor for Plan II.

Requirements (Plan II): 15 hours distributed as follows:

- English 500, Introduction to the Professional Study of English
- 12 hours of 500 and/or 600-level English Department classes, selected under advisement of the Director of English Graduate Studies.

M.A. Concentration in Language and Literature (32 hours)

The M.A. Concentration in Language and Literature emphasizes research and writing, originality and tradition to promote well-rounded scholars in British and American literature, literary history and criticism, and language theory. Applicants should already possess a Bachelor’s degree in English or a related discipline. The degree requires 32 hours of coursework, a Foreign Language, a Master’s Examination, and a Portfolio of 2 essays.

The 32 hours of coursework are distributed across core requirements and electives. Core requirements include English 500 (Introduction to Professional Studies); English 596 (Master’s Colloquium); and English 598 (Portfolio), along with one 4-hour graduate-level seminar and an English pedagogy class. The remaining credit hours are made up by electives distributed across different periods of literary history in courses numbered 500 or above.

All students in the M.A. Language and Literature concentration must meet a foreign language requirement; take and pass the MA 50-item exam; and submit a two-essay portfolio for evaluation and final approval. The Graduate Committee must approve the portfolio before the Master’s degree can be conferred.

MA in English, Concentration in Rhetoric and Writing (32 hours)

Optional emphases in Teaching and Professional Writing

A Master’s of Arts in English with Concentration in Rhetoric and Writing prepares graduates for careers in professional writing and post-secondary teaching. Students interested in teaching study pedagogical theories and develop practical applications in traditional classrooms and in online or tutoring venues. Students interested in professional writing enroll in writing workshops, where they strengthen existing abilities and sharpen technical expertise in a variety of genres; internship placements in workplace professional writing venues are optional.

Students may choose an emphasis in Writing or Teaching; all students work under Plan II (no thesis); a portfolio (English 596) is required.

- 9 hours of core required courses: 542 and 543; 537 or 538 or 539.
- 10 hours of three courses, including one 4-hour seminar, chosen from at least two of the groups A-F listed in the English Department Graduate Studies Handbook.

- 12 hours of general electives: Four courses from among 538-545, 513-520, 587, or other courses in English as approved by their Committee on Studies (COS) and the Graduate Director; students may offer up to 6 hours of courses from departments outside of English as Electives as approved by their COS and the Graduate Director; students may offer up to 6 hours of English 597 (Problems) for work related to teacher training or professional writing experience, as approved by their COS and the Graduate Director.

- 1 hour of Masters Portfolio, English 596: In the semester before graduation, students prepare a portfolio of work under the direction of their COS which is presented for evaluation in the ninth week of the student’s final semester of attendance.

Emphasis in Teaching (12 hours)

Teaching Emphasis students take 537 or 538 or 539 (depending on what they take for the Core Requirement above) plus 9 hours in other pedagogy-based courses offered in English, the College of Education, or other departments as approved by their COS and the Graduate Director; up to 6 hours may be offered as Teaching Practicum (English 597, Problems).

Emphasis in Professional Writing (12 hours)

Professional Writing Emphasis students must take 539, either in the Core Requirement or as an elective, plus 9 or 12 hours (depending on where they count 539) from 513-520, 587. Professional Writing Emphasis students may take up to 6 hours of courses in other departments as approved by their COS and the Graduate Director; up to 6 hours may be offered as Professional Writing Internship (English 598, Internship, CR/NC) as approved by their COS and the Graduate Director.

M.A. Concentration in Medieval Studies

The M.A. concentration in Medieval Studies is designed for students who wish to pursue an interdisciplinary Master’s degree in medieval English literature. The course of study offers a multicultural and interdisciplinary foundation for the study of the Middle Ages and hence would appeal to students who wish to continue their studies in the medieval period above the B.A. level but below the Ph.D. It will also appeal to secondary school teachers who are seeking a multi-disciplinary content-intensive M.A. degree. Finally, the M.A. concentration prepares the student for the Ph.D. Concentration in Medieval Studies.

This concentration requires 34 hours of interdisciplinary course work, of which 22 hours must be in English. Please see the department’s Web site and Graduate Studies Handbook for specific policy and procedures.

M.F.A. in Creative Writing (49 hours)

The UNM Master of Fine Arts degree in Creative Writing is designed for students committed to pursuing the writing life. This three-year degree combines studio-based workshops in fiction, poetry and creative nonfiction with craft seminars and coursework in literature, teaching pedagogy, and professional writing. Students also spend each of their final two semesters working individually with a faculty mentor towards the development of a book-length manuscript suitable for publication. Our widely published creative writing faculty, along with a distinguished visiting writers series, a faculty and student reading series, the acclaimed Taos Summer Writing Conference, and a national literary magazine, all make for an exciting atmosphere for the study of writing.

Applicants to the M.F.A. program should already hold a Bachelor’s degree. The program requires 49 hours of coursework (excluding dissertation hours); a comprehensive exam; and a creative dissertation. There is no foreign language requirement for the completion of the M.F.A.

The M.F.A.’s 49 hours of coursework are distributed over core requirements that include English 501 (Introduction to the
English (ENGL)

I. Expository and Professional Writing


Ph.D. (54 hours)

The Ph.D. program is designed for students who wish to pursue intensive study in English. The Ph.D. program offers three areas of study: British and American literatures, including criticism and theory; Rhetoric and Writing; and an interdisciplinary Concentration in Medieval Studies. The Ph.D. in English requires 54 hours of coursework; a foreign language requirement; successful completion of comprehensive exams in 3 fields; and a Ph.D. dissertation.

General requirements for the Ph.D. are set forth in earlier pages of this catalog. Consult the English Department’s Graduate Studies handbook and website for details about specific distribution requirements, foreign language regulations, examination procedures, and other policies specific to the English Department. The following are general departmental requirements for the Ph.D. in English.

The Ph.D. in English requires 54 total hours of course work. This number can include work transferred from previous graduate study. At the discretion of the Director of Graduate Studies, no more than 24 hours of Master’s course work can count towards the Ph.D. degree requirements, leaving 30 hours to complete from the time of matriculation.

Ph.D. course work consists of core requirements and electives. Core requirements include: English 500; a theory requirement; excluding any seminars taken in previous graduate study. The remaining required credit hours are fulfilled by electives distributed across courses listed at 500-level or above (excluding English 699, Dissertation). All Ph.D. students must enroll for a minimum of 18 hours of English 699 after Advancement to Candidacy.

All Ph.D. students must successfully complete the department’s foreign language requirement; take and pass comprehensive examinations in 3 areas; complete and successfully defend the dissertation prospectus; and complete and successfully defend a dissertation, as explained in the general requirements for the Ph.D. set forth earlier in this catalog.

Ph.D. Concentration in Medieval Studies

The Ph.D. Concentration in Medieval Studies offers advanced students an alternative means of acquiring bodies of knowledge presently isolated in separate disciplines. The course of study differs from the typical Ph.D. in Medieval English Literature in that it involves diverse departments and presents exciting and provocative points of intersection between literatures and cultures of the Middle Ages and later periods. Please see the department’s Web site and Graduate Studies Handbook for specific policy and procedures.

102. Composition II: Analysis and Argument. (3) Practice writing analytic and argumentative essays based on expository and literary readings. Some research required. Meets New Mexico Lower Division General Education Common Core Curriculum Area I: Communications (NMCCN 1123).

219. Technical and Professional Writing. (3) Practice in writing and editing of workplace documents, including correspondence, reports and proposals. Prerequisite: 102 or its equivalent.

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

290. Introduction to Professional Writing. (3) Introductory course in the professional writing concentration. Study of technical writing, public information and public relations writing and freelance nonfiction writing. Prerequisite: 102 or its equivalent.

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

320. Advanced Expository Writing. (3 to a maximum of 6) Advanced study of specific academic, technical and professional genres. Topic varies. Prerequisites: 219, 220 or 290.

413/513. Scientific, Environmental and Medical Writing. (3 to a maximum of 9) Theoretical and practical studies of writing in the sciences. Addresses writing for both popular and professional audiences.

414/514. Documentation. (3) Theory and practice in developing, editing and producing technical documentation for paper-based and online media.

415/515. Publishing. (3) Theory and process of publishing, offering successful strategies for working with and within the publishing industry. Course includes the discussion of the cultural function of publishing.

416/516. Biography and Autobiography. (3) Writing and reading biography and autobiography; researching a life to be rendered in writing.

417/517. Editing. (3) Theory and practice of copyediting print and online documents. Rhetorical, linguistic and historical analyses of style, grammar and usage.

418/518. Proposal and Grant Writing. (3) Invention and delivery of proposals and grants in the business, scientific, technical and artistic arenas.


420/520. Topics in Professional Writing. (3, no limit) Advanced study of professional writing theory and practice. Recent topics have included creative non-fiction, hypertext and advanced technical writing.

*498. Advanced Workshop in Literature or Writing. (1-3 to a maximum of 6) Intensive study of various topics in literature, language and writing.
II. Creative Writing

221. Introduction to Creative Writing—Fiction. (3) A beginning course in fiction, emphasizing process over product. Introduces issues of craft, workshop vocabulary, strategies for revision and the habit of reading as a writer. A $20.00 workshop fee is required. Prerequisite: 101 or its equivalent.

222. Introduction to Creative Writing—Poetry. (3) A beginning course in poetry, emphasizing process over product. Introduces issues of craft, workshop vocabulary, strategies for revision and the habit of reading as a writer. A $20.00 workshop fee is required. Prerequisite: 101 or its equivalent.

223. Introduction to Creative Writing: Creative Nonfiction. (3 to a maximum of 6) A beginning course in creative nonfiction, emphasizing process over product. Introduces issues of craft, workshop vocabulary, strategies for revision and the habit of reading as a writer. A $20.00 workshop fee is required. Prerequisite: 101 or its equivalent.

321. Intermediate Creative Writing—Fiction. (3 to a maximum of 6) An intermediate course in fiction, building on basic concepts introduced in 221. Emphasizes writing as a reader and incorporates the workshop critique of student drafts. A $20.00 workshop fee is required. Prerequisite: 221 or 222 or 223.

322. Intermediate Creative Writing—Poetry. (3 to a maximum of 6) An intermediate course in poetry, building on basic concepts introduced in 222. Emphasizes writing as a reader and incorporates the workshop critiques of student drafts. A $20.00 workshop fee is required. Prerequisite: 221 or 222 or 223.

323. Intermediate Creative Writing—Creative Nonfiction. (3 to a maximum of 6) An intermediate course in creative nonfiction, building on basic concepts introduced in 223. Emphasizes writing as a reader and incorporates the workshop critique of student drafts. A $20.00 workshop fee is required. Prerequisite: 221 or 222 or 223.

324. Introduction to Screenwriting. (3 to a maximum of 6) (Also offered as MA 324.) Writing workshop on basics of character structure, scenes, visualization and good old story telling as it applies to the screenplay. Students read scripts, watch film clips and begin writing an original screenplay. Restriction: permission of instructor.

421/521. Advanced Creative Writing—Fiction. (3 to a maximum of 6) An advanced course in fiction with a strong emphasis on revision. Combines the workshop experience with classroom study of published authors as well as some theorists on writing. A $20.00 workshop fee is required. Prerequisites: 321.

422/522. Advanced Creative Writing—Poetry. (3 to a maximum of 6) An advanced course in poetry with a strong emphasis on revision. Combines the workshop experience with classroom study of published poets as well as some theorists on writing. A $20.00 workshop fee is required. Prerequisites: 322.

423/523. Advanced Creative Writing: Creative Nonfiction. (3 to a maximum of 6) An advanced course in creative nonfiction with a strong emphasis on revision. Combines the workshop experience with classroom study of published authors as well as some theorists on writing. A $20.00 workshop fee is required. Prerequisites: 323.

424. Creative Writing Workshop Script. (3 to a maximum of 6) Advanced workshop devoted to student preparation of working scripts for film or television. Restriction: permission of instructor.

III. Literature and Language

107. Greek Mythology. (3) (Also offered as GREK, CLST 107.) Introduction to mythology; primary readings in stories about the gods and heroes, usually including Homer, Hesiod, Homeric Hymns and Tragedies. All texts will be in English.

150. The Study of Literature. (3) An introduction to the study and appreciation of literature for non-English majors. Shows how understanding writers' techniques increases the enjoyment of their works; relates these techniques to literary conventions; teaches recognition, analysis, discussion of important themes.

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

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

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

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

250. The Analysis of Literature. (3) First course required of all English majors. Concentrates on methods of literary analysis and critical writing. Prerequisite: 102 or its equivalent.

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

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

270. An Introduction to Modern Literature. (3) An introduction to American and European literature of the 20th century, concentrating on such major authors as Eliot, Faulkner, Fitzgerald, Yeats, Joyce, Ibsen, Camus and Chekhov.

281. Black Books I. (3) (Also offered as AFAM 251.) The course introduces students to the African-American classics of the slavery era. Daily experiences of the characters in these books become the basis for discussing race, class, gender, revolt, freedom, peace and humanity.

287. Introduction to the Short Story. (3) The development of the modern short story from its beginnings in the 19th century to the present. Technique and
theme will be studied in representative stories by American and European writers.

292. World Literatures: Ancient World through the 16th Century. (3) Survey of key texts in world literature from the ancient world through the 16th century.

293. World Literatures: 17th Century through the Present. (3) Survey of key texts in world literatures from the 17th century through the present.

294. Survey of Earlier English Literature. (3) From Old English to 1738. A study of the principal literary and intellectual movements and selected writers and literary works from Beowulf through Johnson.

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


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

304. The Bible as Literature. (3) Literary aspects of the Old and New Testaments. Examines the literary forms within the Bible: epic, parable, pastoral, allegory, proverb and so on. Stresses the importance of the Bible as a source for English and American literature.

305. Mythology. (3) An introduction to the major traditions of European and American mythology. Basic themes and motifs: the quest, creation, birth, marriage, heroes, heroines and death. Provides background for the study of later literature.

306. Arthurian Legend and Romance. (3 to a maximum of 6) (Also offered as COMP 306.) Comprehensive study of the Arthurian Legend from its Celtic origins, to its medieval French romance continuators, and its English apex in Malory. May also trace post-medieval versions in art, print, and film.

308. The Jewish Experience in American Literature and Culture. (3) (Also offered as RELG 308.) A comprehensive survey of the cultural and historic relationship between Jews and American culture and character as a whole.

315. Interdisciplinary Approaches to Literature. (3 to a maximum of 6) (Also offered as RELG 308.) Combines the study of literature with the study of outside materials from history, sociology or other disciplines. Examples include Religion and Literature, Law and Literature, Literature of the Depression and Medieval Literature and Culture.

330. Topics in Comparative and World Literature. (3 to a maximum of 6) (Also offered as COMP 330.) Study of special topics in Comparative and World Literatures, including studies of genre, period, literary movements and themes.

331. Topics in Asian Literature and Culture in Translation. (3 to a maximum of 6) (Also offered as COMP 331.) Study of the culture and literatures of India, China, Japan and other Asian traditions. Topics vary.

332. Topics in African Literature and Culture in Translation. (3 to a maximum of 6) (Also offered as COMP 332.) Study of the culture and literatures of Africa. Topics vary.

*333. Topics in Latin Literature and Culture in Translation. (Latin Literature and Culture in Translation.) (3 to a maximum of 6) (Also offered as CLST, COMP 333.) Study of individuals, genres or periods of Latin literature and culture in translation.

*334. Topics in Greek Literature and Culture in Translation. (Greek Literature and Culture in Translation.) (3 to a maximum of 6) (Also offered as CLST, COMP 334.) Study of individuals, genres and periods of Greek literature and culture in translation.

*335. Topics in French Literature and Culture in Translation. (French Literature and Culture in Translation.) (3 to a maximum of 6) (Also offered as COMP, FREN 335.) Study of individual authors, genres and/or periods of French and Francophone literature and culture.

*336. Topics in German Literature and Culture in Translation. (German Literature and Culture in Translation.) (3 to a maximum of 12) (3) (Also offered as COMP, GRMN 336.) Study of individual authors, genres, and/or periods of German literature and culture in translation.

337. Topics in Italian Literature and Culture in Translation. (Italian Literature and Culture in Translation.) (3 to a maximum of 6) (Also offered as COMP, ITAL 337.) Study of individual authors, genres, and/or periods of Italian literature and culture in translation.

*338. Topics in Russian Literature and Culture in Translation. (Russian Literature and Culture in Translation.) (3 to a maximum of 6) (Also offered as COMP, RUSS 338.) An introduction to Russia’s great novels and tales from the 19th and 20th centuries and their contribution to Russian culture and social thought.

339. Topics in Japanese Literature and Culture in Translation. (Japanese Literature and Culture in Translation.) (3, no limit) (Also offered as COMP, JAPN 339.) Study of individual authors, genres and/or periods of Japanese literature and culture in translation.

348. Introduction to Medieval Culture. (3) Reading and analysis of major comparative medieval works in literature, history, art and architecture, and philosophy. Required for all Medieval Studies undergraduates.

349. From Beowulf to Arthur. (3) Survey of the principal literary genres and approaches to Old and Middle English literature in translation.

350. Medieval Tales of Wonder. (3) (Also offered as COMP 350.) Study of medieval literature, language, and culture in the context of insular and continental texts.

351. Chaucer. (3) Comprehensive study of Chaucer’s poetry, focusing upon language, versification and literary sources in their historical and cultural contexts. Alternates between focus upon Canterbury Tales and upon Troilus and Criseyde with selected other works.

352. Early Shakespeare. (3) Survey of Shakespeare’s Elizabethan-era drama and poetry, including such works as A Midsummer Night’s Dream, Henry IV, Hamlet and Venus and Adonis. Examines dramatic structure, characterization, poetry and a variety of themes in their historical context.
353. Later Shakespeare. (3)
Survey of Shakespeare’s Jacobean-era drama and poetry, including such works as Measure for Measure, Macbeth, The Tempest and the sonnets. Examines dramatic structure, characterization, poetics and a variety of themes in their historical context.

354. Milton. (3)
Comprehensive study of Milton’s poetry and prose with the context of 17th-century history and of Milton criticism. Alternates between focus upon Paradise Lost and shorter poems, and upon Paradise Regained, Samson Agonistes and prose.

355. Enlightenment Survey. (3)

356. The Nineteenth Century. (3)
A survey of 19th Century literature and culture, primarily focused on British and Irish literature, covering a wide range of authors and a variety of genres from the Romantic through the Victorian periods.

360. Individual Authors. (3 to a maximum of 6) ∆
Study of one or more authors. Titles of individual sections vary as content varies.

364. Native Literatures and Rhetorics. (3 to a maximum of 6) ∆
A focused examination of the oral traditions, literatures, rhetorics, criticism, film, art, drama, and ceremonies specific to individual American Indian and indigenous nations, periods, genders, classes and/or regions.

365. Chicana/o Cultural Studies. (3 to a maximum of 6) ∆
An examination of contemporary Chicana/o literature, criticism, murals, film, and other forms of popular culture, with an emphasis on the construction and representation of Chicana/o a cultural identity.

381. Black Books II. (3)
(Also offered as AFAM 381.) This is the second phase of a three part journey through the Black experience in search of humanity and peace. The vehicle is post-slavery books written by and about Black people. Issues raised and the characters in the books provide the occasion for in-depth discussion of inhumanity, protests, self definition, race relationships, liberalism, etc.

397. Regional Literature. (3)
The study of a limited body of writers whose work is identified with a particular geographical region. Authors covered will differ but representative examples are Frank Waters, Willa Cather, Rudolfo Anaya and Walter Van Tilburg Clark.

406. The Folktale in English. (3)
Tradition of folk motifs and themes in development of the tale as a form of storytelling in English and American literature.

410/410. Criticism and Theory. (3 to a maximum of 6) ∆
A historical survey of literary criticism and theory; alternates between criticism from the classical period through the early 19th century, and criticism and theory from the late 19th century through the present.

411/411. Special Topics: Criticism and Theory, Literary and Cultural Movements. (3 to a maximum of 12) ∆
Advanced study of various topics in literary and cultural studies, literary criticism and theory. Recent topics have included Linguistics and Literary Criticism, Cultural Theory, Literature and National Identity.

412. Capstone and Honors Seminar. (3)
Seminar bringing together literary, rhetorical, and/or theoretical works from different times or cultural moments. Students do in-depth research with a clear theoretical base and give oral presentations of their work.

432. Topics in Literature and Culture. (3 to a maximum of 6) ∆
(Also offered as COMP 442.) Varying topics in the practice and theory of literatures and cultures.

440/440. Topics in Language or Rhetoric. (3 to a maximum of 12) ∆
An overview of a defined theme or issue in language or rhetorical theory. Recent topics have included Discourse Analysis/Text Linguistics, Survey of American English, Narrative Theory and Literature, Epistemic Rhetoric and Language Studies, such as Old Norse. Repeatable to a maximum of 12 credit hours.

441/441. English Grammars. (3)
(Also offered as LING 441.) A survey of various grammar models and their applications to analysis of the English language. Prerequisite: 240 or LING 101 or LING 292.

442/442. Major Texts in Rhetoric. (3)
A survey of rhetorical and language theories from the classical period through the 18th century.

443/443. Contemporary Texts in Rhetoric. (3)
A survey of rhetorical and language theories from the 19th and 20th centuries that shape contemporary approaches to discourse, text and persuasion.

445/445. History of the English Language. (3)
A historical survey of the etymology, morphology, phonetics and semantics of English, as well as the relationship between the English language and cultural change.

447/447. Old English. (3 to a maximum of 6) ∆
(Also offered as LING 447/547.) An introduction to the grammar, syntax, and phonology of Old English. Prepares students for more advanced studies in this and later periods.

448/448. Topics in Medieval Studies. (3 to a maximum of 6) ∆
Advanced study of specialized aspects in medieval studies, such as manuscripts; paleography; literary and historical bibliographic methods; medieval Latin sources; cultural, feminist, and historical theoretical approaches to literature; medievalism in Britain and America; history of scholarship.

449/449. Middle English Language. (3)
(Also offered as LING 449/549.) Comprehensive study of Middle English dialects and the development of Middle English from Old English. Prepares students for Middle English literature.

450/450. Beowulf and Other Topics. (3 to a maximum of 6) ∆
Alternates between Beowulf and Advanced Old English, Anglo-Saxon Prose and special topics in Old English. Prerequisite: 445.

451/551. Topics in Medieval Studies. (3 to a maximum of 6) [3 to a maximum of 9] ∆
Advanced study of specialized aspects in medieval studies, such as manuscripts; paleography; literary and historical bibliographic methods; medieval Latin sources; cultural, feminist, and historical theoretical approaches to literature; medievalism in Britain and America; history of scholarship.

452/552. The Renaissance. (3 to a maximum of 6) ∆
Survey of prose, poetry and/or drama of the 16th century. Emphasis varies.

453/553. The Seventeenth Century. (3 to a maximum of 6) ∆
Survey of prose, poetry and/or drama of the 17th century. Emphasis varies.
454./554. Restoration and Early Eighteenth Century. (3 to a maximum of 12) Δ
Studies in literature and culture on topics such as Restoration comedy and heroic tragedy, early eighteenth-century satire and major authors such as John Dryden, Aphra Behn, Alexander Pope, Daniel Defoe and Jonathan Swift.

455./555. Middle and Late Eighteenth Century. (3 to a maximum of 12) Δ
Studies in literature and culture 1735–1800 on topics such as eighteenth-century theater, the development of fiction, the construction of difference and the representations of the relationship between England and the rest of the world.

456./556. British Romanticism. (3 to a maximum of 12) Δ
Studies in the literature and culture of early 19th-century Britain: the Wordsworth circle, the Keats-Shelley circle, Romantic women writers and special topics such as British Culture in the 1790s and Romantic Theory.

457./557. Victorian Studies. (3 to a maximum of 12) [3 to a maximum of 6] Δ
Studies in the literature and culture of the Victorian era; recent offerings have included Dickens, the Bronte’s; and special topics such as Sensation Detection and the Detective Novel; Victorian Sexualities; and Race, Class and Gender.

458./558. Modern British Literature. (3 to maximum 12) Δ
Survey of the poetry, fiction, drama and non-fiction prose of early 20th-century Britain and Ireland, including the works of Conrad, Yeats, Eliot, Forster, Joyce, Shaw and Woolf.

459./559. Irish Literature. (3 to a maximum of 6) Δ
Survey of the prose, poetry and drama of Ireland. Alternates between surveys of modern and postmodern Irish literature and special topics or single author courses such as on Yeats or Joyce.

460./560. Early American Literature. (3 to a maximum of 6) Δ
Taught alternately as the literature of European Exploration of America or Colonial and Revolutionary America.

461./561. American Romanticism. (3 to a maximum of 12) Δ
Survey of the prose and poetry of mid-19th-century America, including writings by the Transcendentalists, Hawthorne, Poe, Melville, Stowe, Whitman and Dickinson.

462./562. American Realism and Naturalism. (3 to a maximum of 6) Δ
Survey of the prose and poetry of turn-of-the-century America, including writings by Mark Twain, Henry James, Crane, Wharton, Norris and Gilman.

463./563. Modern American Literature. (3 to a maximum of 6) Δ
Survey of the poetry, fiction, drama and non-fiction prose of American literature from 1900–1945, including works by writers such as Cather, Faulkner, Fitzgerald, Hemingway, O’Neill, Frost, H.D., Hughes and Stevens.

464./564. Advanced Studies in Native Literatures and Rhetorics. (3 to a maximum of 9) Δ
In-depth investigation of specific topics in Native literatures and rhetorics. Special attention paid to the range of criticism, critical theory, research opportunities, methodologies and pedagogical problems inherent in American Indian and indigenous textual production.

465./565. Chicana/o Literature. (3 to a maximum of 6) Δ
Advanced study of Chicana/o literature, literary history, criticism, theory, novels, short stories, poetry, and film, with emphasis on ethnic, regional, gender, and linguistic identity from nineteenth century to the present.

466./566. African-American Literature. (3 to a maximum of 6) Δ
An introduction to traditional and/or contemporary African-American texts. Topics have included Survey of the African-American Novel and Toni Morrison.

468./568. Topics in American Literature. (3 to a maximum of 12) Δ
Intensive study of special topics in American Literature. Offerings have included Literature of the Civil War, 19th-Century American Literature and the Visual Arts, Southern American Literature and American Women Writers.

470./570. Modernist Literature. (3 to a maximum of 6) Δ
Survey of the poetry, fiction, drama and non-fiction prose of the early 20th century in the United States, Britain and Ireland, with some consideration of the international influence of and upon these literatures. Course content varies from semester to semester.

471./571. Twentieth-Century Drama. (3 to a maximum of 6) Δ
The study of drama and dramatic form from 1880 to the present. Most often taught as Modern Drama (1880–1950), Ibsen and Strindberg to Beckett and Williams) or Contemporary Drama (1950 to present, Beckett and Williams to new plays of recent years).

472./572. Contemporary Literature. (3 to a maximum of 6) Δ
Survey of the poetry, fiction, drama and non-fiction prose of the post-1945 era in the United States and Britain, with some consideration of the international influence of and upon these literatures. Course content varies from semester to semester.

473./573. Postmodernism. (3 to a maximum of 6) Δ
Studies in experimental literary works and theories from World War II to the present.

474./574. Contemporary Southwestern Literature. (3 to a maximum of 6) Δ
This course presents and analyzes major texts in post-war literature of the southwestern U.S., emphasizing the cultural exchanges among Native, Hispanic and Anglo literature and culture.

479./579. Postcolonial Literatures. (3 to a maximum of 6) Δ
Survey of Postcolonial literatures and theories emanating from the Indian subcontinent, Africa and other countries recently independent from the British Empire.

480./580. Topics in British Literature. (3 to a maximum of 9) Δ
Intensive study of special issues and themes, literary movements and single authors in British Literature.

486./586. British Fiction. (3 to a maximum of 6) Δ
Studies in the literary and cultural emergence and formation of fiction as a genre in English. Course content varies; recent topics include The Early English Novel; The 18th-Century Comic Novel; and Race, Class and Gender in the 19th-Century Novel.

487. Studies in Genre. (3 to a maximum of 12) Δ
Study any one genre, including narrative, comedy, satire, tragedy, poetry or stylistic analysis of nonfiction.

490. Senior Honors Thesis. (3)
Open only to students admitted to honors in English. To be taken in the semester when the senior thesis is completed.

497. Individual Study. (1-3 to a maximum of 6) Δ
Permission of the instructor is required before registering. The student should present a plan of study to the instructor.

499. Internship. (1-3)
Permission of the Professional Writing Director is required before registering. Offered on a CR/NC basis only.
IV. Graduate Courses

500. Introduction to the Professional Study of English. (3)
This course prepares students for advanced graduate work in English. Topics include research methods and bibliography; literary criticism and theory; and the history of English as a profession.

501. Introduction to the Profession for Writers. (3)
Introduction to graduate studies for professional and creative writers. A survey of writing for different occasions, the world of publishing, the means of getting published and the technological writers need to know.

510. Criticism and Theory. (3)
A one-semester course that focuses on contemporary criticism and theory in the context of classical through 19th-century criticism and theory.

511. Special Topics: Criticism and Theory, Literary and Cultural Movements. (3 to a maximum of 12)
Advanced study of various topics in literary and cultural studies, literary criticism and theory. Recent topics have included Linguistics and Literary Criticism, Cultural Theory, Literature and National Identity.

513. Scientific, Environmental and Medical Writing. (3 to a maximum of 9)
Theoretical and practical studies of writing in the sciences. Addresses writing for both popular and professional audiences.

514. Documentation. (3)
Theory and practice in developing, editing and producing technical documentation for paper-based and online media.

515. Publishing. (3)
Theory and process of publishing, offering successful strategies for working with and within the publishing industry. Course includes the discussion of the cultural function of publishing.

516. Biography and Autobiography. (3)
Writing and reading biography and autobiography; researching a life to be rendered in writing.

517. Editing. (3)
Theory and practice of copyediting print and on-line documents. Rhetorical, linguistic and historical analyses of style, grammar, and usage.

518. Proposal and Grant Writing. (3)
Invention and delivery of proposals and grants in the business, scientific, technical and artistic arenas.

519. Visual Rhetoric. (3)
Analysis and design of paper-based and on-line documents.

520. Topics in Professional Writing. (3 to a maximum of 12)
Advanced study of professional writing theory and practice. Recent topics have included creative non-fiction, hypertext and advanced technical writing.

521. Creative Writing Workshop: Prose Fiction. (3 to a maximum of 6) [3]
Prerequisite: 421.

522. Creative Writing Workshop: Poetry. (3 to a maximum of 6) [3]
Prerequisite: 422.

523. Creative Writing Workshop: Creative Nonfiction. (3, no limit) [3]
Prerequisite: 423.

528. Studies in Reading and Literature for Teachers. (3)
(Also offered as LLSS 528.)

537. Teaching Composition. (3)
Taught by the Director of Rhetoric and Writing, this course provides practical help in teaching English 101. (Required of all new Teaching Assistants in their first semester of teaching.)

538. Writing Theory for Teachers. (3)
Includes major theories of teaching writing from first-year composition through advanced and technical writing. Considers how theoretical approaches to writing, reading and teaching can be usefully applied to classroom practice.

539. Teaching Professional Writing. (3)
Provides theory and practice in teaching professional writing at the university level and in training situations.

540. Topics in Language or Rhetoric. (3 to a maximum of 12)
An overview of a defined theme or issue in language or rhetorical theory. Recent topics have included Discourse Analysis/Text Linguistics, Survey of American English, Narrative Theory and Literature, Epistemic Rhetoric and Language Studies, such as Old Norse.

541. English Grammars. (3)
(Also offered as LING 541.) A survey of various grammar models and their applications to analysis of the English language.

542. Major Texts in Rhetoric. (3)
A survey of rhetorical and language theories from the classical period through the 18th century.

543. Contemporary Texts in Rhetoric. (3)
A survey of rhetorical and language theories from the 19th and 20th centuries that shape contemporary approaches to discourse, text and persuasion.

545. History of the English Language. (3)
An historical survey of the etymology, morphology, phonetics and semantics of English, as well as the relation between the English language and cultural change.

547. Old English. (3 to a maximum of 6)
(Also offered as LING 547./447.) An introduction to the grammar, syntax, and phonology of Old English. Prepares students for more advanced studies in this and later periods.

548. Topics in Medieval Studies. (3 to a maximum of 9)
Advanced study of specialized aspects in medieval studies, such as manuscripts; paleography; literary and historical bibliographic methods; medieval Latin sources; cultural, feminist, and historical theoretical approaches to literature; medievalism in Britain and America; history of scholarship.

549. Middle English Language. (3)
(Also offered as LING 549./449.) Comprehensive study of Middle English dialects and the development of Middle English from Old English. Prepares students for Middle English literature.

550. Beowulf and Other Topics. (3 to a maximum of 12)
Alternates between Beowulf and Advanced Old English, Anglo-Saxon Prose and special topics in Old English. Prerequisite: 549.

551. Topics in Medieval Studies. (3 to a maximum of 6) [3 to a maximum of 9]
Advanced study of specialized aspects in medieval studies, such as manuscripts; paleography; literary and historical bibliographic methods; medieval Latin sources; cultural, feminist, and historical theoretical approaches to literature; medievalism in Britain and America; history of scholarship.

552. The Renaissance. (3 to a maximum of 12)
Survey of prose, poetry and/or drama of the 16th century. Emphasis varies.
553./453. The Seventeenth Century. (3 to a maximum of 12) △
Survey of prose, poetry and/or drama of the 17th century. Emphasis varies.

554./454. Restoration and Early Eighteenth Century. (3 to a maximum of 12) △
Studies in literature and culture on topics such as Restoration comedy and heroic tragedy, early eighteenth-century satire and major authors such as John Dryden, Aphra Behn, Alexander Pope, Daniel Defoe and Jonathan Swift.

555./455. Middle and Late Eighteenth Century. (3 to a maximum of 12) △
Studies in literature and culture 1735–1800 on topics such as eighteenth-century theater, the development of fiction, the construction of difference and the representations of the relationship between England and the rest of the world.

556./456. British Romanticism. (3 to a maximum of 12) [3 to a maximum of 6] △
Studies in the literature and culture of early 19th-century Britain; the Wordsworth circle, the Keats-Shelley circle, Romantic women writers and special topics such as British Culture in the 1790s and Romantic Theory.

557./457. Victorian Studies. (3 to a maximum of 12) △
Studies in the literature and culture of the Victorian era; recent offerings have included Dickens, the Bronte's; and special topics such as Sensation; Detection and the Detective Novel; Victorian Sexualities; and Race, Class and Gender.

558./458. Modern British Literature. (3 to a maximum of 12) △
Survey of the poetry, fiction, drama and nonfiction prose of early 20th-century Britain and Ireland, including the works of Conrad, Yeats, Eliot, Forster, Joyce, Shaw and Woolf.

559./459. Irish Literature. (3 to a maximum of 12) △
Survey of the prose, poetry and drama of Ireland. Alternates between surveys of modern and postmodern Irish literature and special topics or single author courses such as on Yeats or Joyce.

560./460. Early American Literature. (3 to a maximum of 6) △
Taught alternately as the literature of European Exploration of America or Colonial and Revolutionary America.

561./461. American Romanticism. (3 to a maximum of 12) △
Survey of the prose and poetry of mid-19th-century America, including writings by the Transcendentalists, Hawthorne, Poe, Melville, Stowe, Whitman and Dickinson.

562./462. American Realism and Naturalism. (3 to a maximum of 12) △
Survey of the prose and poetry of turn-of-the-century America, including writings by Mark Twain, Henry James, Crane, Wharton, Norris and Gilman.

563./463. Modern American Literature. (3 to a maximum of 12) △
Survey of the poetry, fiction and non-fiction prose of American literature from 1900–1945, including works by writers such as Cather, Faulkner, Fitzgerald, Hemingway, O'Neill, Frost, H.D., Hughes and Stevens.

564./464. Advanced Studies in Native Literatures and Rhetorics. (3 to a maximum of 9) △
In-depth investigation of specific topics in Native literatures and rhetorics. Special attention paid to the range of criticism, critical theory, research opportunities, methodologies and pedagogical problems inherent in American Indian and indigenous textual production.

565./465. Chicana/o Literature. (3 to a maximum of 12) △
Advanced study of Chicana/o literature, literary history, criticism, theory, novels, short stories, poetry, and film, with emphasis on ethnic, regional, gender, and linguistic identity from nineteenth century to the present.

566./466. African-American Literature. (3 to a maximum of 12) △
An introduction to traditional and/or contemporary African-American texts. Topics have included Survey of the African-American Novel and Toni Morrison.

568./468. Topics in American Literature. (3 to a maximum of 12) △
Intensive study of special topics in American Literature. Offerings have included Literature of the Civil War, 19th-Century American Literature and the Visual Arts, Southern American Literature and American Women Writers.

570./470. Modernist Literature. (3 to a maximum of 12) △
Survey of the poetry, fiction, drama and non-fiction prose of the early 20th century in the United States, Britain and Ireland, with some consideration of the international influence of and upon these literatures. Course content varies from semester to semester.

571./471. Twentieth-Century Drama. (3 to a maximum of 12) △
The study of drama and dramatic form from 1880 to the present. Most often taught as Modern Drama (1880–1950, Ibsen and Strindberg to Beckett and Williams) or Contemporary Drama (1950 to present, Beckett and Williams to new plays of recent years).

572./472. Contemporary Literature. (3 to a maximum of 12) △
Survey of the poetry, fiction, drama, and non-fiction prose of the post-1945 era in the United States and Britain, with some consideration of the international influence of and upon these literatures. Course content varies from semester to semester.

573./473. Postmodernism. (3 to a maximum of 12) △
Studies in experimental literary works and theories from World War II to the present. May be repeated for credit as emphasis varies.

574./474. Contemporary Southwestern Literature. (3 to a maximum of 12) △
This course presents and analyzes major texts in post-war literature of the southwestern U.S., emphasizing the cultural exchanges among Native, Hispanic and Anglo literature and culture.

579./479. Postcolonial Literatures. (3 to a maximum of 12) △
Survey of Postcolonial literatures and theories emanating from the Indian subcontinent, Africa and other countries recently independent from the British Empire.

580./480. Topics in British Literature. (3 to a maximum of 9) △
Intensive study of special issues and themes, literary movements and single authors in British Literature.

581. Chaucer. (3 to a maximum of 6) △
Studies in the Canterbury Tales, Parliament of Fowls, House of Fame and other Chaucerian poems, together with a study of the history, philosophy and theology of the time. There will also be discussions of relevant contemporary critical theory. Emphasis varies.

582. Shakespeare. (3 to a maximum of 12) △
Intensive study of the major dramatic and non-dramatic works of William Shakespeare. Emphasis varies.

583. Milton. (3 to a maximum of 12) △
586/486. British Fiction. (3 to a maximum of 12) ∆
Studies in the literary and cultural emergence and formation of fiction as a genre in English. Course content varies; recent topics include The Early English Novel; The 18th-Century Comic Novel; and Race, Class and Gender in the 19th-Century Novel.

587. Genre Studies. (3 to a maximum of 12) ∆
Studies in one or more of the major genres of literature, including narrative fiction, poetics, comedy, epic, satire and tragedy.

592. Teaching Literature and Literary Studies. (3)
Practicum on teaching literature and literary studies. Study of theoretical discourses about teaching also included. Topics vary. [Course will be offered once a year]

593. Scholarly Publishing. (3)
Workshop requiring peer review, journal research and rhetorical analysis, and extensive revision of a previously written paper to be submitted for publication in the field of literary studies.

595. Master’s Colloquium. (3)
A capstone course for Master’s students that takes a broad view of British and American literature. Using topical, thematic, generic and other critical approaches, the colloquium focuses upon issues that overlap British and American literature such as The Gothic, Themes of Exile, The Formation of the Subject, etc.

596. Portfolio. (1 to maximum of 3) [1] ∆
Directed preparation of the Master’s Portfolio; students enroll with the Graduate Director. Offered on a CR/NC basis only.

597. Problems for the Master’s Degree. (1-3 to a maximum of 3) ††
Intensive, directed study at the Master’s level of particular topics and issues pertaining to the various fields in English. Permission of the Departmental Graduate Director required prior to registration.

598. Graduate Internship. (1-6 to a maximum of 12) ∆
Internships in professional and technical writing supervised by individual faculty members. Offered on a CR/NC basis only.

599. Master’s Thesis. (1-6)
Offered on a CR/NC basis only.

610. Seminar: Studies in Criticism and Theory. (4 to a maximum of 12) ∆
An in-depth investigation of a defined theme or issue in Literary Criticism and Theory; topics vary.

640. Seminar: Studies in Language or Rhetoric. (4 to a maximum of 12) ∆
An in-depth investigation of a defined theme or issue in language theory or rhetoric. Recent topics have included Metaphor and Stylistics, ESL Grammar for Adults and Epistemic Rhetoric.

650. Seminar: Studies in British Literature. (4 to a maximum of 12) ∆
An in-depth investigation of a defined theme or issue in British Literature; topics vary.

660. Seminar: Studies in American Literature. (4 to a maximum of 12) ∆
An in-depth investigation of a defined theme or issue in American Literature; topics vary.

664. Seminar: Studies in American Indian and Indigenous Literatures. (4 to a maximum of 12) ∆
An in-depth investigation of a defined theme or issue in American Indian and Indigenous literatures; topics vary.

680. Seminar: Studies in Genre, Backgrounds, Forces. (4 to a maximum of 12) ∆
An in-depth investigation of special topics pertaining to the study of British and American Literature and related fields of study.

697. Problems for the Doctor’s Degree. (1-3, no limit) ††
Intensive, directed study at the Doctoral level of particular topics and issues pertaining to the various fields in English. Permission of the Departmental Graduate Director required prior to registration.

698. Independent Study. (1-3 for maximum of two consecutive semesters) ††
Permission of the Departmental Graduate Director required prior to registration.

699. Dissertation. (3-12)
Offered on a CR/NC basis only.

ENGLISH-PHILOSOPHY

Introduction
The combined major in English and philosophy is an interdepartmental major administered jointly by the two departments. Students interested in this program should consult the Philosophy Department office. The purpose of the interdepartmental major is to develop an understanding of the history of ideas, ideals, and values; their expression in literature and philosophy; and the relation of these fields. The major will serve the interests of general education and will also be useful to many pre-professional students.

Major Study Requirements
Students completing the English-philosophy major are not required to have a minor. It is recommended that courses in literature and philosophy in related periods be taken concurrently where possible.

The minimum requirement is 45 hours including:
1. Eighteen hours in English courses, 12 of which are to be numbered 300 or above. Recommended courses: 250, The Analysis of Literature, 410, Criticism and Theory.
2. Eighteen hours in Philosophy courses, 12 of which are to be numbered 300 or above. Recommended courses are PHIL 156, at least one of 201 or 202, at least one of 352, 354 or 358.
3. Six hours additional of English or Philosophy numbered 300 or above.
4. ENGP 480.

Minor Study Requirements
Not offered.

English-Philosophy (ENGP)

*480. Philosophy and Literature. (3 to a maximum of 12) ∆
English and Philosophy Staffs (Also offered as PHIL 480.) Selected philosophical movements and their relationships to literary masterpieces. Prerequisites: Any 2 ENGL courses 200 and above.

ENVIRONMENTAL SCIENCE

See Earth & Planetary Sciences.
EUROPEAN STUDIES

See International Studies

FOREIGN LANGUAGES AND LITERATURES

Natasha Kolchevska, Chairperson
Ortega Hall 229
MSC03 2080
1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 277-4771

Programs: Chinese, Classical Studies, Comparative Literature and Cultural Studies, French, German, Greek (Ancient), Italian, Japanese, Languages, Latin, Russian

Affiliated Programs: Arabic, Biblical Hebrew, Sanskrit

Professors
Natasha Kolchevska, Ph.D., University of California (Berkeley)–Russian
Byron Lindsey, Ph.D., Cornell University–Russian
Walter Putnam, Ph.D., University of Paris–French
Warren S. Smith, Ph.D., Yale University–Classics

Associate Professors
Susanne Baackmann, Ph.D., University of California (Berkeley)–German
Pamela Cheek, Ph.D., Stanford University–French
Monica S. Cyrino, Ph.D., Yale University–Classics
Katrin Schroeter, Ph.D., Brown University–German

Assistant Professors
Stephen Bishop, Ph.D., University of Michigan–French
Lorna Brau, Ph.D., New York University–Japanese
Martin Klebes, Ph.D., Northwestern University–German
Joseph McAlhany, Ph.D., Columbia University–Classics
Carmen Nocentelli, Ph.D., Stanford University–CLCS

Adjunct Professor
George F. Peters, Professor of German, Michigan State University

Lecturers
Machiko Bomberger, Teaching Certificate, Keio University (Tokyo)–Japanese
Rachele Duke, Ph.D., University of California (Los Angeles)–Italian
Joachim Oberst, Ph.D., McGill University–Greek
Marina Peters–Newell, Ph.D., University of Washington–French
Jian Zhu, M.A., The University of New Mexico–Chinese

Faculty Emeriti
Bruno Hannemann, Ph.D., University of California (Berkeley)–German
Robert Holzapfel, Ph.D., University of Iowa–German
Robert Jespersen, Ph.D., Stanford University–German
Peter K. Pabisch, Ph.D., University of Illinois (Urbana–Champaign)–German
Diana Robin, Ph.D., University of Iowa–Classics
Claude M. Senninger, Ph.D., University of Paris–French
Julian White, Ph.D., University of North Carolina–French

Undergraduate Programs

Majors
The Department of Foreign Languages and Literatures undergraduate degrees in the following fields of study:

- B.A. in Classical Studies
- B.A. in Comparative Literature and Cultural Studies
- B.A. in French
- B.A. in German
- B.A. in Languages
- B.A. in Russian

Minors
In addition to the fields of study listed above, minors are also available in the following:

- Classical Studies
- Comparative Literature and Cultural Studies
- French
- German
- Greek
- Italian
- Japanese
- Languages
- Latin
- Russian

Courses in Chinese are also offered. For Arabic, see the courses listed below under "Foreign Languages" or the Department of African American Studies. For Biblical Hebrew, see "Foreign Languages" or the Department of Religious Studies. For Sanskrit, see Philosophy.

For Swahili, see the Department of African American Studies. For Navajo (Diné) or other Native American languages, see the Department of Linguistics. For Quechua (QUEC), see the Latin American and Iberian Institute.

Undergraduate Advisors

Director of Undergraduate Studies: Warren Smith
Classical Studies: Monica Cyrino
Chinese: Jian Zhu
Comparative Literature and Cultural Studies: Pamela Cheek
French: Walter Putnam
German: Katrin Schroeter
Greek: Monica Cyrino
Italian: Rachele Duke
Japanese: Lorie Brau
Languages: Warren Smith
Latin: Joseph McAlhany
Russian: Byron Lindsey

Placement

101 courses are reserved for students who have not previously studied the language in which they plan to enroll. Students who have had previous exposure to a language and plan to continue the study of the same language must consult the placement policies for that language. Students who enroll in advanced courses may obtain credit by the challenge procedure for any courses below the level of the one in which they enroll.

To Challenge a Course

Students can earn hours for language courses numbered 101, 102, 201, and 202 without taking an examination by earning a grade of A or B in a course numbered higher than the course(s) challenged. A grade of Pass/Fail (CR/NC) is assigned to all challenged course(s). Please note that the student is responsible for fees associated with earned hours.
Graduate Programs
The Department of Foreign Languages and Literatures (FLL) offers the following graduate degrees:

- M.A. in Comparative Literatures and Cultural Studies
- M.A. in French
- M.A. in German Studies
- Ph.D. in French Studies

All graduate programs are administered by a Graduate Committee composed of three members of the FLL graduate faculty, the Director of Graduate Studies and the Chairperson of FLL. Except for the internal regulations and requirements outlined below, all degree programs are subject to the terms of The University of New Mexico Catalog in effect at the time a student is admitted into a specific program.

Graduate Advisors
Director of Graduate Studies: Walter Putnam
Comparative Literature and Cultural Studies: Pamela Cheek
German Studies: Susanne Baackmann
French and French Studies: Walter Putnam

Application and Admission
For information about admission to our graduate programs, contact the Director of Graduate Studies or visit our website http://www.unm.edu/~fll.

Application procedure for US citizens:
Applicants who are US citizens should go to the Office of Graduate Studies website at http://www.unm.edu/~grad/admissions/admissions.html to submit the Application for Admission form, Residency form and application fee. Send official transcripts to:

The Office of Graduate Studies
1 University of New Mexico
MSC 03 2180 Humanities 107
Albuquerque NM 87131-0001
Tel (505) 277-2711
Fax (505) 277-7405

Send 3 letters of recommendation, a writing sample in the language of study and a letter of intent (see http://www.unm.edu/~grad/admissions/onlineapps.html or contact the Director of Graduate Studies for information about these documents) to:

The Department of Foreign Languages & Literatures
The University of New Mexico
1 University of New Mexico
MSC 03 2080 Ortega Hall 229
Albuquerque NM 87131-0001
Tel (505) 277-4771
Fax (505) 277 3599

Application procedure for non-US citizens:
Applicants who are citizens of a country other than the U.S. should visit the International Admissions web site at http://www.unm.edu/preview/na_intgrad.htm for information and forms. Send Application form, TOEFL or IELTS results, certified translated copies of official academic records, financial guarantee and application fee to:

Office of International Admissions
MSC 06 3720
1 University of New Mexico
Albuquerque, NM 87131-0001
USA

Send 3 letters of recommendation, a writing sample in the language of study and a letter of intent (see http://www.unm.edu/~grad/admissions/onlineapps.html or contact the Director of Graduate Studies for information about these documents) to:

The Department of Foreign Languages & Literatures
The University of New Mexico
1 University of New Mexico
MSC 03 2080 Ortega Hall 229
Albuquerque NM 87131-0001
Tel (505) 277-4771
Fax (505) 277 3599

Deadline for Applications:

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<tr>
<th>With financial aid</th>
<th>Without financial aid</th>
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<tr>
<td>For matriculation in the:</td>
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<tr>
<td>Fall semester</td>
<td>February 1</td>
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<td>Spring semester</td>
<td>October 1</td>
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<tr>
<td>Summer session</td>
<td>May 10</td>
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Applicants are normally expected to have an undergraduate degree in the subject matter with a grade point average of 3.2 or better; applicants not presenting these minimum requirements may apply for acceptance with deficiencies as determined by the Graduate Committee.

Assistantships
The Department awards a limited number of assistantships, either as a Teaching Assistant or as a Graduate Assistant. Contact the Director of Graduate Studies for more information.

Chinese (CHIN)
Jian Zhu, Advisor, Ortega Hall 327D, 277-5421

No major or minor study offered.

102. Elementary Chinese II. [Elementary Chinese.] (3)
201. Intermediate Chinese I. [Intermediate Chinese.] (3)
202. Intermediate Chinese II. [Intermediate Chinese.] (3) Prerequisite: 201 or equivalent.
297. Intermediate Chinese. (3) For 4th semester students of Chinese and more advanced students who want to continue their language skills in Chinese.


Classical Studies
Monica Cyrino, Advisor, Ortega Hall 353A, 277-3644, pandora@unm.edu

Major Study Requirements
The student majoring in Classical Studies will choose one of two concentrations, depending on the wish to take a broader spectrum of courses relating to the ancient world (Civilization Concentration) or concentrate in Greek and Latin (Language Concentration). Those students wishing to pursue graduate study in the Classics are advised to choose the Language Concentration.

Civilization Concentration:
Requirements: 30 hours:
1. Six hours Latin or Greek above 200
2. Three hours Classics 204 or 205
3. Three hours Classics 333 or 334
4. Three hours Art History above 200 in a course including the ancient world
5. Six hours History above 200 in a course which includes the ancient world
6. Nine hours from the following:
   Classics 107
   Art History 201, 261, 315
   Philosophy 201, 307, 360, 402, 403, 404
   Religious Studies 232, 360, 404, 463
   Any other Classics course above 200
   Any other History course above 200 which includes the ancient world
   A Comparative Literature course above 200 which includes the ancient world
   Substitutes must be approved in advance by the major advisor.

Language Concentration:

Requirements: 30 hours:

1. A. Latin Emphasis
   i. Twelve hours Latin above 200
   ii. Nine hours Greek above 200
   –or–
   B. Greek Emphasis
   i. Twelve hours Greek above 200
   ii. Nine hours Latin above 200
2. Three hours History above 200 in a course which includes the ancient world
3. Three hours Classics above 200
4. Three hours from the courses named in number 6 of the Civilization Concentration above.
   Substitutes must be approved in advance by the major advisor.

Minor Study Requirements

Requirements: 18 hours:
1. Six hours LATN 201-202 or GREK 201-202
2. Six hours Classics course above 200
3. Six hours from the following:
   Classics 107
   Classics courses above 300
   Art History courses above 200 which include the ancient world
   Philosophy courses above 200 which include the ancient world

Classics (CLST)

107. Greek Mythology. (3)
   (Also offered as GREK, ENGL 107.) Introduction to mythology; primary readings in stories about the gods and heroes, usually including Homer, Hesiod, Homeric Hymns and Tragedies. All texts will be in English.

204. Greek Civilization. (3)
   (Also offered as PHIL, HIST, ARTH 204.) An interdisciplinary introduction to ancient Greece. Lectures on Greek art, history, literature and philosophy.

205. Roman Civilization. (3)
   (Also offered as PHIL, HIST, ARTH 205.) An interdisciplinary introduction to ancient Rome. Lectures on Roman literature, history, art and philosophy.

214. The Classical Tradition I. (3)
   A survey of the classical tradition and its influence on western civilization from the perspective of ancient Greek culture and literature.

215. The Classical Tradition II. (3)
   A survey of the classical tradition and its influence on western civilization from the perspective of ancient Roman culture and literature.

**333. Topics in Latin Literature and Culture in Translation.** [Latin Literature and Culture in Translation.]
   (3 to a maximum of 6) Δ
   (Also offered as COMP, ENGL 333.) Study of individual authors, genres or periods of Latin literature and culture in translation.

**334. Topics in Greek Literature and Culture in Translation.** [Greek Literature and Culture in Translation.]
   (3 to a maximum of 6) Δ
   (Also offered as COMP, ENGL 334.) Study of individual authors, genres and periods of Greek literature and culture in translation.

498. Reading and Research for Honors. (3)
   Open only to juniors and seniors approved for departmental honors. Senior thesis based on independent research.

499. Honors Essay. (3)
   Open only to seniors enrolled in departmental honors. Restriction: permission of instructor.

Comparative Literature and Cultural Studies

Pamela Cheek, Coordinator
Ortega Hall 327B, 277-3810, p chees @unm.edu

Advisory Committee:
Gary Harrison, English
Feroza Jussawalla, English
Martin Klebes, Foreign Languages and Literatures
Kimberle López, Spanish and Portuguese
Joseph McAlhany, Foreign Languages and Literatures
Carmen No centelli, English and Foreign Languages and Literatures
Rebecca Schreiber, American Studies

Additional Participating Faculty:
Suzanne Baackmann, Foreign Languages and Literatures
Eleni Bastea, Architecture and Planning
Judith Bennahum, Theatre and Dance
Stephen Bishop, Foreign Languages and Literatures
Loma Brau, Foreign Languages and Literatures
Beverly Burns, Sociology
Monica S. Cyno, Foreign Languages and Literatures
Susan Dever, Media Arts
Les Field, Anthropology
Elizabeth Hutchison, History
Natasha Kolchevska, Foreign Languages and Literatures
Byron Lindsey, Foreign Languages and Literatures
Alex Lubin, American Studies
Walter Putnam, Foreign Languages and Literatures
Kathrin Schroeter, Foreign Languages and Literatures
Warren Smith, Foreign Languages and Literatures
Hector Torres, English
Carolyn Woodward, English

Major Study Requirements

Comparative Literature and Cultural Studies is an interdisciplinary major with concentrations in Cultural Studies and Comparative Literature. Students complete 33 credits of course work. The Introduction to World Cultures and Critical Theory (9 credits) provides students with a survey of world literatures and cultures and introduces them to analyzing cultural productions through critical and cultural theory. The Cultures and Literatures (9 credits) component of the major broadens a student’s awareness of the diversity of cultural productions around the world. The Concentration (15 credits) offers the opportunity to pursue an individualized interdisciplinary program of study by taking courses chosen in consultation with the coordinator. Students may choose to write an honors essay as the capstone to their work. Because this is an interdisciplinary program offered by the Department of Foreign Languages and Literatures in conjunction with affiliated departments, students will need to work closely with
Plan I (18 credits + 6 credits under Plan II)

Students under Plan I will take 12 credits in either Greek or Latin above the 500-level in American Studies, Anthropology, History, Fine Arts, Communications and Journalism, Political Science, Linguistics, Philosophy, Law, Foreign Languages and Literatures, Spanish and Portuguese, English or American Literature). Courses may include studies in theory, history, film and the arts, as well as in literary texts.

Second Major Study Requirements

Students complete 27 credits of course work, as described below. For specific courses in categories II and III, see corresponding categories in the major.

I. 9 credits from the following courses: COMP 223, COMP 224, ENGL 292, and ENGL 293.

II. 6 credits in literature, culture and theory courses.

III. 12 credits in cultural studies or comparative literature.

Minor Study Requirements

Students complete 21 credit credits of course work, as described below. Normally, courses taken in a student’s major cannot be counted toward the minor. For specific courses in category III, see category III in the major.

I. 6 credits from the following courses: COMP 223, COMP 224, ENGL 292, and ENGL 293.

II. 6 credits taken in the following courses: COMP 330 – 340, 432, 480.

III. 9 credits in cultural studies or comparative literature, as described above.

Graduate M.A. Program

Comparative Literature and Cultural Studies is an interdisciplinary M.A. program administered by the coordinator and the Advisory Committee (see above). The Master of Arts is offered as an interdisciplinary program that may be completed by fulfilling requirements under Plan I or Plan II. Students following Plan I will take 25 credits of graduate course work and additional 6 credits of thesis work. Students following Plan II will take 31 credits of graduate course work. Students following Plan I or Plan II will complete Foreign Languages and Literatures examination requirements for the degree by their final semester of study. The requirement for second-language proficiency for students in the Cultural Studies Concentration may be satisfied after a student has been admitted to the program by taking the first two semesters of a language sequence or by passing a proficiency examination. Because this is an interdisciplinary program offered by the Department of Foreign Languages and Literatures in conjunction with affiliated departments and programs, students must work closely with a CL/CS coordinator to construct an appropriate plan of study. The coordinator will determine which courses outside of Foreign Languages and Literatures may be applied to the M.A. degree in consultation with a student’s committee on studies. Only 3 credits of problems courses may be counted toward the M.A. under Plan I and only 6 credits under Plan II.

I. The Core (7 credits)

COMP 500; MLNG 501 (1 credit); one course in theory and criticism: COMP 520, 524, 580, 582, 610, 611; GRMN 555; ENGL 510, 511, 590; AMST 516, 517, 518, 525, 535, 545, 554, 555; CJ 500, 501; ANTH 536, 547; SOC 500, 512, 513, 514.

—or—

II. The Concentration:

A. The Comparative Literature Concentration—Plan I (18 credits + 6 thesis credits of COMP 599); Plan II (24 credits)

Students will split these credits evenly between literatures from two different languages (one of which may be a literature in English): FREN 501, 502, 512, 520, 522, 524, 532, 542, 552, 570, 580, 582, 584, 585, 586, 588, 600, 610, 611; GRMN 549, 550, 552, 553, 555, 556, 581, 585; GREK 301, 302; LATN 303, 304, 351, 352, 503; PORT 514, 515, 516, 517, 521, 557, 558; SPAN 504, 515, 519, 520, 522, 523, 525, 526, 529, 629, 631, 633, 639, 578, 579, 679; ENGL 545, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 568, 570, 571, 572, 573, 574, 579, 580, 581, 582, 583, 586, 587; AMST 508, 540, 541, 542, 543, 544, 550, 552, 556, 557, 558, 559, 560, 562, 563, 564, 565, 568.

—or—

B. The Cultural Studies Concentration—Plan I (18 credits + 6 thesis credits of COMP 599); Plan II (24 credits)


—or—

C. The Classics Concentration—Plan I (18 credits + 6 thesis credits of COMP 599); Plan II (24 credits)

Students under Plan I will take 12 credits in either Greek or Latin above the 300-level. They will take 6 credits in courses about the classical world and its legacy or 6 credits in theory and criticism. Students under Plan II will take 15 credits in either Greek or Latin
above the 300-level and 9 credits in courses about the classical world and its legacy or 9 credits in courses on theory and criticism. For Greek and Latin above the 300-level: GREK 301, 302, GREK 501; LATN 303, 304, 351, 352, 503. For the classical world and its legacy: HIST 501, 502, 503, 504, 528, 520, 526; ENGL 548, ENGL 551; ARTH 561, 567, ARCH 541; PHIL 502, 503, 504, 507, 508, 531, 534, 536, 560. For theory and criticism: COMP 580, FREN 520, 580, 582, 610, 611; GRMN 555; ENGL 510, 511, 590; AMST 516, 517, 518, 525, 535, 545, 555; CJ 500, 501; ANTH 536, 547; SOC 500, 512, 513, 514.

**Graduate Minor**

The Program offers a graduate minor in comparative literature and cultural studies. Students may choose to emphasize course work in comparative literature, cultural studies or classics. Proficiency in a foreign language must be demonstrated by taking the first two semesters of a language sequence or by passing a proficiency examination.

**Requirements:** 18 credits

I. Three hours COMP 500.

II. Fifteen hours of courses in one of the following concentrations:

A. **Comparative Literature:** Fifteen credits, 9 of which must be in a literature in a language other than English (see above). No more than 3 of these credits may be in a foreign language course taught in translation.

B. **Cultural Studies:** 9 credits of courses in theory and criticism (see above) and 6 credits in an interdisciplinary field defined in consultation with the coordinator (see above).

C. **Classics:** 9 credits in either Greek or Latin above the 300-level (see above) and 6 credits in courses about the classical world and its legacy or 6 credits in courses on theory and criticism (see above).

**Comparative Literature (COMP)**

223–224. Literary Questions. (3)

Examination of basic questions in comparative literature studies: themes, movements, modes, interaction of literature with other disciplines, etc. Work will be comparative and reading list will represent a cross-section of Western European, American, Russian and Classical literatures. Titles will vary as content varies.

300. Arthurian Legend and Romance. (3 to a maximum of 6) ∆

(Also offered as ENGL 306.) Comprehensive study of the Arthurian Legend from its Celtic origins, to its medieval French romance continuators, and its English apex in Malory. May also trace post-medieval versions in art, print, and film.

330. Topics in Comparative and World Literature. (3 to a maximum of 6) ∆

(Also offered as ENGL 330.) Study of special topics in Comparative and World Literatures, including studies of genre, period, literary movements and themes.

331. Topics in Asian Literature and Culture in Translation. [Asian Literature and Culture in Translation.] (3 to a maximum of 6) ∆

(Also offered as ENGL 331.) Study of the culture and literatures of India, China, Japan and other Asian traditions. Topics vary.

332. Topics in African Literature and Culture in Translation. [African Literature and Culture in Translation.] (3 to a maximum of 6) ∆

(Also offered as ENGL 332.) Study of the culture and literatures of Africa. Topics vary.

*333. Topics in Latin Literature and Culture in Translation. [Latin Literature and Culture in Translation.] (3 to a maximum of 6) ∆

(Also offered as CLST, ENGL 333.) Study of individual authors, genres or periods of Latin literature and culture in translation.

*334. Topics in Greek Literature and Culture in Translation. [Greek Literature and Culture in Translation.] (3 to a maximum of 6) ∆

(Also offered as CLST, ENGL 334.) Study of individual authors, genres and periods of Greek literature and culture in translation.

*335. Topics in French Literature and Culture in Translation. [French Literature and Culture in Translation.] (3 to a maximum of 6) ∆

(Also offered as ENGL, FREN 335.) Study of individual authors, genres and/or periods of French and Francophone literature and culture.

*336. Topics in German Literature and Culture in Translation. [German Literature and Culture in Translation.] (3 to a maximum of 12) [3] ∆

(Also offered as ENGL, GRMN 336.) Study of individual authors, genres, and/or periods of German literature and culture in translation.

337. Topics in Italian Literature and Culture in Translation. [Italian Literature and Culture in Translation.] (3 to a maximum of 6) ∆

(Also offered as ENGL, ITAL 337.) Study of individual authors, genres, and/or periods of Italian literature and culture in translation.

*338. Topics in Russian Literature and Culture in Translation. [Russian Literature and Culture in Translation.] (3 to a maximum of 6) ∆

(Also offered as ENGL, RUSS 338.) An introduction to Russia’s great novels and tales from the 19th and 20th centuries and their contribution to Russian culture and social thought.


(Also offered as ENGL, JAPN 339.) Study of individual authors, genres and/or periods of Japanese literature and culture in translation.

*340. Topics in Russian Literature in Translation. [3-6, no limit] [3-6, to a maximum of 6] ∆

(Also offered as RUSS 340.) Topics will deal with individual authors, genres, periods or themes. All repeated courses require approval from graduate advisor.

350. Medieval Tales of Wonder. (3)

(Also offered as ENGL 350.) Study of medieval literature, language, and culture in the context of insular and continental texts.

432. Topics in Literature and Culture. (3 to a maximum of 6) ∆

(Also offered as ENGL, FREN 432.) Varying topics in the practice and theory of literatures and cultures.

*452. Medieval English Mystics. (3)

(Also offered as RELG 452.) A study of the literary and religious aspects of the English contributions to Christian mystical theology in the works of the anonymous author of *The Cloud of Unknowing*, etc.

453. Asian Studies Thesis. (3)

(Also offered as HIST, PHIL, POLS, RELG, 453.) Supervised research in one or more disciplines leading to an undergraduate thesis for the major in Asian Studies.
200 ARTS AND SCIENCES

*480. Seminar in Comparative Literature. (1-3 to a maximum of 6) \[Spring\]
Seminar will deal with individual authors, genres or periods in two or more literatures. Reference to other subjects.

498. Reading and Research for Honors. (3)
Open to juniors and seniors approved by the Honors Committee.

499. Honors Essay. (3)
Open only to seniors enrolled for departmental honors.

500. Introduction to Graduate Study in Comparative Literature. (3)

551. Problems. (1-6 to a maximum of 6) [1-6 to a maximum of 9] \[Also offered as MLNG 580.\] For M.A. candidates. One problems course may be applied to degree. Requires advisor or chairperson approval.

580. Seminar in Modern Languages and Literatures. (1-6, no limit) \[Also offered as COMP 580.\] Repeated courses require advisor’s approval.

599. Master’s Thesis. (1-6)
Offered on a CR/NC basis only.

Foreign Languages (MLNG)
No major study offered. See major in Languages.

101. Approaches to Languages and Cultures. (3) \[ Also offered as AFAM 106.\] A course in elementary modern standard Arabic.

106. Elementary Arabic I. (3)
(Also offered as AFAM 106.) A course in elementary modern standard Arabic.

107. Elementary Arabic II. (3)
(Also offered as AFAM 107.) A course for those with very minimal exposure to modern Arabic language.

(Also offered as RELG 109.) Introduction to the language of the Hebrew Bible.

206. Intermediate Arabic. (1)
(Also offered as AFAM 206.) The course covers the writing system, phonology, vocabulary, morphology, and syntax structures of the Arabic language. Students will attend language laboratory to enhance their listening, comprehension and pronunciation skills. Prerequisites: 107.

207. Intermediate Arabic II. (3)
(Also offered as AFAM 207.) The course increases student’s reading, writing and speaking skills in Arabic including students’ knowledge of the writing system, the phonology, the vocabulary, the morphology and the syntax structures of the language. Language laboratory use is optional. Prerequisites: 206.

\[April\]

*407. Sanskrit I. (3)
(Also offered as LING, RELG 407.) An introduction to the Sanskrit language in conjunction with readings from classical Sanskrit literature in translation.

*408. Sanskrit II. (3)
(Also offered as LING, RELG 408.) The continuation of Sanskrit I: the completion of the study of Sanskrit grammar and an introduction to the reading of Sanskrit texts.

457. Topics in Languages Studies. [Special Topics in Languages Studies.] (3) \[No limit\] Repeated courses require advisor’s approval.

*480. Second Language Pedagogy. (3)

497. Undergraduate Problems. (1-6 to a maximum of 6) \[Permission of instructor required.\]

500. Teaching Practicum. (1-3)
Introduction to Second Language Acquisition Theory and Practice with an emphasis on the communicative methodology.

501. Professional Development Colloquium. (1)
A series of workshops designed to help graduate students of the Department of Foreign Languages and Literatures with aspects of their professional development.

580. Seminar in Modern Languages and Literatures. (1-6, no limit) \[Also offered as COMP 580.\] Repeated courses require advisor’s approval.

American Indian Languages
See Linguistics.

Apache (APCH)
No major or minor study offered.

Navajo
See Linguistics.

Quechua (QUEC)
See Latin American and Iberian Institute.

Zuni (ZUNI)
No major or minor study offered.

French
Undergraduate Advisor:
Walter Putnam, Ortega Hall 323B, (505) 277-1182
Lower-division Coordinator:
Marina Peters-Newell, Ortega Hall 319B, (505) 277-0525

Major Study Requirements
1. Thirty hours in French courses numbered above 290, including 301, 302, 305, 345, 346, 351, and 352. One content appropriate Comparative Literature course may be counted.
2. One 400 level French course, and
3. Two years of college work in another foreign language (or reading knowledge).

Second Major Study Requirements
Students who present two majors (French and another field) are required to take 24 hours in French courses numbered above 290, including 301, 302, and 305. One content appropriate Comparative Literature course may be counted.

Minor Study Requirements
Fifteen hours in French courses numbered above 290, including 301 or 302.
Lower Division French

All beginning students should enroll in Elementary French (101), which provides a foundation in reading, writing, listening and speaking for all subsequent courses.

Students who have taken French previously should consult with the lower-division coordinator for accurate placement. The department offers an intensive language sequence (FREN 275–276) for 6 credit hours per semester. At the end of two semesters, students have completed the equivalent of FREN 101, 102, 201 and 202 and are prepared to enter third-year courses.

Graduate Program

Graduate Advisor
Walter Putnam, Ortega Hall 323C, 277-1182
wputnam@unm.edu

M.A. in French

The M.A. in French provides an interdisciplinary foundation designed to prepare students for work in pertinent fields including secondary school teaching, translation and for entrance to doctoral programs in French. A background in French equivalent to that of an undergraduate major is required for entering candidates. M.A. candidates choose between two tracks: under Plan I, they complete 24 hours of course work plus 6 hours of thesis; under Plan II, they complete 32 hours of course work without thesis. The comprehensive exams involve a more extensive written component for Plan II. Core requirements are a theory course (3 credit hours) and a professional development colloquium (1 credit hour). Two semesters of another foreign language or its equivalent are required. Please contact the graduate advisor or the department for specific information.

Ph.D. in French Studies

The Department of Foreign Languages & Literatures offers a Ph.D. in French Studies. Students are admitted on the basis of their past records and future promise for scholarship. The admissions committee also takes into consideration the expressed field of research with an eye to suitable faculty guidance and direction. Potential applicants are encouraged to express their field of study and 12 hours in the minor field.

Each student must assemble a committee on studies composed of three University of New Mexico faculty members before the end of the second semester of the Ph.D. program. The committee will meet regularly with the student to develop a program suited to his or her own needs and interests. The committee holds authority over each student’s program and may require specific courses dictated by a student’s scholarly interest and goals. The committee on studies will guide the candidate in forming an appropriate committee to administer comprehensive examinations as well as to plan and carry out the dissertation.

5. All Ph.D. candidates in French Studies are advised to gain teaching experience as well as experience in a French-speaking environment as part of their professional training.

French (FREN)

101–102. Elementary French. (3, 3) Conducted in French. [Fall, Spring]

103. Elementary French Conversation. (1) Supplementary course to FREN 101–102 for students interested in additional practice in speaking.

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

201. Intermediate French I. (3) Review of grammar and development of communication skills, conducted mostly in French.


203. Intermediate French Conversation. (3) Designed primarily to give qualified students of 201–202 extra practice in the oral use of the language; therefore, it is recommended that it be taken concurrently with 201 or 202. Enrollment limited to 20 students.

275. Accelerated Beginning French. (6) Encompasses the work of 101–102. 101–102 and 275 may not both be counted for credit.


French 202 or the equivalent is prerequisite to all courses listed below, except 335.

301. Advanced Essay & Exploration I. (3) Contextual grammar review and study of stylistics to improve composition skills. Introduction to literature and/or cinema. Taught entirely in French.

302. Advanced Essay & Exploration II. (3) Advanced grammar and continued stylistic study and discussion of literature and/or film. A stepping stone to the literature and culture classes. Taught entirely in French.

305. French Pronunciation. [French Phonology.] (3) Phonetic and phonemic system of French. Required for the undergraduate major. (Offered only once a year)

*335. Topics in French Literature and Culture in Translation. [French Literature and Culture in Translation.] (3 to a maximum of 6) (Also offered as COMP, ENGL 335.) Study of individual authors, genres and/or periods of French and Francophone literature and culture.


380. Lectures and Discussions on French Studies. (1-4, no limit) Δ Topic will vary. Team taught course presenting a multidisciplinary approach to aspects of French literature and culture.

385. Seminars in French Studies. (1-4, no limit) Δ Titles of individual sections will vary as content varies. Topics will deal with specific aspects of French literature, culture and language.

407. Translation. (3) Study of principles and techniques of translating through comparative stylistics.

432. Topics in Literature and Culture. (3 to a maximum of 6) Δ (Also offered as COMP, ENGL 432.) Varying topics in the practice and theory of literatures and cultures.

440. Teaching of French. (3) Practicum; observation and criticism of classroom methods in use. Offered on a CR/NC basis only. (Fall)

465. T/French Film. (3 to a maximum of 9) Δ Topics in French film.


485. Advanced Seminars in French Studies. (1-4, no limit) Δ Each section in this course will focus on a different topic. Titles of individual sections will vary as content varies. Topics will deal with specific aspects of French literature, culture and language on an advanced level.

497. Undergraduate Problems. (1-6 to a maximum of 6) Restriction: permission of instructor.

498. Reading and Research for Honors. (3) Open to juniors and seniors approved by the Honors Committee.

499. Honors Essay. (3) Open only to seniors enrolled for departmental honors.

500. Teaching Practicum. (1-3) Required of all new teaching assistants in French; others by permission of instructor.


502. T/Medieval French Studies. (3 to a maximum of 9) Δ Study of topics in medieval French literature and culture.

508. Reading French for Graduate Students. (3) This course is designed for graduate students in Arts & Sciences who need to acquire a reading knowledge of French.

512. T/Sixteenth Century French Studies. (3 to a maximum of 9) Δ Topics in 16th-century French studies.

520. French Thought. (3 to a maximum of 9) Δ Aspects of French cultural, intellectual and social thought.

522. T/Seventeenth Century French Studies. (3 to a maximum of 9) Δ Topics in 17th-century French studies.

524. Seminar in Nineteenth-Century French Literature. (3)

532. T/ Eighteenth Century French Studies. (3 to a maximum of 9) Δ Topics in 18th-century French studies.

542. T/Nineteenth Century French. (3-9 to a maximum of 9) Δ Topics in 19th-century French studies.

552. T/Twentieth Century French Studies. (3 to a maximum of 9) Δ Topics in 20th-century French studies.

570. Seminar in French Studies. (3 to a maximum of 9) Δ

575. Graduate Problems. (1-6, no limit) Δ Restriction: permission of instructor.

580. T/Cultural Studies. (3 to a maximum of 9) Δ Topics in cultural studies.

582. T/Colonial and Postcolonial Studies. (3 to a maximum of 9) Δ Topics in cultural studies.

584. ST/Women Writers. (3 to a maximum of 9) Δ Topics in cultural studies.

585. Graduate Seminars in French Studies. (1-4) Δ Each section in this course will focus on a different topic. Titles of individual sections will vary as content varies. Repetition unlimited if content/topic changes.

586. T/Gender and Sexuality. (3 to a maximum of 9) Δ Topics in cultural studies.

588. T/Genre Studies. (3 to a maximum of 9) Δ Interdisciplinary study of a specific literary genre.

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

600. T/One Author’s Oeuvre. (3 to a maximum of 9) Δ An in-depth study of one author’s oeuvre.

610. Introduction to Theory. (3) An introduction to the tools and schools of critical theory.

611. T/Topics in Theory. (3 to a maximum of 9) Δ Topics in literary and cultural studies.

699. Dissertation. (3-12) Offered on a CR/NC basis only.

German (GRMN)

Undergraduate Advisor
Katrin Schroeter, Ortega Hall 347C, 277-9115 katja@unm.edu

Lower-Division Coordinator
Martin Klebes, Ortega Hall 351C, 277-3617 klebes@unm.edu

Major Studies Requirements

30 hours of course work, to include the following: GRMN 301, 302 and 307 and two of the following: 305, 308, 370, 401, 405, 410, or 470 taken at the German Summer School may substitute for either 301 or 302, but not both. The remaining hours may be selected from German courses above 300. Six of these hours may consist of approved German Studies courses in other programs. No more than 18 hours may be earned in courses offered at the German Summer School.

Second Language Option

Two years, or the equivalent, of college level work in another foreign language. 27 hours of course work, to include the following: GRMN 301, 302, 307, and two of the following: 305, 308, 370, 401, 405, 410, or 470 taken at the German Summer School may substitute for either 301 or 302, but not both. The remaining hours may be selected from German courses
above 300. Three of these hours may consist of approved German Studies courses in other programs. No more than 15 hours may be earned in courses offered at the German Summer School.

Second Major Option

Students who present two majors (German and another field) are required to complete 24 hours of course work in German, to include the following: 301, 302, 307, and two of the following: 305, 308, 370, 401, 405, 410, or 470 taken at the German Summer School may substitute for either 301 or 302, but not both. The remaining hours may be selected from German courses above 300. Three of these hours may consist of approved German Studies courses in other programs. No more than 12 hours may be earned in courses offered at the German Summer School.

No more than 12 hours may be earned in courses offered at the German Summer School.

Minor Study Requirements

Fifteen hours of course work above 300, including 301, 302.

Lower Division German

All beginning students should enroll in Basic German (101), which provides a foundation in reading, writing, listening and speaking for all subsequent courses. All students who have never taken a German course at UNM must take a placement exam to determine the adequate course level. Heritage speakers are strongly advised not to enroll in lower-division language courses.

Graduate Program

Graduate Advisor
SUSANNE BAACKMANN, ORTEGA HALL 349C, 277-3206

M.A. in German Studies

The M.A. in German Studies provides an interdisciplinary foundation designed to prepare students for work in pertinent fields including secondary school teaching, translation work, and also for entrance to doctoral programs in German. A background in German equivalent to that of an undergraduate major is required for entering candidates. M.A. candidates may choose between two plans: under Plan I, they are required to complete 24 hours of course work plus 6 thesis hours; under Plan II, they are required to complete 32 hours of course work without thesis. The comprehensive exams involve a more extensive written component for Plan II. Core requirements include a theory course (3 credit hours) and a Professional Development Colloquium (MLNG 501) (1 hour). Teaching assistants are also required to enroll in a Teaching Practicum (MLNG 500) during their first semester of teaching. Two semesters of another foreign language or its equivalent are required of all M.A. candidates. Please contact the graduate advisor or the department for specific information.

Undergraduate Program

101–102. Basic German I–Basic German II. [Basic German.] (3, 3)
Language course sequence for all beginning students, providing a foundation in reading, writing, listening and speaking life for all subsequent courses. (Fall, Spring)

201–202. Intermediate German I–Intermediate German II. [Intermediate German.] (3, 3)
Continues development of skills in reading, writing, speaking and listening at the second-year level.
497. Undergraduate Problems. (1-3 to a maximum of 6) Restriction: permission of instructor.

498. Reading and Research for Honors. (1-3 to a maximum of 6) Open to juniors and seniors approved by the department.

499. Honors Essay. (3) Open only to seniors enrolled for departmental honors. Restriction: permission of supervising instructor.

Graduate Program

508. German Reading for Graduate Students. (3) Accelerated course for graduate reading requirements in other departments. Emphasizes readings in sciences and humanities. Will not satisfy A&S language requirement. Undergraduates must have permission of instructor.

549. 18th-Century German Literature and Culture. (3) Topics in German literature and culture from the Enlightenment to Early Romanticism and Weimar Classicism.

550. Special Topics in German Studies. (3, no limit) Topics will deal with specific aspects of German literature, culture and language.

551. Graduate Problems. (1-3 to a maximum of 6) May be repeated per Office of Graduate Studies policy three times. Restriction: permission of instructor.

552. 19th-Century German Literature and Culture. (3) Topics in German literature and culture from the Fin-de-Siècle.

553. 20th-Century German Literature and Culture. (3) Topics in German literature and culture from the Fin-de-Siècle to contemporary developments.

555. German Critical Thought. (3, no limit) Aspects of German philosophical, critical, aesthetic, and social thought from the 18th to the 21st century.

556. Gender, Media, and Literature in German Contexts. [German Women Writers.] (3, no limit) Study of gender in film, literature, and other media from 1800 to the present.

559. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

Courses Offered at the German Summer School Only

German Summer School Office
Ortega Hall 347A, 277-7367, schule@unm.edu

The German Summer School is a total-immersion 4-1/2-week program allowing students to gain near-native fluency or to advance an entire level. The curriculum includes undergraduate and graduate courses, as well as supplementary pedagogy workshops (not a full M.A. in teaching) for teachers of German. Language proficiency certification administered by the Goethe-Institut is also available. Summer School courses count toward the undergraduate German major and the M.A. in German Studies. For the undergraduate major, at least 12 hours of the required course work must be completed on the University of New Mexico main campus. For more information contact the Summer School office or visit the FLL website.

370. Intermediate Language Instruction. (1-4) Review of grammar topics, conversation, and composition. Prepares students for the Zertifikat Deutsch exam administered by the Goethe-Institut. May be repeated three times.

380./481./581. Lecture Series in German Studies. (1-4) Team-taught interdisciplinary lecture series with an overarching theme followed by discussion sections. May be repeated three times for undergraduate credit. May not be repeated for graduate credit.

385. Seminar in German Studies. (1-2, no limit) Introductory undergraduate seminar on specific topics in German Literature, culture and language. Multiple sections may be offered in a given year. Titles of individual sections may vary as content varies.

390. Workshop in German Studies. (1 to a maximum of 4) Introductory workshops on various topics relating to contemporary German Culture. Emphasis on applied language skills. Multiple sections may be offered in a given year. Titles of individual sections will vary as content varies.

410. Advanced Language Instruction. (1-4) Review of more complex grammar topics, advanced conversation and composition. Prepares students for the Zentrale Mittelstufenprüfung administered by the Goethe-Institut. May be repeated twice for undergraduate credit, and once for graduate credit.

470. Advanced German Composition. (1-4) Intensive practice of writing skills in a variety of genres. Prepares students for the Zentrale Oberstufenprüfung administered by the Goethe-Institut. May be repeated twice for undergraduate credit, and once for graduate credit.

481./380./581. Lecture Series in German Studies. (1-4) Team-taught interdisciplinary lecture series with an overarching theme followed by discussion sections. May be repeated three times for undergraduate credit. May not be repeated for graduate credit.

485. Advanced Seminar in German Studies. (1-4) Advanced undergraduate seminar on specific topics in German literature, culture and language. Multiple sections may be offered in a given year. Titles of individual sections will vary as content varies.

581./380./481. Lecture Series in German Studies. (1-4) Team-taught interdisciplinary lecture series with an overarching theme followed by discussion sections. May be repeated three times for undergraduate credit. May not be repeated for graduate credit.

585. Graduate Seminar in German Studies. (1-4, no limit) Graduate seminar on specific topics in German Literature, culture, and language. Multiple sections may be offered in a given year. Titles of individual sections will vary as content varies.

Greek (GREK)
Monica Cyrino, Advisor, Ortega Hall 353A, 277-3644 pandora@unm.edu
Joseph McAlhany, Ortega Hall 347B, 277-1181 jcm3@unm.edu

Major Study Requirements
See Classical Studies.

Minor Study Requirements
Twelve hours in courses numbered above 200, including 301 and 302.

Goethe-Institut
is also available. Summer School courses vary as content varies. Multiple sections may be offered in a given year. Titles of individual sections will vary as content varies.

Major Study Requirements
See Classical Studies.

Minor Study Requirements
Twelve hours in courses numbered above 200, including 301 and 302.
JAPANESE 205

104. New Testament Greek. (1-6 to a maximum of 6) Δ
(Also offered as RELG 104.) Introduction to New Testament Greek. Six hours is the equivalent of one year of Greek.

107. Greek Mythology. (3)
(Also offered as CLST, ENGL 107.) Introduction to mythology; primary readings in stories about the gods and heroes, usually including Homer, Hesiod, Homeric Hymns and Tragedies. All texts will be in English.

201. Intermediate Greek I. [Intermediate Greek.](3, 3)
Systematic review of Greek grammar and syntax; reading of authors such as Plato and Herodotus.

*301. Advanced Greek I. [Classical Greek.](3, 3, no limit) ††
Readings in Homer, Sophocles, Euripides, Plato and the New Testament, depending on the level and interests of the class.

*302. Advanced Greek II. [Classical Greek.](3, 3, no limit) ††
Readings in Homer, Sophocles, Euripides, Plato and the New Testament, depending on the level and interests of the class.

497. Undergraduate Problems. (1-6 to a maximum of 6) Δ

551. Graduate Problems. (1-9 to a maximum of 9) Δ

Italian (ITAL)

Rachele Duke, Advisor, Ortega Hall 327C, 277-7371
rduke@unm.edu

Minor Study Requirements

Twenty-four hours of work distributed as follows: 6 hours above the 275–276 Italian language level; no fewer than 9 hours in the following History courses: 302, 303, 304, 305. (readings courses or seminars subject to approval); no fewer than 9 hours in the following Art History courses: 261, 262, 263, 332, 340, 429 or Media Arts courses: 330, 428 (readings courses or seminars subject to approval); certain courses in Latin may also apply and are subject to approval.

275–276. Accelerated Elementary Italian–Accelerated Intermediate Italian. [Beginning Italian (Accelerated.).](6, 6)
Intensive course for serious beginning students. 275 equivalent to 101–102. 276 equivalent to 201–202. (Fall, Spring)

*307. Survey of Italian Literature I. (3)
A survey of Italian culture as reflected in literary texts from the Middle Ages to the Renaissance.

*308. Survey of Italian Literature II. (3)
A survey of Italian culture as reflected in literary texts from the Renaissance to the present.

337. Topics in Italian Literature and Culture in Translation. [Italian Literature and Culture in Translation.] (3 to a maximum of 6) Δ
(Also offered as ENGL, COMP 337.) Study of individual authors, genres, and/or periods of Italian literature and culture in translation.

*475. Dante in Translation. (3)
(Also offered as RELG 475.) Principally the Vita Nuova and the Divine Comedy.

497. Undergraduate Problems. (1-6 to a maximum of 6)
Restriction: permission of instructor.

498. Reading and Research for Honors. (6)
Open for Juniors and Seniors approved by Honors Committee.
Restriction: permission of instructor.

499. Honors Essay. (3)
Open only to Juniors enrolled for departmental honors.
Restriction: permission of supervising instructor.

Japanese (JAPN)

Lorna Brau, Advisor, Ortega Hall 353C, 277-3683
lbrau@unm.edu

Minor Study Requirements

Eighteen hours in courses numbered above 200. Of these, six hours are selected from Japanese language courses at the 201 level or above, with the remaining 12 hours of courses selected from 301, 302, 320, 339, 411 and HIST 384. In addition, the 18 hours may include 3 hours of independent study with Japanese studies faculty on a Japan-related topic under JAPN 497.

First-Year Program

All beginning students should enroll in Basic Japanese (101 followed by 102), which provides a foundation in language skills for all subsequent courses.

Second-Year Program

All second-year Japanese students should enroll in Intermediate Japanese (201 followed by 202), which continues the development of all language skills. Students intending to go beyond the second year should sign up for 301/302. Transfer students and those who have studied Japanese in high school should seek advice from a member of the Japanese faculty.

Foundation course for all beginning students, with instruction in speaking, listening, reading and writing. (Fall)

102. Elementary Japanese II. [Basic Japanese.] (3)
Second half of foundation course 101. (Spring)

Continues development of four language skills (speaking, listening, reading and writing) at the third semester level. (Fall)

Continuation of 201. (Spring)

297. Language & Culture. (3) Δ
This course introduces numerous aspects of business life and etiquette, and language necessary for a variety of business transactions. Realistic dialogue and useful practice exercises, such as initial meetings, telephone conversations, company tours, business conversations and the like appear throughout the course. May be repeated up to 6 credit hours.
301. Advanced Japanese I. [Advanced Japanese] (3) Continues development of four language skills (speaking, listening, reading and writing) at fifth semester level, introducing more complex grammar and spoken and written communicative tasks. (Fall)


320. Japanese Culture. (3 to a maximum of 6) ∆ This course provides a multidisciplinary introduction to Japanese culture, with an emphasis on the anthropology and sociology of contemporary Japan.

339. Topics in Japanese Literature and Culture in Translation. [Japanese Literature and Culture in Translation.] (3, no limit) ∆ (Also offered as COMP ENGL 339.) Study of individual authors, genres and/or periods of Japanese literature and culture in translation.

*411. Topics in Japanese Culture. (3, no limit) ∆ Explorations of a variety of topics in Japanese language, literature, arts and social sciences.

497. Undergraduate Problems. (1-6 to a maximum of 6) ∆ Restriction: permission of instructor.

Languages

Warren Smith, Advisor, Ortega Hall 353B, (505) 277-3708, wsmith@unm.edu.

This interdisciplinary major offered through the Department of Foreign Languages and Literatures in conjunction with the Department of Spanish and Portuguese can be taken through one of two options.

Option A requires 42 credit hours of course work; students electing to take Option A do not need a minor or a second major. Option B requires 24 credit hours of course work; students electing to take Option B need a minor or a second major.

Option A

Requirements: 42 hours of course work, to be distributed as follows:

1. Latin or Greek 101 (3 hours)
2. Linguistics 101 or 292 (3 hours)
3. Nine hours of course work above 300 in each of two of the following languages (18 hours): French, German, Italian, Portuguese, Russian (200 or above) and Spanish
4. Six hours of lower division course work in a language other than the two counted under category 3 above (including Chinese, Latin, Greek, Japanese, Navajo, Sign Language or Swahili) (6 hours)
5. Twelve additional hours of course work either in Linguistics, the languages chosen under categories 1 or 3 (upper division only), or 4 (lower division possible), or English courses such as History of the English Language, Old English, or Comparative Literature 223 or 380 (but not both) (12 hours)

Option B

A minor or a second major is necessary for Option B.

Requirements: 24 hours of course work, to be distributed as follows:

1. LATN or GREK 101 (3 hours)
2. Linguistics 101 or 292 (3 hours)
3. Nine hours of course work above 300 in each of two of the following languages: French, German, Greek, Italian, Latin, Portuguese, Russian (200 or above) and Spanish. Comparative Literature 223 or 380 may also be counted toward category 3 (18 hours)

Minor Study Requirements

Nine hours of courses above 300 in each of two languages (18 hours).

Latin (LATN)

Joseph McAlhany, Advisor, Ortega Hall 347B, 277-1181 jcm3@unm.edu

Warren Smith, Ortega Hall 353B, 277-3708 wsmith@unm.edu

Major Study Requirements

See Classical Studies.

Minor Study Requirements

Twelve hours in courses numbered above 200.

Placement—Elementary and Intermediate Courses

Students who have previously studied Latin should determine their entry level at the University of New Mexico by consulting with the advisor for Latin.

101. Elementary Latin I. [Elementary Latin.] (3) Introduction to the Latin language; grammar, syntax and readings in Roman authors. {Fall, Spring}

102. Elementary Latin II. [Elementary Latin.] (3) Continuation of 101. Introduction to the Latin language; grammar, syntax and readings in Roman authors. {Spring}

103. Latin Lab Session. (1) To be offered every term concurrently with 101 as a lab or practice session for the beginning student; only for those wishing an extra 1 hour credit. Offered on a CR/NC basis only.

105. Vocabulary Building. (3) To assist the students in improving their vocabulary and knowledge of English through a study of the derivation of English from Greek and Latin roots.

201–202. Intermediate Latin I–Intermediate Latin II. [Intermediate Latin.] (3, 3) Systematic review of Latin grammar and syntax; readings in simple prose authors such as Cicero and Caesar; introduction to Latin poetry and scansion.

*303. Advanced Latin I. [Readings in Latin Literature.] (3, 3, no limit) †† Readings in Classical authors such as Plautus, Catullus, Vergil, Horace and Ovid. Occasional composition in Latin.

*304. Advanced Latin II. [Readings in Latin Literature.] (3, 3, no limit) †† Readings in Classical authors such as Plautus, Catullus, Vergil, Horace and Ovid. Occasional composition in Latin.


497. Undergraduate Problems. (1-6 to a maximum of 6) ∆

503. Topics in Latin Language and Literature. (3) ∆ ††
Graduate readings in Latin authors. Prerequisites: 303, 304 or the equivalent.

551. Graduate Problems. (1-9 to a maximum of 9) ∆

Russian
Byron Lindsey, Advisor, Ortega 351B, 277-2538
bliny@unm.edu

Major Study Requirements
Option A: Regular Option
Thirty hours of courses in Russian language and literature/culture including the following:
 Six hours RUSS 201–202
 Six hours RUSS 301–302
 Three hours RUSS 401
 Three hours RUSS 402 or equivalent
 Twelve hours RUSS 407 and/or literature/culture course in translation.

Option B: Second Major Option
Twenty-four hours of courses in Russian language and literature/culture including the following:
 Six hours RUSS 201–202
 Six hours RUSS 301–302
 Three hours RUSS 401
 Three hours RUSS 402 or equivalent
 Six hours RUSS 407 and/or literature/culture course in translation.

Minor Study Requirements
Eighteen hours in Russian courses at the 200-level and beyond. One course in Russian literature in translation may be counted toward the minor.

Advisement and Placement
Students who have studied Russian previously should seek advice from the Russian faculty.

Students enrolling in 101–102 and 201–202 are urged to enroll in the conversational courses 103–104 and 203–204 as supplements to these basic courses.

Russian (RUSS)
101. Elementary Russian I. [Elementary Russian.] (3) Elementary Russian for students with no previous exposure to the language. Development of all four language skills: reading, speaking, writing and listening comprehension. Can be taken in conjunction with Russian 103. [Fall]

102. Elementary Russian II. (3) Elementary Russian for students who have completed Russian 101 or equivalent. Continued development of all four skills. Can be taken in conjunction with Russian 104. [Spring]


290. Workshop on Russian Language and Culture. (1-6 to a maximum of 6) ∆
Intensive practical training in Russian language and culture.

*301. Advanced Russian I. [Advanced Russian.] (3) Vocabulary building, basic grammar review and special attention to idiomatic Russian.

*302. Advanced Russian II. [Advanced Russian.] (3) Emphasis on all four language skills, especially reading. The structure of Russian is reviewed in detail.

*338. Topics in Russian Literature and Culture in Translation. [Russian Literature and Culture in Translation.] (3 to a maximum of 6) ∆
(Also offered as COMP, ENGL 338.) An introduction to Russia’s great novels and tales from the 19th and 20th centuries and their contribution to Russian culture and social thought.

339. Russian Culture and History through Film. (3)
(Also offered as HIST 335 and MA 339.) In this course we study films and read secondary sources from the Soviet and post-Soviet eras (with English subtitles) and examine how they comment on current Russian social and cultural issues. Taught in English.

*340. Topics in Russian Literature in Translation. (3-6, no limit) [3-6, to a maximum of 6] ∆
(Also offered as COMP 340.) Topics will deal with individual authors, genres, periods or themes.


*409. Seminar in Russian Literature and Culture. (3, no limit) ∆
Topic will deal with individual authors, genres or periods. Taught in English and/or Russian.

497. Undergraduate Problems. (1-6 to a maximum of 6) ∆
Restriction: permission of instructor.

498. Reading and Research for Honors. (3)
Open to juniors and seniors as approved by Russian faculty. Students will study one aspect of the field with a member of the Faculty Committee.

499. Honors Essay. (3)
Open only to seniors enrolled for departmental honors.

GEOGRAPHY

Olen P. Matthews, Chairperson
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1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 277-5041

Professors
Bradley T. Cullen, Ph.D., Michigan State University
Olen Paul Matthews, Ph.D., University of Washington
Stanley A. Morain, Ph.D., University of Kansas

Associate Professors
Jerry L. Williams, Ph.D., University of Oregon

Research Associate Professors
Richard P. Watson, Ph.D., University of Texas (Austin)

Lecturer
Danielson R. Kisanga, Ph.D., Clark University

Professors Emeriti
Elinore M. Barrett, Ph.D., University of California (Berkeley)
Rodman E. Snead, Ph.D., Louisiana State University
Adjunct Faculty
Deirdre Kann, Ph.D., Purdue University
William Krausmann, Ph.D. University of Utah
Larry Layne, Ph.D., State University of New York (Syracuse)
Zachary McCormick, Ph.D., Oklahoma State University
W. Donald McTaggart, Ph.D., Australian National University
Paul Neville, M.A., University of New Mexico
Paul Rich, Ph.D., Harvard University
Stuart White, Ph.D., University of Wisconsin

Major Study
Undergraduate Advisor
Jerry Williams, jwilly@unm.edu

World cultures represent a diverse fabric of socioeconomic endeavors. To sustain human populations in their physical and cultural milieus, environmental managers and geographic information scientists work with resource managers, economists, land planners, and land developers to make more informed decisions about places. Geography has sharpened its traditional stature among core disciplines by leading the development of spatial analytical theory, methods and techniques. Geography is both a physical and a social science because geographers cannot study societies and their technologies without also studying the environments in which they exist. The department’s programs focus on environmental management (that is, human / environment interactions) and GI-Science (that is, geographic information systems, remote sensing, position, navigation, and timing, and spatial statistics).

Geography offers a Bachelor of Arts and Bachelor of Science degree, and a Master of Science degree. The BA and BS degrees prepare majors for one or two career paths, or for entrance into the MS Program. The BA degree acknowledges general competency in Geography for those seeking careers in either applied geography or environmental management.

The BS degree has a Geographic Information Science focus. The MS degree has concentrations in environmental management and geographic information sciences, and provides options for both thesis and non-thesis tracks.

The GI-Science curriculum is ideally suited for majors from many A&S departments, as well as from other Schools at UNM. These technologies are finding many practical applications in the social and physical sciences, engineering, health care, architecture and planning, and legal professions.

Major Study Requirements

The major in geography requires 39–40 credit hours of lower and upper division course work.

The required curriculum for the Bachelor of Arts degree is as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 101</td>
<td>Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105L</td>
<td>Physical Geography Lab</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>Human Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 195</td>
<td>Survey of Environmental Issues</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 281L</td>
<td>Survey of Geographic Information Science</td>
<td>4</td>
</tr>
<tr>
<td>One course</td>
<td>Physical Environment Group</td>
<td>3</td>
</tr>
<tr>
<td>Two courses</td>
<td>Environmental Management Group</td>
<td>6</td>
</tr>
<tr>
<td>One course</td>
<td>Geographic Information Science Group 3–4</td>
<td>3</td>
</tr>
<tr>
<td>One course</td>
<td>Regional Group</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 470</td>
<td>Concepts of Applied Geography</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 471</td>
<td>Applied Geography Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives Any 300- or 400-level GEOG Courses 3–4

courses included in each of the above groups are as follows:


Geographic Information Science Group: 381L, 383, 386, 483L, 484, 487L, 488L.

Regional Group: 201, 301, 344, 345.

The required curriculum for the Bachelor of Science degree is as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
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<td>3</td>
</tr>
<tr>
<td>GEOG 105L</td>
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<tr>
<td>GEOG 470</td>
<td>Concepts of Applied Geography</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 471</td>
<td>Applied Geography Seminar</td>
<td>3</td>
</tr>
<tr>
<td>One course</td>
<td>Environmental Management Group</td>
<td>3</td>
</tr>
<tr>
<td>Two courses</td>
<td>Geographic Information Science Group 6-7</td>
<td>9</td>
</tr>
<tr>
<td>Three courses</td>
<td>300 level or above Physical Environment Group</td>
<td>9</td>
</tr>
</tbody>
</table>

In addition for the B.S. degree, 9 credits of 300 level or above course work must be taken in Biology or Earth and Planetary Science. MATH 150, 162, or 163 are required for some courses in Biology and Earth and Planetary Sciences.

Honors In Geography

Students aspiring to honors in Geography must announce their intention to the Honors Program Advisor and select a faculty advisor before the end of the junior year. Candidates must have earned a cumulative GPA of 3.20 throughout their Major course of studies. The Honors program requires 3 credits of Geog 491 (Problems in Geography) in the fall semester, followed by 3 credits of Geog 492 in the spring semester. The objective of these 6 credits is for the candidate to develop a Senior Thesis by the 12th week of the spring term reviewable by the faculty advisor and a second faculty member, who together will determine if the quality of the effort is sufficient for honors. For Honors candidates, Geog 491 and 492 will replace Geog 470 and 471. If students enter senior status at mid-year, they may register for 492 followed by 491.

Minor Study Requirements

GEOG 101, 102 and 15 additional hours of Geography course work.

Distributed minor not available.

Group Requirements

GEOG 101/105L is accepted as a laboratory science in fulfillment of the Physical and Natural Sciences (Group III) requirement of the College of Arts and Sciences. The following are accepted in fulfillment of the Physical and Natural Sciences (Group III) requirement of the College of Arts and Sciences: 251, 351, 352, 356, 359. Other geography courses are accepted toward fulfillment of the Social and Behavioral Sciences (Group IV) requirements.
Graduate Program

Graduate Advisor
Bradley Cullen
bcullen@unm.edu

Graduate applicants please direct correspondence to Graduate Advisor.

Degree Offered

M.S. Geography

Concentrations: a) environmental analysis (human/environmental interaction) or b) geographic information technologies (GIS, GPS and remote sensing)

A master’s degree is offered under both Plan I and Plan II as described in the earlier pages of this catalog. Any student planning to go on for a Ph.D. is strongly urged to take Plan I and write a thesis. Graduate students entering the program without Introductory GIS and Spatial Analysis will be considered deficient and will take those courses without graduate credit. A minor may be taken under either plan with the approval of the Geography Department’s Graduate Advisory Committee. In place of a minor, approved courses in related fields may be substituted.

Minimum requirements for the Geography M.S. degree are as follows:

Plan I Credits
GEOG 501 3
GEOG 504 3
One physical geography seminar: 512 or 513 3
One GIS seminar: 521, 522 3
Four graduate credit or 500-level geography courses 12
Thesis 6
Total 30

Plan II Credits
GEOG 501 3
GEOG 504 3
Two other courses: 512, 513, 521, 522 or 545 6
Seven additional graduate-credit or 500-level geography courses 21
Total 33

Candidates under Plan I will be examined orally on their thesis. Candidates under Plan II will be tested with both oral and written examinations on a topic selected by his or her graduate committee from the three areas listed below. Part or all of the Plan II exam may be applied and require field work. A regional focus in any of the three topics is acceptable.

1. Physical Geography.

A graduate student who elects to do a master’s degree in geography should have either an undergraduate degree in geography or be prepared to make up deficiencies as determined by the Geography Department’s Graduate Advisory Committee. Students must earn grades of B (3.0 GPA) or better in all courses on their plan of study, including those at the undergraduate level. GRE scores are required for application to the M.S. program.

Geography (GEOG)

101. Physical Geography. (3)
World geography; physical elements. Use of maps and globes for a systematic analysis of world climates, vegetation, soils and landforms and their distribution, interrelation and significance to human.

102. Human Geography. (3)
World geography; human elements. A systematic analysis of world population, demographic factors, ethnic groups, predominant economies and political units and their distribution, interrelation and interaction with the physical earth.

105L. Physical Geography Laboratory. (1)

140. [201.] World Regional Geography. (3)
The regional geography of the world. Both physical and human aspects are studied along with current economic and political problems.

195. Survey of Environmental Issues. (3)
Survey of environmental issues related to the degradation of land, air and water resources.

251. Meteorology. (3)
(Also offered as EPS 251.) Description of weather phenomena, principles of atmospheric motion, weather map analysis and weather prediction.

281L. Survey of Geographic Information Science.
[Survey of Geographic Information Technologies.] (4) Examination of the spatial framework of geographical analysis and mapping tools used in the spatial sciences. Introduction to spatial methodology and concepts in Geographic Information Systems (GIS), Remote Sensing and Image Processing (RS/IP) and Global Positioning Systems (GPS). Fees required. Two hrs. lab.

302. Regional Geography. (3 to a maximum of 6)
Geography of a selected region of the globe with focus on the national, economic, and social environments that are reflected in settlement systems. Includes analyses of current environmental and cultural issues.

**344. Geography of New Mexico. (3)
A geography of New Mexico which will concentrate on the natural, economic and social environments that relate to settlement systems. Includes a survey of settlement from prehistoric periods to the urban Rio Grande corridor.

**345. Geography of the Southwest. (3)
Interdisciplinary study of selected areas of the greater Southwest based on both physical character (physiography) and cultural traces associated with pre-historic and historic settlement. Field component will be required.

**351. Climatology. (3)
An analysis of factors affecting climatic variations, including solar and terrestrial radiation, atmospheric temperature, pressure and wind patterns, the global hydrologic cycle and atmospheric chemistry.

352. Global Climate Change. (3)
(Also offered as EPS 352.) Comparison of natural and anthropogenic causes of large-scale climate change. Factors influencing development of mitigation of adaptation policies. Prerequisite: 351.

**356. Systematic and Regional Biogeography. (3)
Concepts and theories of historical and evolutionary biogeography focusing on flowering plants and mammals from the Cretaceous to present. Biotic evolution of Realms and Biomes in context of plate tectonics, glacial episodes and modern human impacts.

**359. Water in Environmental Systems. (3)
The drainage basin is used as the fundamental unit for a quantitative analysis of the movement and storage of water in the hydrologic system. Applied land and water use planning aspects are emphasized.
210 ARTS AND SCIENCES

**360. Land and Resource Management.** [Political Geography.] (3)
Spatial organization of political processes. Exercise of legal and political power over land and other resources. Resolution of conflicts between competing government units.

**363. Resource Geography.** (3)
A systematic analysis of spatial economic patterns. Introduction to models of economic space and theories of spatial economic interaction. Analysis of effects of resource attributes and distributions upon economic activities. Examination of cultural-economic regions.

**367. Urban Socioeconomic Issues.** (3)
An analysis of internal forces which influence the morphology of the city. Review of internal and regional urban location models with applications to cities in New Mexico. Elements of urban and regional land use mapping are studied through student field projects.

**381L. Introduction to Geographic Information Systems.** (4)
The study of spatial data, spatial processes and an introduction to the computer tools necessary to analyze spatial representations of the real world. Exercises in data acquisition, preprocessing, map analysis and map output. Fees required. Three hrs. lecture, 2 hrs. lab.

**383. Spatial Analysis.** (3)
Survey and application of common quantitative spatial analysis methods used for analyzing data within a spatial context, including spatial autocorrelation estimators, point pattern analysis, analysis of line data, and an introduction to geostatistics.
Prerequisite: STAT 145.

386. Earth Observing Systems. (3)
A survey of satellite and aerial platforms and sensors. Emphasis is placed on design specifications, trade-offs in specifications to optimize system performance, techniques for radiometric and geometric calibration, calibration test sites, and data fusion and assimilation.

*402. Geographic Education.** (3)
Standard based geographic methods and concepts for social studies teaching. Presenting geographic techniques and materials in the classroom. Map use and field projects.

459./559. Natural Resources and GIS. (3)
Examination of advanced GIS concepts and application to natural resource assessment and problem identification. Synthesis of spatial data and analysis of spatial characteristics for natural resources.
Prerequisites: 381L.

461./561. Environmental Management. [Environmental Conservation.] (3)
Examination of critical issues of environmental degradation in global and local system related to: air and water pollution, soil erosion, deforestation, strip mining, over dependence on fossil fuels and improper management of toxic and other wastes. Appraisal of the conservation methods and policies applied to these issues and the outlook for the future.
Prerequisite: 102.

462./562. Water Resources Management. (3)
An examination of the problems and trends in the use of water resources in the United States, with emphasis on the physical and social aspects related to its management.
Prerequisite: 101 or 102.

463./563. Public Land Management. [Public Lands and Other Shared Resources.] (3)
Defining public and private rights associated with managing natural resources is the key to many of the current controversies concerning the environment. This course looks at public land policy and policy related to other common property resources such as water, the oceans, and the coastal zone.

465./565. Urban Environmental Management. (3)
Williams
History of urban attempts to manage the natural environment, both globally and locally. A review of ecological and natural constraints and feedbacks initiated by urbanization. Field classes and projects.

470. Concepts of Applied Geography. (1)
Background readings and discussions centered on Geography as a discipline. Concepts, methods and techniques of geographic analysis and modeling are applied to a specific geographic problem. This course is required before taking 471.

471. Applied Geography Seminar. (3)
Applications of environmental analysis and geographic information technologies to a selected geographic problem. Field trips required. Recommended during the last semester for majors.
Prerequisite: 470.

483L./583L. Digital Image Processing. (3)
Techniques for extracting information from Earth observing sensor data. Instruction includes steps of image processing from rectification and enhancement of digital aerial and satellite data, classification strategies, and merging of data with other map products.
Prerequisite: 281L. Two hrs. lab.

484./584. Applied Remote Sensing. (3) Morain
Applications of aerial and satellite sensors for natural resources. Emphasis is on reviewing and evaluating remote sensing applications in the scientific literature. Further emphasis is placed on applications of remotely sensed data with geo info systems.
Prerequisite: 386.

487L./587L. Intermediate Geographic Information Systems. (3)
Examination of data structures in GIS. Database management. Approaches to spatial analysis and geostatistical analysis.
Prerequisite: 381L. Two hrs. lab.

488L./588L. Advanced Geographic Information Systems. (3)
Customization of GIS through use of object-oriented programming language. Project management in the programming environment.
Prerequisite: 487L. Two hrs. lab.

491./591–492./592. Problems. (1-3, 1 to a maximum of 3) ∆
Supervised individual study and field work. Must be taken for 6 credit hours in the Honors program.

493./593–494./594. Internship in Applied Geography. (1 to a maximum of 3, 1 to a maximum of 3) ∆
Written field analysis of a project coordinated between student, faculty and private manager. Credits to be determined by supervising faculty.

*499. Topics in Geography. (1-3 to a maximum of 6) ∆
Specific topics in geography which relate contemporary issues to the discipline. Topics will be noted in the appropriate schedule of classes. Credit can be applied by majors to the appropriate department group requirements for the degree.

501. Research Methods Seminar. (3)

504. Environmental Issues Seminar. (3)

512. Seminar in Physical Geography. (3 to a maximum of 6) ∆
Variable focus depending on the instructor. Typical foci include biogeography, water resources and elements of Earth systems science. Emphasis is on major research questions, recent advances in the field, and on recent literature related to the causal mechanisms.
Prerequisites: 351 or 356.
513. Seminar: Contemporary Issues in Water Resources. (3 to a maximum of 6) ∆
An examination of current issues in water resource management. Issues include integrated and environmentally based approaches for water resources management, integration of spatial technologies and techniques for water resource assessment and management.
Prerequisite: 359.

521. Seminar in Environmental Modeling and Geographic Information Systems. [Environmental Modeling and Geographic Information Systems.] (3 to a maximum of 6) ∆
Significant issues, problems and future trends in environmental modeling systems are linked with geographic information systems.
Prerequisite: 488L.

522. Seminar in Remote Sensing. (3 to a maximum of 6) ∆
Focus on the major research questions, recent literature and recent advances in remote sensing.
Prerequisite: 484.

545. Seminar: Geography of the Southwest. (3 to a maximum of 6) ∆
Application of geographic research methods to research topics from the American Southwest and Northern Mexico. Emphasis will be on human/land relationships. Field component required.
Prerequisites: 344 or 345.

559./459. Natural Resources and GIS. (3)
Examination of advanced GIS concepts and application to natural resource assessment and problem identification. Synthesis of spatial data and analysis of spatial characteristics for natural resources.
Prerequisites: 381L.

561./461. Environmental Management. [Environmental Conservation.] (3)
Examination of critical issues of environmental degradation in global and local system related to: air and water pollution, soil erosion, deforestation, strip mining, over dependence on fossil fuels and improper management of toxic and other wastes. Appraisal of the conservation methods and policies applied to these issues and the outlook for the future.
Prerequisite: 102.

562./462. Water Resources Management. (3)
An examination of the problems and trends in the use of water resources in the United States, with emphasis on the physical and social aspects related to its management.
Prerequisite: 101 or 102.

563./463. Public Land Management. [Public Lands and Other Shared Resources.] (3)
Defining public and private rights associated with managing natural resources is the key to many of the current controversies concerning the environment. This course looks at public land policy and policy related to other common property resources such as water, the oceans, and the coastal zone.

565./465. Urban Environmental Management. (3)
Williams
History of urban attempts to manage the natural environment: both globally and locally. A review of ecological and natural constraints and feedbacks initiated by urbanization. Field classes and projects.

570. Physical Climatology. (3)
(Also offered as EPS 570.) Theory and observations of the Earth’s climate system. Radiative transfer, conservation of heat and momentum, maintenance of circulation systems, mechanisms of climate change.
Prerequisites: (351 or EPS 436 or EPS 536) and MATH 163 and PHYC 161.

583L./483L. Digital Image Processing. (3)
Techniques for extracting information from Earth observing sensor data. Instruction includes steps of image processing from rectification and enhancement of digital aerial and satellite data, classification strategies, and merging of data with other map products.
Prerequisite: 281L. Two hrs lab.

584./484. Applied Remote Sensing. (3)
Applications of aerial and satellite sensors for natural resources. Emphasis is on reviewing and evaluating remote sensing applications in the scientific literature. Further emphasis is placed on applications of remotely sensed data with geo info systems.
Prerequisite: 386.

587L./487L. Intermediate Geographic Information Systems. (3)
Examination of data structures in GIS. Database management. Approaches to spatial analysis and geostatistical analysis.
Prerequisite: 381L. Two hrs. lab.

588L./488L. Advanced Geographic Information Systems. (3)
Customization of GIS through use of object-oriented programming language. Project management in the programming environment.
Prerequisite: 487L. Two hrs. lab.

591./491--592./492. Problems. (1-3 to a maximum of 6, 1-3) (1 to a maximum of 3, 1 to a maximum of 3) ∆
Supervised individual study and field work. Must be taken for 6 credit hours in the Honors program.

593./493--594./494. Internship in Applied Geography. (1 to a maximum of 3, 1 to a maximum of 3) ∆
Written field analysis of a project coordinated between student, faculty and public or private manager. Credits to be determined by supervising faculty.

599. Master’s Thesis. (1-6)
Offered on a CR/NC basis only.

GEOLOGY
See Earth & Planetary Sciences.

GERMAN
See Foreign Languages and Literatures.

GREEK
See Foreign Languages and Literatures.

HEALTH, MEDICINE AND HUMAN VALUES PROGRAM (BA/MD Program)
Valerie Romero-Leggott, M.D., School of Medicine, Associate Dean for Diversity
Richard Santos, Ph.D., Economics

Institutional Address
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College of Arts and Sciences
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Ellen Cosgrove, M.D., Senior Associate Dean for Education
Roberto Gomez, M.D., Associate Dean of Students
Renée Omelas, M.D., Pediatrics
Craig Timm, M.D., Associate Dean for Undergraduate Medical Education
Betsy Vanleit, Ph.D., Family and Community Medicine

Introduction
The Health, Medicine and Human Values (HMHV) program, the undergraduate component of UNM’s combined BA/MD Degree Program, presents a unique opportunity for a select group of qualified Freshmen who wish to become physicians. The program is open to 25 students and five alternates each Fall (application and eligibility criteria are described below). Following an integrated curriculum that covers a broad base of interdisciplinary course work in the humanities, social sciences, mathematics, and physical sciences, program participants will complete a Bachelor’s degree at the end of four years, after which they will complete their Doctor of Medicine (MD) degree in the School of Medicine at UNM where a seat will have been reserved for them.

The HMHV program offers students flexibility in choosing an undergraduate major while providing them with a structured pre-Medical Core of special seminars focusing upon humanities, fine arts, and social/behavioral sciences studies in the context of health science and medicine; with experiential learning practice; and with a suite of mathematics and physical/natural science courses that will prepare them for medical school.

In consultation with the HMHV / BA/MD advisor, program participants choose one of the following options: 1) the Arts and Sciences major; 2) the Health, Medicine and Human Values major: Health, Humanities and Society concentration, or 3) the Health, Medicine and Human Values major: Biomedical Sciences concentration. Option I is designed for students who wish to receive a BA (or BS) degree in a liberal arts field, such as Anthropology, Biology, English, History, Psychology, or Sociology. Option II is designed for students who prefer a distributed liberal arts and sciences program of study. And Option III is designed for those students who wish to pursue a rigorous program of study in the physical and natural sciences. All three options include a suite of courses in the humanities, social sciences, mathematics, and physical and natural sciences that prepare the student for medical school.

Note: The HMHV Program does not require students to elect a minor.

Admissions and Eligibility
Who is Eligible to Apply. To be eligible to apply for the program, applicants must:

1. Be currently enrolled in good standing as a senior in high school or equivalent;
2. Be a U.S. citizen or permanent resident of the United States;
3. Be a resident of New Mexico for tuition and scholarship purposes.

In addition, students who apply to the program should demonstrate strong academic and personal potentials for success in the BA/MD program. The following academic characteristics are not baseline requirements but are offered as guidelines.

To complete the BA and MD within eight years, a student will need to have earned a score of 24 or better on the ACT (110 or better on the SAT Critical Reading & Math) and to have earned a 3.50 GPA, both overall and in the specific college preparatory units required for admission to UNM.

Note: Students who are interested in the Biomedical Sciences concentration, should have completed the equivalent of MATH 121 or 150 before entering the program.

How to Apply
The application deadline is December 1 of the senior year in high school. Students must apply for admission to UNM, Albuquerque campus, and submit all required application materials (see below) before they can be considered for the HMHV program.

Application Materials
1. UNM Admissions Application.
2. Combined BA/MD / HMHV Supplemental Application.
3. ACT and / or SAT Test Scores.
4. High School Transcripts (sixth semester – through the end of the Junior year – by Dec 1; and seventh semester – through Fall term of Senior year – by mid-January).
5. Three individual recommendation forms from teachers – at least one from a math or science teacher and one from another teacher in the specific college preparatory units outlined in the UNM Admissions Application.
6. A list of honors, awards and distinctions; extracurricular activities; community and volunteer activities; significant health care experience; involvement in research, academic enrichment, or related employment.
7. A 700- to 750-word typed, double-spaced personal statement, describing in the student’s own words his or her motives for a career in medicine; his or her interactions with diverse populations of individuals; and any life experiences that demonstrate a the student’s breadth of cultural understanding.

Selection Process. After receiving the completed UNM and BA/MD Supplemental application forms and transcripts, an admissions team will conduct a pre-screening of all applicants to select potential candidates for the program. The admissions team will conduct interviews of the top candidates in February and contact the finalists in mid March. Finalists will have until May 1 to submit their acceptance letters to the program office.

Annual Timeline:
• December 1: Application Deadline; sixth semester transcripts due.
• Mid January: Seventh semester transcripts due.
• January 31: Completion of pre-screening and notification of candidates.
• February: Interviews.
• Mid March: Final selection and notification of finalists.
• May 1: Deadline for finalists to confirm acceptance.

Continuous Eligibility. Students will meet at least once a year with the HMHV / BA/MD advisor to review their continuing eligibility status. Those who do not meet continuing eligibility requirements are subject to probation or disenrollment, as recommended by the Committee on Student Promotions and Evaluation. To remain in good standing in the undergraduate portion of the program, HMHV students must maintain the following standards:

1. Maintain a 3.00 GPA on a 4.0 scale in their freshman year.
2. Maintain a 3.50 GPA on a 4.0 scale in their sophomore, junior, and senior years.
3. Maintain the enrollment status required to complete the undergraduate program in four years.
Medical School Eligibility

To be eligible to continue into the UNM School of Medicine portion of the program, HMHV students must meet the following criteria:

1. Earn grades of B or better on all courses specifically required for medical school.
2. Complete all requirements, including the Summer Community Health Practica, for Options I, II, or III, with a cumulative GPA of 3.375 or better on a 4.0 scale.
3. Take the MCAT Preparatory Course.
4. Earn a score on the MCAT exam consistent with the minimal acceptable threshold for admission into the School of Medicine.
5. Maintain a code of professional and moral conduct appropriate for admission to the School of Medicine.
6. Develop an understanding of the public health needs of communities in New Mexico, and demonstrate a commitment to those needs through service, cultural sensitivity, and awareness of New Mexico’s unique populations.

Medical School Admission. Students who meet all eligibility requirements (see above) will be interviewed by the School of Medicine Admissions Committee and receive formal, written approval for the transition into the Medical curriculum. This interview will take place in the Spring semester of the senior year.

HMHV Academic Program Requirements

Joint Requirements: Options I, II, and III. All students in the HMHV program must fulfill the Core Curriculum and Group Requirements for the College of Arts and Sciences as well as all of the requirements for their selected major and concentration. In addition, all HMHV students must complete 15 hours of special seminars designed specifically for participants in the program, and 6 hours of summer community health practica. The combined 21 hours of special seminars and community health practica promote cohort building among the HMHV students and constitute the interdisciplinary and experiential core of the program.

Health, Medicine and Human Values Seminars (15 hours)
The Health, Medicine and Human Values seminars are interdisciplinary courses that provide opportunities for experiential and problem-based learning, applied writing and speaking, and small-group problem solving. The seminars involve collaborative teaching with faculty from the School of Medicine and the College of Arts and Sciences. The seminar titles are as follows:

- I. Contours of Health in New Mexico
- II. Literature, Fine Arts, and Medicine
- III. Health Economics, Politics, and Policy
- IV. Health and Cultural Diversity
- V. Ethics, Medicine, and Health

Note: A&S Group Requirements — Seminars I, III, and IV each may be counted as 3 hours toward the Social/Behavioral Sciences Group Requirement; Seminars II and V, as 3 hours toward the Humanities Group Requirement.

Community Health Practica (6 hours, summer program)
The Community Health practica, taken in the summers after the second and third year in the program, are designed to allow students to engage in experiential learning projects involved in community and clinical health. The practica will enable students to put into practice some of the problem-solving skills and information acquired in the seminars and other parts of the HMHV curriculum. Each practica involves a writing and research component, as well as the experiential component.

- Community Health Practicum I (3 hours)
- Community Health Practicum II (3 hours)

Detailed descriptions of the additional requirements for each option are described below.

Option I: Arts and Sciences Major (BA or BS) The Arts and Sciences option enables HMHV students to choose a major from one of the College of Arts and Sciences degree-granting programs, while completing the structured set of courses designed for the HMHV program to prepare students for Medical School. In addition to completing all departmental requirements for the selected major, students must complete the Health, Medicine and Human Values Seminars; the Community Health Practica; and a 45-hour Pre-Medical Sciences Core, described below.

Option I Requirements: (96 hours, plus Departmental Major Requirements)
1. Writing and Communication (12 hours)
   - English 191
   - English 102
   - Two writing or communication courses above English 102, at least one of which must be in a department other than English.
   - (ENGL 219-20, 221-23; 320; CJ 130, 221, 225, 332, 333; PHIL 156)
2. Second Language (3 hours)
   At least one lower division course in a language other than English. A regional language (e.g., Spanish, Navajo) or American Sign Language is recommended.
3. University of New Mexico Core Requirements (15 hours)
   - Social and Behavioral Science (6 hours)
   - Humanities (6 hours)
   - Fine Arts (3)
4. Health, Medicine and Human Values Seminars (15 hours)
   (See “Joint Requirements” above.)
5. Community Health Practica (6 hours)
   (See “Joint Requirements” above.)
6. Pre-Medical Sciences Core (45 hours)
   - Mathematics (6 hours)
     - MATH 121 or 150 or above (3 hours)
   - STAT 145 for HMHV (3 hours)
   - Biology (12 hours)
     - (BIOL 201, 202 and 204L)
   - Biochemistry (3 hours)
     - (BIOC 423)
7. Departmental Major Requirements (32 hours or more)

Note: Group Requirements — Students in consultation with the BA/MD advisor must ensure that they fulfill all Arts and Sciences Group Requirements as they complete their major.

Option II: Health, Medicine and Human Values Major: Health, Humanities and Society Concentration. (BA) This option offers students a structured set of distribution requirements emphasizing the humanities and social sciences, while providing them with a pre-Medicine core in mathematics and the physical/natural sciences. In addition to completing 33 hours of distributed course work for the Health, Humanities and Society Concentration (below), Option II students must also complete the Health, Medicine and Human Values Seminars; the Community Health Practica; and a 45-hour Pre-Medical Sciences Core.

Option II Requirements (129 hours)
1. Writing and Communication (12 hours)
   - English 101
   - English 102
   - Two writing or communication courses above English 102, at least one of which must be in a department other than English.
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Option III: Health, Medicine and Human Values Major: Biomedical Sciences Concentration. (BA) Emphasizing intensive study in the physical/natural sciences, the Biomedical Sciences concentration is open only to those students who have had advanced preparation in Mathematics (through Algebra) before matriculating in the HMHV program. Students in Option III must complete the Health, Medicine and Human Values Seminars; the Community Health Practica; a 61-hour Pre-Medical Sciences Core; and 18 upper-division hours of course work across the arts and sciences, at least 18 of which must be in 300 to 400-level upper division courses. (Note: In consultation with the HMHV advisor, students may choose electives within each distribution area other than the recommended courses below.)

- **Mathematics / Physical & Natural Sciences** (9 hours, at least 3 of which are 300 level or above) Recommended: MATH 180 & 181; BIOL 237, 238; ANTH 150, 151L; ANTH 251, 350, 365; CHEM 463, 464; CHEM 315, 421.
- **Humanities/Fine Arts** (9 hours, at least 6 of which are 300 level or above) Recommended: HIST 416, 417; RELG 447; ENGL 413; PHIL 245.
- **Social/Behavioral Sciences** (9 hours, at least 6 of which are 300 level or above) Recommended: POLS 376, 377; SOC 300, 321; ECON 335, 410; PSY 220, 240, 332, 342.
- **Electives** (6 hours)

**4. Health, Medicine and Human Values Seminars (15 hours)**
(See “Joint Requirements” above.)

**5. Community Health Practica (6 hours)**
(See “Joint Requirements” above.)

**6. Pre-Medical Sciences Core (61 hours)**
- **Calculus (6 hours)** (MATH 180 and 181)
- **General Biology (16 hours)** (BIOL 201, 202, 203L & 204L)
- **General Chemistry (6 hours)** (CHEM 121L and 122L)
- **Organic Chemistry (8 hours)** (CHEM 301, 302, 303L and 304L)
- **Physics (8 hours)** (PHYC 151, 152, 151L & 152L)
- **Biochemistry (3 hours)** (BIOC 423)
- **Anatomy & Physiology (8 hours)** (BIOL 237, 238, 247L & 248L)
- **Microbiology for Health Sciences and Non-Majors (4 hours)** (BIOC 239L)

**7. Group Requirements and Electives.** (18 hours). The Biomedical Sciences concentration requires an additional 18 hours of course work in 300 to 400-level upper division courses distributed across the Arts and Sciences Group categories.

**Note:** In consultation with the HMHV advisor, students must be sure to satisfy the Arts and Sciences Group Requirements as needed with some of these courses.

**Health, Medicine and Human Values (HMHV) Seminars**

**101. Contours of Health in New Mexico. (3)** Seminar exploring ethnic, economic, demographic, and geographic variables impacting public health in New Mexico and the Southwest. Topics include access to health care; local alternatives to medical treatment; cultural definitions of health, illness, and death. Restriction: Students enrolled in the HMHV program.

**201. Literature, Fine Arts, & Medicine. (3)** Seminar exploring links among health, illness, literature and the arts, encompassing a diverse range of forms and genres. Topics include representations of health, illness, and medicine; arts as therapy; medical history in literature and art. Restriction: Students enrolled in the HMHV program.

**301. Health Economics, Politics, and Policy. (3)** Seminar exploring political and economic forces that impact health care policies and practices. Topics include political and economic forces impacting health care; health care reform; the institutional and political organization of medicine. Restriction: Students enrolled in the HMHV program.

**310. Health and Cultural Diversity. (3)** Seminar exploring cultural variables that affect the experience and practice of health and health care: how culture, ethnicity, race, and gender inform ideas of health and illness, death and dying, and the patient-physician relationship. Restriction: Students enrolled in the HMHV program.

**401. Ethics, Medicine, and Health. (3)** Seminar exploring ethical and legal considerations that influence medical practices and decision-making. Topics include contemporary ethical and moral issues in medicine; and a comparative and critical analysis of relationships between professional ethics and personal beliefs. Restriction: Students enrolled in the HMHV program.

Community Health Practica

350. Community Health Practicum I. (3)
Experiential learning project conducted in a variety of rural or underserved healthcare settings. Emphasis upon the roles of health professionals and teams, community health issues, and health care practices, processes and systems. Restriction: Students enrolled in the HMHV program.

450. Community Health Practicum II. (3)
Experiential and research project conducted in a variety of rural or underserved healthcare settings. Emphasis upon the roles of health professionals and teams, community health issues, and health care practices, processes and systems. Restriction: Students enrolled in the HMHV program.

HISTORY

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Janet Roebuck, Ph.D., University of London

Enrique Gemo, Humboldt University
Donald Skabelund, Ph.D., University of Utah
Donald D. Sullivan, Ph.D., University of Colorado

Undergraduate Major

A history major is especially well suited to prepare a student for graduate study or work in the professions. The Department encourages those students who have a firm idea of their career goals to specialize at the undergraduate level, taking courses which will support their career objectives. Others study history because it gives a general background which will prepare them intellectually for advanced study in business, law, theology, archival management, editing, public administration or similar careers that require a liberal arts background with a research emphasis. The Department encourages such students to take a broad range of courses covering the history of the various regions of the world.

Undergraduate Major Requirements

The history program for general majors, as outlined below, is designed to provide some of the cultural background necessary for intelligent and responsible living and lifelong intellectual growth. It also helps to prepare students for a variety of professions and careers. The lower-division requirement includes HIST 101L, and 102L, and one of the following pairs: 161L–162L, 251–252, 281–282, for a total of 12 hours. The upper-division requirement includes a minimum of eight 300-400 level semester courses (24 hours), including HIST 491 (Historiography) or 492 (Senior Seminar). A minimum of two courses in each of three fields is necessary, i.e., two in U.S., two in Latin American, two in European, etc. Consult the undergraduate advisor for variations possible in this program.

The Department will accept the grade of C- as counting toward graduation but requires that the student achieve a minimum grade point average of 2.25 in major or minor studies.

Undergraduate Minor Requirements

The planned program outlined below is designed to supplement a student’s work in his or her major field. In total it requires a minimum of seven semester courses (21 hours). The upper-division requirement includes a minimum of five semester courses (15 hours), at least three of which must be concentrated in one field, e.g., U.S., Europe.

The Department will accept the grade of C- as counting toward graduation but requires that the student achieve a minimum grade point average of 2.25 in major or minor studies.

Distributed Minor for History Majors

A major may offer a distributed minor in American Studies, Asian Studies, Comparative Literature or Russian Studies, as well as a minor in a single department. Approval of the Chairperson of the History Department is required for all distributed minors.

Departmental Honors

The Department of History has an honors program which a student may enter with the recommendation of his or her departmental advisor. To complete the program, a student must take 9 hours in honors courses. A student may offer this
program in lieu of one of the required fields in history. Details are available in the Department.

Graduate Program

Graduate Coordinator
Timothy Moy

Application Deadlines
Fall semester: January 15
Spring and Summer semesters: October 15
Financial Aid: January 15

Degrees Offered

M.A. in History

Concentrations: The Western World to 1500, Europe 1500–1815, Europe since 1815, United States, American West, Latin America, Asia.

Prerequisites for admission: a Bachelor’s degree in History or a related field, which should include general European and American history, some advanced course work, and a senior thesis or course in historiography or historical methodology.

Ph.D. in History

Concentrations: Ancient, Medieval Europe, Modern Europe since 1815, Europe since 1815 or regional or topical subspecialty therein, United States to 1877, United States since 1877, American West, Latin America to 1810, Latin America since 1810, Asia to 1600, Asia since 1600, Comparative History of Women and Gender.

Prerequisite for admission: an M.A. in History or an equivalent degree approved by the departmental admissions committee.

Degree Requirements

General

For University requirements for the M.A. and Ph.D. degrees consult the appropriate pages of this catalog. The following are general department requirements for History graduate programs. For more detailed requirements, consult the Department of History M.A. Program Requirements or the Department of History Ph.D. Program Requirements.

Course work: all students must take History 665, normally in the first year of study. At least half of each student’s required credit hours (exclusive of thesis or dissertation) should be earned in graduate seminars. No more than 6 hours of “problems” (697–698) courses may count toward either the M.A. or Ph.D. degree.

Foreign language: each student must demonstrate a reading knowledge of one foreign language by passing a written departmental translation examination, or by presenting 12 credit hours of instruction in a single foreign language taken after admission to the graduate program.

M.A.

Program options: students may elect a thesis (Plan I) or non-thesis (Plan II) program as specified under the general M.A. requirements in this catalog. The thesis option must be approved in advance by the supervising professor. All theses must be written in English.

Concentrations: each student must select a concentration from the M.A. concentrations listed above. Plan II students will also select an additional concentration from History or another discipline. Students must take at least one graduate seminar in each of their concentrations. Student must pass a general written examination in their concentration.

Ph.D.

Concentrations: students select three fields of study, two concentrations and an additional field, from the Ph.D. concentrations listed above. Students must take at least two seminars in each of their concentration and field unless insufficient seminars are available, in which case other courses may be substituted with departmental approval. Students must demonstrate competency in their fields by written and oral comprehensive examinations in the two concentrations and by written examination in the additional field.

Second foreign language: in addition to the departmental language requirement (see above), students with a concentration in any area of European, Latin American or Asian history must demonstrate competence in a second foreign language appropriate to their course of study.

Breadth requirement: each student’s program of study must include at least three graduate courses concerning a single geographic area outside the current boundaries of the United States. At least one of these must be a University of New Mexico History course.

Dissertation: History dissertations must be written in English.

History (HIST)

I. Survey Courses

101L. Western Civilization to 1648. [Western Civilization.] (3) Bokovoy, Graham, Robbins, Rubenstein, Sanabria, Steen, Spidle Ancient times to 1648. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts (NMCCN 1053). {Summer, Fall, Spring} 1648 to present. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts (NMCCN 1063). {Summer, Fall, Spring}

161L. History of the United States to 1877. [3] Connell-Szasz, Hutton, Sandoval-Straus, Scharff, Szasz, Yazawa Survey of the economic, political, intellectual and social development of the United States, including the place of the U.S. in world affairs from 1607 to 1877. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts (NMCCN 1113). {Summer, Fall, Spring} 1877 to present. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts (NMCCN 1123). {Summer, Fall, Spring}

162L. History of the United States Since 1877. [3] Connell-Szasz, Farber, Hutton, Moy, Sandoval-Straus, Scharff, Szasz, Yazawa Survey of the economic, political, intellectual and social development of the United States, including the place of the U.S. in world affairs from 1877 to the present. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts (NMCCN 1123). {Summer, Fall, Spring}

204. Greek Civilization. (3) (Also offered as CLST, PHIL, ARTH 204.) An interdisciplinary introduction to the ancient world as the foundation of modern civilization. Lectures on classical art, history, literature and philosophy. {Spring}

205. Roman Civilization. (3) (Also offered a CLST, PHIL, ARTH 205.) An interdisciplinary introduction to ancient Rome. Lectures on Roman literature, history, art and philosophy.
220. Studies in History. (1-3, no limit) \( \Delta \)
Will vary from instructor to instructor but will offer a review of particular historical issues designed for the nonspecialist. For content of particular courses, see Schedule of Classes and contact Department. (Fall, Spring)

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

252. Modern Eastern Civilizations. (3) Porter, Risso
The emergence of modern Asia from the impact of Western colonialism and imperialism to nationalism, modernization and revolution.

260. History of New Mexico. (3) Ball, Reyes, Truett
Introduction to New Mexico history from earliest human settlement to the present day.

281. History of Early Latin America. (3) Gauderman, Bieber
An introduction to indigenous, African and Iberian backgrounds. Examines colonial societies through social, economic and political institutions with attention to the contributions of Indians, Africans and Europeans to the creation of Latin America's diverse societies.

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

284. African-American History. (3)
(Also offered as AFAM 284.) The course examines major events and personalities that shaped the history of African Americans in the United States.

285. African-American History II.
(Also offered as AFAM 285.) This course will explore each of the major historical events, Black leaders of those times and their influence on the social and political advancement of Afro-American from the Civil War to the present.

335. Russian Culture and History through Film. (3)
(Also offered as RUSS 339 and MA 339.) In this course we study films and read secondary sources from the Soviet and post-Soviet eras (with English subtitles) and examine how they comment on current Russian social and cultural issues. Taught in English.

III. Early Modern Europe

300./500. Studies in History. (1-3, no limit) \( \Delta \)
Will vary from instructor to instructor, but will be an in-depth analysis of specific historical problems. For course content, consult Schedule of Classes.

306./506. Reformation Era, 1500–1600. (3) Steen
(Also offered as RELG 306.) Religious revolution and concurrent developments in European politics, society and culture.

307./507. Europe in the Seventeenth Century. (3) Steen
Survey of political, cultural, social and economic trends in Europe during Thirty Years War and reign of Louis XIV. Special emphasis on developments in England, France and Habsburg dominions.

308./508. Europe in the Eighteenth Century, 1700–1788. (3) Steen
Survey of the political, cultural, social and economic situation in Europe at height of Old Regime. Emphasis will be on intellectual and social developments that culminated in French Revolution.

309./509. The French Revolution and Napoleon, 1789–1815. (3) Steen
Survey of the course of the revolution and its impact on France and on European social, political, economic and military life.

315./515. Romanov Russia to 1855. (3) Robbins
From the Time of Troubles to the death of Nicholas I. Stresses the development of political institutions and the origins of the revolutionary movement.

318./518. Spain and Portugal to 1700. (3) Sanabria
The consolidation and expansion of the Christian empires of Aragon, Castile and Portugal across Iberia and the Atlantic, from Muslim times to the War of Spanish Succession.
IV. Modern Europe

320./520. History of Women from Ancient Times to the Enlightenment. (3) Slaughter
(Also offered as WMST 320.) Study of sex roles in primitive societies, classical views of women, the Judeo-Christian treatment of women, medieval social roles and the changes that came with the Renaissance and Reformation. Attention will be paid to the role of women in the family and to their economic function as well as to the less common activities of saint, witch and revolutionary.

328./528. History of Science From Antiquity to the Scientific Revolution. (3) Moy
A history of western science from ancient Mesopotamia through the “Scientific Revolution.”

411./611. History of England, 1066–1660. (3) Rubenstein
Survey of medieval foundations, Tudor era and 17th-century social and political revolutions.

329./529. History of Science Since the Enlightenment. (3) Moy
A history of western science from the Enlightenment to the 20th century.

317./517. Europe since 1939. (3) Bokovoy
This course examines the impact of political and cultural changes upon urban spaces and urban lives from the 17th century, including revolutions, imperial expansion, the emergence of class society, transformations in urban and rural environments, cultural identity and nationalism.

311./511. World War I, 1914–1918. (3) Bokovoy
A social, cultural, political, diplomatic and military history of World War I.

312./512. Modern Europe, 1890–1939. (3) Bokovoy, Schibeci
The origins of World War I, World War II and the search for peace.

313./513. Europe since 1939. (3) Bokovoy, Slaughter
Study of the transformation of Europe after World War II as experienced on the political, economic, social and cultural levels.

316./516. Russia in the Era of Reform and Revolution, 1855–1924. (3) Robbins
From the “Great Reforms” to the death of Lenin. Surveys the vast political, social and cultural changes which produced and accompanied the Russian revolution.

317./517. Stalinist and Post-Stalinist Russia, 1924 to Present. (3) Robbins
Surveys the attempt to construct a communist society in Russia and the ultimate collapse of this tragic experiment. Briefly treats post-soviet developments. Emphasis on political, social and cultural change.

319./519. Spain and Portugal since 1700. (3) Sanabria
Survey of Spanish and Portuguese history since the war of Spanish Succession through Spain and Portugal’s successful democratic transitions, with special emphasis on the second Spanish Republic and Civil War.

321./521. Women in the Modern World. (3) Hutchinson, Scharff, Slaughter
(Also offered as WMST 316.) Study of western women from pre-industrial to contemporary society which will focus on Victorianism, familial roles, changes in work patterns, feminist movements and female participation in fascist and revolutionary politics.

329./529. History of Science Since the Enlightenment. (3) Moy
A history of western science from the Enlightenment to the 20th century.

351./551. History of Sport. (3) Sanabria
This course offers an interdisciplinary exploration of the history of sport and the relationship between sport and societies in Western Europe, the United States and their colonies from Antiquity through modern times.

414./614. Twentieth Century Spanish Culture. (3) Sanabria
A historical approach to Spanish culture since the Spanish-American War (1898), focusing on regionalism, the commercialization of sport and leisure, the construction of gender roles and Spain’s entry into the European Community.

415./615. European Diplomatic History. (3) Spidle
Since 1815.

416./616. History of Medicine to 1850. (3) Spidle
A survey of western medicine’s development to mid-19th century, aimed at the non-specialist. Includes the impact of health factors in general historical development.

417./617. History of Modern Medicine. (3) Spidle
Survey of western medicine since mid-19th century, aimed at the non-specialist. Includes the impact of health factors in general historical development.

418./618. City Life. (3)
(Also offered as SOC 338.) A study of the development of urban spaces and urban lives from the 17th century, which considers the impact of political and cultural changes upon physical spaces and their impact upon modern lives.

419./619. Formation of Modern European Culture. (3)
Via a broad variety of media arts, theories and documents, this course introduces students to people and events that have contributed to changing definitions of modern European cultural identity between the 17th and 20th centuries.

420./620. Modern France since 1815. (3) Sanabria
A survey of French history from the Bourbon Restoration through modern times. Particular attention given to the Third Republic, the French colonial empire, French fascism and Vichy France, and France’s role in the modern world.

421./621. Britain 1660 to the Present. (3)
Surveys British society and culture from the restoration to the monarchy and emphasizes Britain’s influence on world politics and culture.

422./622. Modern European Imperialism. (3)
This course examines the expansion of European imperialism since the 17th century, from trading companies to cultural imperialism.

423./623. Germany, 1871 to 1971. (3) Spidle
Bismarck to Brandt, a survey of German history from unification to contemporary times, with special emphasis on Weimar and Hitlerian Germany.

424./624. Modern Eastern Europe. (3) Bokovoy
The study of the “other” Europe, examining Eastern Europe during WWI, the interwar years, WWII and the communist and post-communist eras.

425./625. Europe and the Balkans. (3) Bokovoy
This course explores the Balkan peninsula not only as Europe’s most diverse and complex cultural crossroad and frontier, but as an “imagined” political and cultural other.

426./626. History of the Holocaust. (3) Pugach
(Also offered as RELG 426.) An examination of the motives, methods and execution of the destruction of the Jews by Nazi Germany and the responses of Jews, Western Powers, the Churches and Righteous Gentiles in the context of Jewish and world history.

427./627. History of Sexuality. (3) Slaughter
(Also offered as WMST 427.) Study of sexual behavior, politics and ideology in Western Society from the pre-modern world to the contemporary era. Background in History of Women Studies is suggested.
428./528. Women, War and Revolution. (3) Slaughter
(Also offered as WMST 428.) Study of women’s participation in wars and revolutions, and discussion of the social impact of these events which often alters women’s status, experience and expectations. Typical approach using global examples and case studies.

V. United States History

300./500. Studies in History. (1-3, no limit) ∆
Will vary from instructor to instructor, but will be an in-depth analysis of specific historical problems. For course content, consult Schedule of Classes.

330./530. The American Colonies, 1607–1763. (3)
Yazawa
The settlement of English America. The transference of institutions and attitudes from Britain, Europe and Africa to North America and what happened to them when they encountered the new environment and the native population.

331./531. The American Revolution, 1763–1789. (3)
Yazawa
The separation of British America from the mother country: why it was undertaken, how it was achieved, what its significance was. The effort to gather a scattered and diverse people under one constitutional government.

332./532. Age of Washington and Jefferson. (3)
Yazawa
Study of the impact of the American Revolution on the post-war society, the creation of the new nation, crisis of the 1790s, origin of modern political parties, Jeffersonian America, the War of 1812 and the movement westward.

333./533. Age of Jackson. (3)
The United States from 1815 to 1848, emphasizing economic growth, social transformation, westward expansion, political democratization, nationalism and sectionalism, and the rise of the slavery controversy.

334./534. The Civil War Era. (3)
The United States from 1848 to 1868. Topics covered include slavery, anti-slavery and the coming of the Civil War; social, political and economic aspects of the war; emancipation and Reconstruction.

336./536. Twentieth Century America 1920–1960. (3)
Americans debate the role of government, the meaning of social justice and their role in the world as they forge the New Deal at home and fight fascism and then communism abroad.

337./537. Twentieth Century America, 1960–Present. (3)
From JFK/LBJ liberalism to Reagan/Gingrich conservatism; the civil rights revolution and its backlash; from Vietnam to post-Cold War internationalism; democracy in the information age.

338./538. The United States in the World War II Era. (3)
Szasz
The Era of World War II from the mid 1930s to the mid 1950s, with a focus on the social, political, economic, cultural, military and diplomatic aspects of the conflict.

339./539. Vietnam War Era. (3)
Hutton
This history of the Vietnam War era covers the origins of the conflict, the nature of the war, the home front reaction and the political, military and social consequences.

340./540. U.S. Foreign Relations to 1900. (3)
Pugach
Survey and analysis of U.S. foreign relations from independence to 1900.

341./541. U.S. Foreign Relations from 1900. (3)
Pugach
Survey and analysis of U.S. foreign relations in the 20th century.

342./542. Constitutional History of the United States to 1877. (3)
Yazawa
The American Constitution from English origins through the Civil War and Reconstruction. The continuing effort to fashion a frame of government broad enough to embrace diverse peoples of different races, religious, national origins and value systems.

343./543. Constitutional History of the United States since 1877. (3)
Yazawa
Sequel to 342. A century-long struggle to resolve the conflicting liberties of the people and requirements of an ordered society. Examination of the occasional collisions of the cherished rights of property and personal freedom.

344./544. U.S. Women to 1865. (3)
Scharff
This course introduces students to the history of American women’s roles, status and ideas before 1865.

345./545. U.S. Women since 1865. (3)
Scharff
This course introduces students to the history of American women’s roles, status and ideas since 1865.

346./546. Native America to 1850. (3)
Connell-Szasz
(Also offered as NAS 346.) This course will cover American Indian/Alaska Native history to 1850.

347./547. Native America, 1850–1940. (3)
Connell-Szasz
(Also offered as NAS 347.) This course will cover American Indian/Alaska Native history from 1850 to 1940.

348./548. Native America Post-1940. (3)
Connell-Szasz
(Also offered as NAS 342.) Course will address issues that Native Americans have dealt with from World War II to the early 21st century, including termination, urbanization, Red Power, gaming and self-determination.

349./549. Military History of the United States to 1900. (3)
Hutton
Survey of U.S. military and naval history from colonial times to 1900, with emphasis upon technological, managerial and political developments that have affected the armed services.

350./550. Modern U.S. Military History, 1900 to Present. (3)
Hutton
A survey of the origins and development of American military institutions, traditions and practices of the 20th century. Attention to WWI, WWII and the Vietnam war, technological advances and institutional history will be given.

351./551. History of Sport. (3)
Sanabria
This course offers an interdisciplinary exploration of the history of sport and the relationship between sport and societies in Western Europe, the United States and their colonies from Antiquity through modern times.

430./630. The Old South. (3)
The South from the beginning of colonization to the outbreak of the Civil War. Emphasis on slavery and its impact on southern society.

431./631. Political History of the United States. (3)
Study of American politics from 1787 to the present. Emphasis on national politics with special attention to the presidency and changes in the political systems.

432./632. U.S. Social Life and Leisure. (3)
Sandovall-Strausz, Scharff
An inquiry into sociability in the United States from 1820 to 1960. Leading themes include youth and working-class culture, social policing, identity, social life under capitalism, sexuality, travel, consumer culture and the politicization of leisure.

433./633. U.S. Environmental History. (3)
Scharff, Truett
Examines the environmental transformation of the United States from the colonial era to the present day. Focus on the ecological consequences of colonial encounters; shifting links between cultures, markets and the land; changing ideas and politics of nature; and the environmental impacts and inequalities of urban-industrial life.
Chicana/o population of the U.S.
focus on the different socio-economic experiences of the communities in the late 19th and 20th century with a special
This course examines the historical development of Chicana/o history. (3) Reyes

VI. The American West
300./500. Studies in History. (1-3, no limit) ∆
Will vary from instructor to instructor, but will be an in-depth analysis of specific historical problems. For course content, consult Schedule of Classes.

360./560. History of the American Frontier. (3) Connell-Szasz, Hutton
Frontier expansion and conflict from the time of European discovery to the Mexican-American War.

361./561. The Trans-Mississippi West. (3) Connell-Szasz, Hutton

362./562. The American West in the Twentieth Century. (3) Scharff
Surveys the growth of the trans-Mississippi West in the 20th century, giving attention to social development, economic growth, cultural development, the role of minority groups and the impact of science and technology.

363./563. Early History of Mexican-Americans. (3) Reyes
This course will review the history of the Southwest from pre-conquest and Spanish colonization to the U.S. invasion and its aftermath.

364./564. Contemporary Chicana/o History. (3) Reyes
This course examines the historical development of Chicana/o communities in the late 19th and 20th century with a special focus on the different socio-economic experiences of the Chicana/o population of the U.S.

365./565. U.S. Culture and Society 1860-. [American Culture and Society Since 1860.] (3) Szasz

366./566. Western Films. (3) Hutton
Intended to complement courses in the history of the American West. It will deal with the role of Westmens in the development of the American film industry. The approach will be interdisciplinary and utilize approaches from the fields of history, literature and film. (Fall)

367./567. The Western Hero. (3) Hutton
This course examines the evolution of the western hero. In fiction, history and film the western hero has mirrored the development of the nation, always responding to a rapidly changing society—and more often than not defining it.

368./568. Women in the U.S. West. (3) Scharff, Reyes
History of women in the western United States from the colonial period to the present, with attention to women’s work and family roles, common stereotypes of western women, sex roles on the frontier and why women’s suffrage was first achieved in the West.

369./569. Hispanic Frontiers in North America. (3) Reyes, Truett
Hispanic histories of the frontiers of New Spain and Mexico. Focus on historical encounters, environmental transformations and changing identities at the northern frontiers of New Spain and Mexico. From the time of Columbus to 1848.

370./570. Inca Empire to Spanish Colony: Spanish South America to 1824. (3) Gauderman
The native cultures in pre-Conquest times; the conquest of the Incas and the colonial settlement of the remainder of Spanish South America; economic, social and cultural developments of colonial times, concentrating on the central Andean region, but with accounts of varying development in other areas; the origins and accomplishment of independence in the early 19th century.

371./571. From Aztec to Spanish Domination: The History of Early Mexico. (3) Gauderman

372./572. Mexico Since 1821. (3) Bieber, Hall, Hutchison
Study of the events, leadership, social and economic implications, and role of U.S. involvement in the Mexican Revolution of 1910–1920.
374./574. Southern South America. (3) Hutchison
   Argentina, Chile, Uruguay and Paraguay from colonization to the present. Most emphasis on late 19th and 20th centuries, when these nations led the region’s development. Deals with the rise of the export economies, populist movements, milita-
rism and socio-economic stagnation.

375./575. Rebellion and Revolution in Modern Andean Nations. (3) Gauderman
Focuses on the history of Bolivia, Colombia, Ecuador and Peru from their independence from Spain to modern times. Explores political and economic themes as well as the socio-economic and political dimensions of class, race, ethnicity and gender.

376./576. Brazil in the Colonial Period, 1500–1822. (3) Bieber
   Colonial Brazil from 1500 to 1822. Focus on structures of colo-
nialism and their impact on indigenous, African and European peoples. Plantation society, slavery, mercantile policy, the role of the church, women and family will be discussed.

377./577. Modern Brazil, 1822–Present. (3) Bieber
History of Brazil since independence. Topics include oligarchi-
cal politics, the end of slavery, race relations, urbanization, industrialization, authoritarian regimes, labor and peasant movements.

389. Latin American Thought I. (3)
   (Also offered as RELG, SOC, PHIL 389.) Pre-Columbian thought through independence ideologies.

390. Latin American Thought II. (3)
   (Also offered as SOC, RELG, PHIL 390.) Positivism through contemporary thought.

468./648. Society and Development in Latin America, 1492–Present. (3) Bieber
   Overview of social and economic trends in Latin America, stressing labor systems, social structure, trade, demography and industrialization.

469./649. Inter-American Relations. (3) Hall
   Relations among the American nations since 1810 and with other world powers. Stresses U.S. role in the region after 1900, as well as tendencies to curb that influence. Guerrilla warfare, revolutionary networks and Third World ideology covered.

470./650. Labor and Working Class in Latin America. (3) Hutchison
   This course traces the evolution of Latin American labor systems in the modern period.

471./651. Women in Early Latin America. (3) Hall, Gauderman
   (Also offered as WMST 418.) A historical exploration of the place of women within the social systems of pre-Columbian and colonial Latin America. Will explore the gendered dimen-
sions of the economy, politics and culture in indigenous and Spanish societies.

472./652. Women in Modern Latin America. (3) Hall, Hutchison
   (Also offered as WMST 472.) Course will focus on women in Latin America, 1821–present, through various historical developments. Will explore political themes, such as suf-
frage, revolution and military regimes and social dimensions of class, race, ethnicity, work and family.

473./653. Indigenous Peoples of Latin America. (3) Bieber, Gauderman
   Historical overview of indigenous peoples of Spanish and Portuguese America from pre-colonial times to the present. Emphasis on cultural history, contact and change and policies impacting native American groups.

474./654. Slavery and Race Relations. (3) Bieber
   Overview of slavery, the slave trade and post-emancipation race relations in the U.S., the Caribbean and Latin America.

475./655. The Cuban Revolution, 1959 to Present. (3)
   (Also offered as SOC 484.) Background to revolution since 1898; emphasis on period since 1959.

476./656. Latin American Religions. (3) Hutchison
   Religious experience, movements and communities in Latin America, from conquest to the present. Examines the cultural interactions that have shaped belief and practice, and polit-
ics—particularly the influence of Catholicism and of native and African religions.

VIII. Asian History

300./500. Studies in History. (1-3, no limit) ∆
   Will vary from instructor to instructor, but will be an in-depth analysis of specific historical problems. For course content, consult Schedule of Classes.

380./580. The Ancient Near East. (3)
   A political and social survey of civilization in Egypt and Mesopotamia from its birth in Sumer in the fourth millenn-
ium to the destruction of the Achaemenid Persian empire by Alexander.

381./581. Traditional China. (3) Porter
   Emergence and development of Chinese civilization to its height in the 13th century, including cultural, political, social and economic themes.

382./582. Imperial China. (3) Porter
   The development of early modern society and the impact of the West from the 13th to the 20th century.

383./583. Revolutionary China. (3) Porter
   Political, social economic and cultural history of China in the revolutionary period from 1911 to the present.

384./584. History of Japan. (3) Porter
   Social, political, and economic institutions from historical beginnings to modern times.

386./586. The Islamic Middle East to 1800. (3) Risso
   The political, social and economic development of the Islamic world through the Ottoman and Safavid eras. Arab, Persian and Turkish elements of Islamic civilization will be included.

387./587. The Modern Middle East from 1800. (3) Risso
   Topics include 19th-century reform attempts, the transition from empire to nation-states, the gap between ideology and practice, the Arab-Israeli conflict and revolutionary Iran.

388./588. India. (3) Risso
   History of South Asia with emphasis on cultural development, social groups and religious communities and the establish-
ment of the modern nation-state of India.

453. Asian Studies Senior Thesis. (3)
   (Also offered as RELG, PHIL, POLS 453.) Supervised research in one or more disciplines leading to an undergradu-
ate thesis for the major in Asian Studies.

480./660. Christians and Spices: The Western Impact on Asia. (3) Porter
   The era of European expansion in Asia from Vasco da Gama to circa 1900; sources of European expansion, the early struggles and conquests, colonial systems and imperialism.

481./661. Islam. (3) Risso
   (Also offered as RELG 481.) Topics include the development of Islamic law and theory; philosophy and mysticism; ritual and art. The political, social and economic ramifications of Islam will be emphasized.

482./662. Raj: India During British Rule. (3) Risso
   Covering the two centuries from 1756 through 1947, this course includes inter-cultural contacts, economic issues and the developments of both Indian and Muslim nationalisms.
IX. Women and Gender

300./500. Studies in History. (1-3, no limit) ∆ Will vary from instructor to instructor, but will be an in-depth analysis of specific historical problems. For course content, consult Schedule of Classes.

320./520. History of Women from Ancient Times to the Enlightenment. (3) Slaughter (Also offered as WMST 320.) Study of sex roles in primitive societies, classical views of women, the Judeo-Christian treatment of women, medieval social roles and the changes that came with the Renaissance and Reformation. Attention will be paid to the role of women in the family and to their economic function as well as to the less common activities of saint, witch and revolutionary.

321./521. Women in the Modern World. (3) Hutchison, Scharff, Slaughter (Also offered as WMST 316.) Study of western women from pre-industrial to contemporary society which will focus on Victorianism, familial roles, changes in work patterns, feminist movements and female participation in fascist and revolutionary politics.

322./522. History of the Women’s Rights Movement. (3) Hutchison, Slaughter (Also offered as WMST 330.) A detailed study of the movements for women’s rights in the U.S., Europe and Latin America in the 19th and 20th centuries. The topic’s approach will emphasize the movement’s relation to and impact on broader historical questions.

344./544. U.S. Women to 1865. (3) Scharff This course introduces students to the history of American women’s roles, status and ideas before 1865.

345./545. U.S. Women since 1865. (3) Scharff This course introduces students to the history of American women’s roles, status and ideas since 1865.

427./627. History of Sexuality. (3) Slaughter (Also offered as WMST 427.) Study of sexual behavior, politics and ideology in Western Society from the pre-modern world to the contemporary era. Background in History of Women Studies is suggested.

428./628. Women, War and Revolution. (3) Slaughter (Also offered as WMST 428.) Study of women’s participation in wars and revolutions, and discussion of the social impact of these events which often alters women’s status, experience and expectations. Typical approach using global example and case studies.

453. Asian Studies Thesis. (3) (Also offered as COMP, PHIL, POLS, RELG, 453.) Supervised research in one or more disciplines leading to an undergraduate thesis for the major in Asian Studies.

462./608. Women in the U.S. West. (3) Scharff, Reyes History of women in the western United States from the colonial period to the present, with attention to women’s work and family roles, common stereotypes of western women, sex roles on the frontier and why women’s suffrage was first achieved in the West.

471./651. Women in Early Latin America. (3) Gauderman, Hall (Also offered as WMST 418.) A historical exploration of the place of women within the social systems of pre-Columbian and colonial Latin America. Will explore the gendered dimensions of the economy, politics and culture in indigenous and Spanish societies.

472./652. Women in Modern Latin America. (3) Bieber, Hall, Hutchison (Also offered as WMST 472.) Course will focus on women in Latin America, 1821–present, through various historical developments. Will explore political themes, such as suffrage, revolution and military regimes and social dimensions of class, race, ethnicity, work and family.

X. Race and Ethnicity

300./500. Studies in History. (1-3, no limit) ∆ Will vary from instructor to instructor, but will be an in-depth analysis of specific historical problems. For course content, consult Schedule of Classes.

346./546. Native America to 1850. (3) Connell-Szasz (Also offered as NAS 346.) This course will cover American Indian/Alaska Native history to 1850.

347./547. Native America, 1850–1940. (3) Connell-Szasz (Also offered as NAS 347.) The course will cover American Indian/Alaska Native history from 1850 to 1940.

348./548. Native America Post-1940. (3) Connell-Szasz (Also offered as NAS 348.) Course will address issues that Native Americans have dealt with from World War II to the early 21st century, including termination, urbanization, Red Power, gaming and self-determination.

363./563. Early History of Mexican-Americans. (3) Reyes This course will review the history of the Southwest from pre-conquest and Spanish colonization to the U.S. invasion and its aftermath.

364./564. Contemporary Chicana/o History. (3) Reyes This course examines the historical development of Chicana/o communities in the late 19th and 20th century with a special focus on the different socio-economic experiences of the Chicana/o population of the U.S.

436./636. Race in 20th Century America. (3) The 20th century history of Americans’ struggle to solve “the problem of the color line.”

444./612. Native American and Celtic History Since 1700. (3) Connell-Szasz Course will have a cross-cultural focus and look at how major trends of the modern era have played out among various American Indian/Alaska Native Nations and the Celtic people of Eire (Ireland), Alba (Scotland) and Cymru (Wales).

463./643. Hispanic Frontiers in North America. (3) Reyes, Truett History of colonial encounters, Indian-European exchanges and conflicts, environmental transformations and changing identities at the northern frontiers of New Spain and Mexico. From the time of Columbus to 1848.

464./644. U.S.–Mexico Borderlands. (3) Truett History of the U.S.–Mexico borderlands and its various native and immigrant communities from 1848 to the present. Focus on cultural and economic linkages, ethnic and military struggles, and formation of new identities on the border.

465./645. History of Mexican Immigration. (3) Reyes This course examines the history of Mexican immigration to the U.S. We review historical interpretations of the broader political economy of colonial, 19th and 20th century America to contextualize past and current Mexican immigration.

466./646. Native American Southwest. (3) Truett (Also offered as NAS 466.) In this class we will explore the history of Native American groups and their relationships to dominant cultures and nations in the American Southwest and Northern Mexico.

473./653. Indigenous Peoples of Latin America. (3) Bieber, Gauderman Historical overview of indigenous peoples of Spanish and Portuguese America from pre-colonial times to the present. Emphasis on cultural history, contact and change and policies impacting native American Groups.
474./654. Slavery and Race Relations. (3) Bieber
Overview of slavery, the slave trade and post-emancipation race relations in the U.S., the Caribbean and Latin America.

XI. Religion, Science and Ideas

300./500. Studies in History. (1-3, no limit) ∆
Will vary from instructor to instructor, but will be an in-depth analysis of specific historical problems. For course content, consult Schedule of Classes.

323./523. History of the Jewish People to 1492. (3)
Pugach
(Also offered as RELG 323.) Survey of Jewish history in Ancient and Medieval times, stressing major religious, intellectual, political and social developments. Traces the transformation of the Hebrews into the Jews and Israelite religion into Judaism. Highlights the Rabinic era and the diaspora experience in the Islamic and Christian worlds. (Fall and alternate years)

324./524. Modern History of the Jewish People. (3)
Pugach
(Also offered as RELG 324.) Survey in ethnic history stressing political, religious and social developments from the expulsion from Spain (1492) to the present. Concentrates on European Jewry but will include consideration of American Jewish community, modern anti-semitism and rise of the state of Israel. (Spring and alternate years)

325./525. History of World Communism. (3)
From Marx to the present.

326./526. History of Christianity to 1517. (3)
(Also offered as RELG 326.) The history of Christianity from its beginnings in Palestine to the eve of the Protestant Reformation. Primary focus will be on the rich variety of forms—doctrinal, liturgical and institutional—that Christianity assumed through the Medieval centuries. Also of concern will be its contributions and significance as a civilizing force. (Fall)

327./527. History of Christianity, 1517 to Present. (3)
(Also offered as RELG 327.) The development of Christianity from the Protestant Reformation into the modern world, including biography, doctrine, liturgy, institutions and religious practice, together with the interaction of Christianity with society at large. (Spring)

328./528. History of Science From Antiquity to the Scientific Revolution. (3) Moy
A history of western science from ancient Mesopotamia through the "Scientific Revolution."

329./529. History of Science Since the Enlightenment. (3) Moy
A history of western science from the Enlightenment to the 20th century.

416./616. History of Medicine to 1850. (3) Spidle
A survey of western medicine's development to mid-19th century, aimed at the non-specialist. Includes the impact of health factors in general historical development.

417./617. History of Modern Medicine. (3) Spidle
Survey of western medicine since mid-19th century, aimed at the non-specialist. Includes the impact of health factors in general historical development.

439./639. History of Science and Technology in the U.S. (3) Moy
A history of science and technology in the United States, examining both intellectual developments and the creation of an American scientific community.

440./640. Atomic America. (3) Moy
The history of atomic America in the 20th century, with focus on the political, social and cultural dimensions of the nuclear arms race; the controversy over nuclear energy; and the specter of nuclear terrorism.

441./641. History of Religion in America. (3) Szasz
(Also offered as RELG 441.) This class will cover the rise and development of the nation's religious groups, from first contact to the present day. The focus will be on the social impact of the groups and how they influenced the development of American life.

481./681. Islam. (3) Risso
(Also offered as RELG 481.) Topics include the development of Islamic law and theory; philosophy and mysticism; ritual and art. The political, social and economic ramifications of Islam will be emphasized.

XII. Special Courses, Undergraduate Colloquia and Seminars

490./590. World History: Comparative Themes. (3)
Skipping through time and space, this course investigates a series of themes common to human existence, and stresses interaction among different societies and civilizations. Teams taught by three members of the History Department.

491. Historiography. (3) Bieber, Sandoval-Strausz, Spidle
Development of historical thought and writing. Prerequisites: 101L–102L and a minimum of two upper-division courses in history. Restriction: permission from department. (Summer, Fall)

492. Senior Seminar. (3)
Restriction: permission from department.

493. Reading and Research in Honors. (3)
Restriction: permission of instructor.

494. Senior Thesis. (3)
Prerequisite: 493.

495./595. Introduction to Public History. (3) Ball
The object of this class is to introduce students to the field of Public History. The course will embrace the theory, method and practice of public history.

496. Undergraduate Readings in History. (1-3, no limit) ∆
Permission of instructor required before registering.

497./597. Introduction to Editing Historical Journals. (3) Ball
Nature and problems of editing historical journals. Appraisal, evaluation, revision and preparation for publication, including practical experience.

499. Internship. (3-9) ∆
Provides a supervised work experience in the practical application of historical skills. Training for interns is provided in various fields such as museum work, archival management and historical editing. It does not give credit toward minimum requirements for the Ph.D. Course may be repeated without limit provided the topics vary.

XIII. Graduate Seminars

665. Seminar in Historical Research Methods. (3, no limit) ∆
Restriction: permission of department graduate advisor.

666. Seminar and Studies in History. (3, no limit) ∆
Restriction: permission of department graduate advisor.

667. Seminar and Studies in Ancient History. (3, unlimited repetition) ∆
Restriction: permission of department graduate advisor.
680. Seminar and Studies in U.S. Social History and History. (3 to a maximum of 6) △
Restriction: permission of department graduate advisor.

681. Seminar and Studies in United States Diplomatic History. (3, no limit) △
Restriction: permission of department graduate advisor.

682. Seminar in American Western History. (3, no limit) △
Restriction: permission of department graduate advisor.

683. Seminar in American Indian History. (3, no limit) △
Restriction: permission of department graduate advisor.

684. Seminar and Studies in Chicana/o History. (3 to a maximum of 6) △
Restriction: permission of department graduate advisor.

685. Seminar in Borderlands History. (3, no limit) △
Restriction: permission of department graduate advisor.

686. Seminar in Early Latin America. [Seminar in Colonial Latin American History] (3, no limit) △
Restriction: permission of department graduate advisor.

687. Seminar in Recent Latin American History. (3, no limit) △
Restriction: permission of department graduate advisor.

688. Seminar and Studies in Brazilian History. (3, no limit) △
(Also offered as LTAM 504.) Format varies from research seminar to reading colloquium and covers the whole history of Brazil. Reading knowledge of Portuguese recommended. Restriction: permission of department graduate advisor.

689. Interdisciplinary Seminar on Problems of Modernization in Latin America. (3, no limit) △
(Also offered as ECON, POLS, SOC 584.) Restriction: permission of department graduate advisor.

690. Seminar in Latin-American Studies. (3, no limit) △
(Also offered as LTAM 504.) Restriction: permission of department graduate advisor.

691. Seminar and Studies in Far Eastern History. (3, no limit) △
Restriction: permission of department graduate advisor.

692. Seminar in the History of Women and Gender. (3, no limit) △
Restriction: permission of department graduate advisor.

693. Public History. (3)
This seminar will explore the field of Public History, the application of history outside the traditional teaching track in areas such as museum curating, archival curating, historical editing, film writing, public historical interpretation, contract history, historical preservation and other related areas of historical endeavor. Restriction: permission of department graduate advisor.

697–698. Problems. (1-9, 1-9, no limit) △
Restriction: permission of department graduate advisor.

599. Master’s Thesis. (1-6)
Offered on a CR/NC basis only.

699. Dissertation. (3-12)
Offered on a CR/NC basis only.
Restriction: permission of department graduate advisor.

XIV. Graduate Courses

500/300. Studies in History. (1-3, no limit) △
Will vary from instructor to instructor, but will be an in-depth analysis of specific historical problems. For course content, consult Schedule of Classes.

501/301. Greece. (3)
A political and social survey of the Greek people from the Mycenaean world through the long autumn of Hellenistic age and the arrival of the Romans.

502/302. Rome. (3)
A political and social survey of the Roman people from their origins on the Tiber through the glories of Empire to the final collapse of classical society in the 6th century.

503/303. Early Middle Ages, 300 to 1050. (3) Graham, Rubenstein
The emergence of medieval European civilization from the reign of Constantine to the beginnings of the papal monarchy. Prerequisite: 101L.

504/304. The High Middle Ages, 1050 to 1400. (3) Graham, Rubenstein
The maturing of medieval civilization: Gregorian reform, the Crusades, the rise of the university and the Gothic cathedral.

505/305. Renaissance Era, 1300 to 1520. (3) Rubenstein
The decline of medieval civilization and the transition to a new phase of European history.
506./306. Reformation Era, 1500–1600. (3) Steen
(Also offered as RELG 506.) Religious revolution and concurrent developments in European politics, society and culture.

507./307. Europe in the Seventeenth Century. (3) Steen
Survey of political, cultural, social and economic trends in Europe during Thirty Years War and reign of Louis XIV. Special emphasis on developments in England, France and Hapsburg dominions.

508./308. Europe in the Eighteenth Century, 1700–1788. (3) Steen
Survey of the political, cultural, social and economic situation in Europe at height of Old Regime. Emphasis will be on intellectual and social developments that culminated in French Revolution.

509./309. The French Revolution and Napoleon, 1789–1815. (3) Steen
Survey of the course of the revolution and its impact on France and on European social, political, economic and military life.

510./310. Modern Europe, 1815–1890. (3)
This course examines social, political and economic issues that shaped European society in the 19th century, including revolutions, imperial expansion, the emergence of class society, transformations in urban and rural environments, cultural identity and nationalism.

511./311. World War I, 1914–1918. (3) Bokovoy
A social, cultural, political, diplomatic and military history of World War I.

512./312. Modern Europe, 1890–1939. (3) Bokovoy, Schibeci
The origins of World War I, World War II and the search for peace.

513./313. Europe since 1939. (3) Bokovoy, Slaughter
Study of the transformation of Europe after World War II as experienced on the political, economic, social and cultural levels.

514./314. Old Russia from the Ninth to the Seventeenth Century. (3) Robbins
Survey of the Kievan, Mongol and Muscovite periods. Emphasis on political and social developments.

515./315. Romanov Russia to 1855. (3) Robbins
From the Time of Troubles to the death of Nicholas I. Stresses the development of political institutions and the origins of the revolutionary movement.

516./316. Russia in the Era of Reform and Revolution, 1855–1924. (3) Robbins
From the “Great Reforms” to the death of Lenin. Surveys the vast political, social and cultural changes which produced and accompanied the Russian revolution.

517./317. Stalinist and Post Stalinist Russia, 1924 to Present. (3) Robbins
Surveys the attempt to construct a communist society in Russia and the ultimate collapse of this tragic experiment. Briefly treats post-soviet developments. Emphasis on political, social and cultural change.

518./318. Spain and Portugal to 1700. (3) Sanabria
The consolidation and expansion of the Christian empires of Aragon, Castile and Portugal across Iberia and the Atlantic, from Muslim times to the War of Spanish Succession.

519./319. Spain and Portugal since 1700. (3) Sanabria
Survey of Spanish and Portuguese history since the war of Spanish Succession through Spain and Portugal’s successful democratic transitions, with special emphasis on the second Spanish Republic and Civil War.

520./320. History of Women from Ancient Times to the Enlightenment. (3) Slaughter
(Also offered as WMST 520.) Study of sex roles in primitive societies, classical views of women, the Judeo-Christian treatment of women, medieval social roles and the changes that came with the Renaissance and Reformation. Attention will be paid to the role of women in the family and to their economic function as well as to the less common activities of saint, witch and revolutionary.

521./321. Women in the Modern World. (3) Hutchison, Scharff. Slaughter
Study of western women from pre-industrial to contemporary society which will focus on Victorianism, familial roles, changes in work patterns, feminist movements and female participation in fascist and revolutionary politics.

522./322. History of the Women’s Rights Movement. (3) Hutchison, Slaughter
A detailed study of the movements for women’s rights in the U.S., Europe and Latin America in the 19th and 20th centuries. The topic’s approach will emphasize the movement’s relation to and impact on broader historical questions.

523./323. History of the Jewish People to 1492. (3) Pugach
Survey of Jewish history in Ancient and Medieval times, stressing major religious, intellectual, political and social developments. Traces the transformation of the Hebrews into the Jews and Israelite religion into Judaism, Highlights the Rabbinic era and the diaspora experience in the Islamic and Christian worlds. (Fall and alternate years)

524./324. Modern History of the Jewish People. (3) Pugach
(Also offered as RELG 524.) Survey in ethnic history stressing political, religious and social developments from the expulsion from Spain (1492) to the present. Concentrates on European Jewry but will include consideration of American Jewish community, modern anti-semitism and rise of the state of Israel. (Spring 2004 and alternate years)

525./325. History of World Communism. (3)
From Marx to the present.

526./326. History of Christianity to 1517. (3)
The history of Christianity from its beginnings in Palestine to the eve of the Protestant Reformation. Primary focus will be on the rich variety of forms—doctrinal, liturgical and institutional—that Christianity assumed through the Medieval centuries. Also of concern will be its contributions and significance as a civilizing force. (Fall)

527./327. History of Christianity, 1517 to Present. (3)
The development of Christianity from the Protestant Reformation into the modern world, including biography, doctrine, liturgy, institutions and religious practice, together with the interaction of Christianity with society at large. (Spring)

528./328. History of Science From Antiquity to the Scientific Revolution. (3) Moy
A history of western science from ancient Mesopotamia through the “Scientific Revolution.”

529./329. History of Science Since the Enlightenment. (3) Moy
A history of western science from the Enlightenment to the 20th century.

530./330. The American Colonies, 1607–1763. (3) Yazawa
The settlement of English America. The transference of institutions and attitudes from Britain, Europe and Africa to North America and what happened to them when they encountered the new environment and the native population.
531./331. The American Revolution, 1763–1789. (3) Yazawa
The separation of British America from the mother country: why it was undertaken, how it was achieved, what its significance was. The effort to gather a scattered and diverse people under one constitutional government.

532./332. Age of Washington and Jefferson. (3) Yazawa
Study of the impact of the American Revolution on the post-war society, the creation of the new nation, crisis of the 1790s, origins of modern political parties, Jeffersonian America, the War of 1812 and the movement westward.

533./333. Age of Jackson. (3) Hutton
The United States from 1815 to 1848, emphasizing economic growth, social transformation, westward expansion, political democratization, nationalism and sectionalism, and the rise of the slavery controversy.

534./334. The Civil War Era. (3) Hutton
The United States from 1848 to 1868. Topics covered include slavery, anti-slavery and the coming of the Civil War; social, political and economic aspects of the war; emancipation and Reconstruction.

536./336. Twentieth Century America 1920–1960. (3) Yazawa
Americans debate the role of government, the meaning of social justice and their role in the world as they forge the New Deal at home and fight fascism and then communism abroad.

537./337. Twentieth Century America, 1960–Present. (3) Connell-Szasz, Hutton
From JFK to liberal American conservatism; the civil rights revolution and its backlash; from Vietnam to post-Cold War internationalism; democracy in the information age.

538./338. The United States in the World War II Era. (3) Szasz
The Era of World War II from the mid 1930s to the mid 1950s, with a focus on the social, political, economic, cultural, military and diplomatic aspects of the conflict.

539./339. Vietnam War Era. (3) Hutton
This history of the Vietnam War era covers the origins of the conflict, the nature of the war, the home front reaction and the political, military and social consequences.

540./340. U.S. Foreign Relations to 1900. (3) Reyes
Pugach
Survey and analysis of U.S. foreign relations from independence to 1900.

541./341. U.S. Foreign Relations from 1900. (3) Reyes
Pugach
Survey and analysis of U.S. foreign relations in the 20th century.

542./342. Constitutional History of the United States to 1877. (3) Yazawa
The American Constitution from English origins through the Civil War and Reconstruction. The continuing effort to fashion a frame of government broad enough to embrace diverse peoples of different races, religions, national origins and value systems.

543./343. Constitutional History of the United States since 1877. (3) Yazawa
Sequel to 342. A century-long struggle to resolve the conflicting liberties of the people and requirements of an ordered society. Examination of the occasional collisions of the cherished rights of property and personal freedom.

544./344. U.S. Women to 1865. (3) Scharff
This course introduces students to the history of American women’s roles, status and ideas before 1865.

545./345. U.S. Women Since 1865. (3) Scharff
This course introduces students to the history of American women’s roles, status and ideas since 1865.

546./346. Native America to 1850. (3) Connell-Szasz
This course will cover American Indian/Alaska Native history to 1850.

547./347. Native America, 1850–1940. (3) Connell-Szasz
(Also offered as NAS 347.) The course will cover American Indian/Alaska Native history from 1850 to 1940.

548./348. Native America Post-1940. (3) Connell-Szasz
Course will address issues that Native Americans have dealt with from World War II to the early 21st century, including termination, urbanization, Red Power, gaming and self-determination.

549./349. Military History of the United States to 1900. (3) Hutton
Survey of U.S. military and naval history from colonial times to 1900, with emphasis upon technological, managerial and political developments that have affected the armed services.

550./350. Modern U.S. Military History, 1900 to Present. (3) Hutton
A survey of the origins and development of American military institutions, traditions and practices of the 20th century. Attention to WWI, WWII and the Vietnam war, technological advances and institutional history will be given.

551./351. History of Sport. (3) Sanabria
This course offers an interdisciplinary exploration of the history of sport and the relationship between sport and societies in Western Europe, the United States and their colonies from Antiquity through modern times.

560./360. History of the American Frontier. (3) Connell-Szasz, Hutton
Frontier expansion and conflict from the time of European discovery to the Mexican-American War.

561./361. The Trans-Mississippi West. (3) Connell-Szasz, Hutton

562./362. The American West in the Twentieth Century. (3) Scharff
Surveys the growth of the trans-Mississippi West in the 20th century, giving attention to social development, economic growth, cultural development, the role of minority groups and the impact of science and technology.

563./363. Early History of Mexican-Americans. (3) Reyes
This course will review the history of the Southwest from pre-conquest and Spanish colonization to the U.S. invasion and its aftermath.

564./364. Contemporary Chicana/o History. (3) Reyes
This course examines the historical development of Chicana/o communities in the late 19th and 20th century with a special focus on the different socio-economic experiences of the Chicana/o population of the U.S.

570./370. Inca Empire to Spanish Colony: Spanish South America to 1824. (3) Gauderman
The native cultures in pre-Conquest times; the conquest of the Incas and the colonial settlement of the remainder of Spanish South America; economic, social and cultural developments of colonial times, concentrating on the central Andean region, but with accounts of varying development in other areas; the origins and accomplishment of independence in the early 19th century.

571./371. From Aztec to Spanish Domination: The History of Early Mexico. (3) Gauderman
An introduction to the ancient, indigenous cultures of Mesoamerica. Examines Mexico’s political, economic and social development under Spanish colonial rule. Attention given to the social and cultural interaction among Mexico’s indigenous, European and African populations.

572./372. Mexico Since 1821. (3) Bieber, Hall, Hutchison
The major political, social and economic trends and events in Mexico from the independence movement to 1940.
573./373. The Mexican Revolution. (3) Hall  
Study of the events, leadership, social and economic implications, and role of U.S. involvement in the Mexican Revolution of 1910–1920.

574./374. Southern South America. (3) Hutchison  
Argentine, Chile, Uruguay and Paraguay from colonization to the present. Most emphasis on late 19th and 20th centuries, when these nations led the region’s development. Deals with the rise of the export economies, populist movements, militarism and socio-economic stagnation.

575./375. Rebellion and Revolution in Modern Andean Nations. (3) Gaunderman  
Focuses on the history of Bolivia, Colombia, Ecuador and Peru from their independence from Spain to modern times. Explores political and economic themes as well as the socio-economic and political dimensions of class, race, ethnicity and gender.

576./376. Brazil in the Colonial Period, 1500–1822. (3) Porter  
Colonial Brazil from 1500 to 1822. Focus on structures of colonialism and their impact on indigenous, African and European peoples. Plantation society, slavery, mercantile policy, the role of the church, women and family will be discussed.

577./377. Modern Brazil, 1822–Present. (3) Bieber  
History of Brazil since independence. Topics include oligarchic politics, the end of slavery, race relations, urbanization, industrialization, authoritarian regimes, labor and peasant movements.

580./380. The Ancient Near East. (3) Porter  
A political and social survey of civilization in Egypt and Mesopotamia from its birth in Sumer in the fourth millennium to the destruction of the Achaemenid Persian empire by Alexander.

581./381. Traditional China. (3) Porter  
Emergence and development of Chinese civilization to its height in the 13th century, including cultural, political, social and economic themes.

582./382. Imperial China. (3) Porter  
The development of early modern society and the impact of the West from the 13th to the 20th century.

583./383. Revolutionary China. (3) Porter  
Political, social economic and cultural history of China in the revolutionary period from 1911 to the present.

584./384. History of Japan. (3) Porter  
Social, political, and economic institutions from historical beginnings to modern times.

586./386. The Islamic Middle East to 1800. (3) Risso  
The political, social and economic development of the Islamic world through the Ottoman and Safavid eras. Arab, Persian and Turkish elements of Islamic civilization will be included.

587./387. The Modern Middle East from 1800. (3) Risso  
Topics include 19th-century reform attempts, the transition from empire to nation-states, the gap between ideology and practice, the Arab-Israeli conflict and revolutionary Iran.

588./388. India. (3) Risso  
History of South Asia with emphasis on cultural development, social groups and religious communities and the establishment of the modern nation-state of India.

590./490. World History: Comparative Themes. (3)  
Skipping through time and space, this course investigates a series of themes common to human existence, and stresses interaction among different societies and civilizations. Team taught by three members of the History Department.

595./495. Introduction to Public History. (3) Ball  
The object of this class is to introduce students to the field of Public History. The course will embrace the theory, method and practice of public history.

597./497. Introduction to Editing Historical Journals. (3) Ball  
Nature and problems of editing historical journals. Appraisal, evaluation, revision and preparation for publication, including practical experience.

This course will offer an overview of the history and culture of England from the arrival of the Angles and Saxons in the middle of the fifth century until the Battle of Hastings of 1066.

602./402. The Crusades. (3) Rubenstein  
This course will examine the phenomenon of the Crusades in the Middle Ages, examining the three (arguably more) distinct cultures involved and addressing issues relevant to social, political, intellectual and military history.

Survey of medieval foundations, Tudor era and 17th-century social and political revolutions.

612./444. Native American and Celtic History Since 1700. (3) Connell-Szasz  
Course will have a cross-cultural focus and look at how major trends of the modern era have played out among various American Indian/Alaska Native Nations and the Celtic people of Eire (Ireland), Alba (Scotland) and Cymru (Wales).

614./414. Twentieth Century Spanish Culture. (3) Sanabria  
An historical approach to Spanish culture since the Spanish/American War (1898), focusing on regionalism, the commercialization of sport and leisure, the construction of gender roles and Spain’s entry into the European Community.

615./415. European Diplomatic History. (3) Spidle  
Since 1815.

616./416. History of Medicine to 1850. (3) Spidle  
A survey of western medicine’s development to mid-19th century, aimed at the nonspecialist. Includes the impact of health factors in general historical development.

617./417. History of Modern Medicine. (3) Spidle  
Survey of western medicine since mid-19th century, aimed at the nonspecialist. Includes the impact of health factors in general historical development.

618./418. City Life. (3)  
A study of the development of urban spaces and urban lives from the 17th century, which considers the impact of political and cultural changes upon physical spaces and their impact upon modern lives.

619./419. Formation of Modern European Culture. (3)  
Via a broad variety of media arts, theories and documents, this course introduces students to people and events that have contributed to changing definitions of modern European cultural identity between the 17th and 20th centuries.

620./420. Modern France since 1815. (3) Sanabria  
A survey of French history from the Bourbon Restoration through modern times. Particular attention given to the Third Republic, the French colonial empire, French fascism and Vichy France, and France’s role in the modern world.

621./421. Britain 1660 to the Present. (3)  
Surveys British society and culture from the restoration to the monarchy and emphasizes Britain’s influence on world politics and culture.

622./422. Modern European Imperialism. (3)  
This course examines the expansion of European imperialism since the 17th century, from trading companies to cultural imperialism.

623./423. Germany, 1871 to 1971. (3) Spidle  
Bismarck to Brandt, a survey of German history from unification to contemporary times, with special emphasis on Weimar and Hitlerian Germany.
624./424. Modern Eastern Europe. (3) Bokovoy
The study of the "other" Europe, examining Eastern Europe during WWI, the interwar years, WWII and the communist and post-communist eras.

625./425. Europe and the Balkans. (3) Bokovoy
This course explores the Balkans peninsula not only as Europe's most diverse and complex cultural crossroad and frontier, but as an "imagined" political and cultural other.

626./426. History of the Holocaust. (3) Pugach
(Also offered as RELG 626.) An examination of the motives, methods and execution of the destruction of the Jews by Nazi Germany and the responses of Jews, Western Powers, the Churches and Righteous Gentiles in the context of Jewish and world history.

627./427. History of Sexuality. (3) Slaughter
Study of sexual behavior, politics and ideology in Western Society from the pre-modern world to the contemporary era. Background in History of Women Studies is suggested.

628./428. Women, War and Revolution. (3) Slaughter
Study of women's participation in wars and revolutions, and discussion of the social impact of these events which often alters women's status, experience and expectations. Typical approach using global examples and case studies.

630./430. The Old South. (3)
The South from the beginning of colonization to the outbreak of the Civil War. Emphasis on slavery and its impact on southern society.

631./431. Political History of the United States. (3)
Study of American politics from 1787 to the present. Emphasis on national politics with special attention to the presidency and changes in the political systems.

632./432. U.S. Social Life and Leisure. (3) Sandoval-Strausz, Scharff
An inquiry into sociability in the United States from 1820 to 1960. Leading themes include youth and working-class culture, social policing, identity, social life under capitalism, sexuality, travel, consumer culture and the politicization of leisure.

633./433. U.S. Environmental History. (3) Scharff, Truett
Examines the environmental transformation of the United States from the colonial era to the present day. Focus on the ecological consequences of colonial encounters; shifting links between cultures, markets and the land; changing ideas and politics of nature; and the environmental impacts and inequalities of urban-industrial life.

634./434. U.S. Business and Labor History. (3) Sandoval-Strausz
This course traces developments in the structure of profit-making enterprises and the organization of labor in United States history, examining how the imperatives of capitalism and the struggles of working people shaped the American economy.

635./435. U.S. Culture and Society 1860-. [American Culture and Society Since 1860.] (3) Szasz

636./436. Race in 20th Century America. (3)
The 20th century history of Americans' struggle to solve "the problem of the color line."

637./437. The City in America. (3) Sandoval-Strausz
This course examines the urban landscapes of America—its physical form as well as the cultural beliefs and practices; economic conditions, material and social technologies; and individual aspirations which shape urban life, function and form.

638./438. American Legal History. (3) Sandoval-Strausz
Law is all around us: in politics, at work and in the home. This course will help students understand state and private law, which have substantial bearing on their lives and those of other Americans.

639./439. History of Science and Technology in the U.S. (3) Moy
A history of science and technology in the United States, examining both intellectual developments and the creation of an American scientific community.

640./440. Atomic America. (3) Moy
The history of atomic America in the 20th century, with focus on the political, social and cultural dimensions of the nuclear arms race; the controversy over nuclear energy; and the specter of nuclear terrorism.

641./441. History of Religion in America. (3) Szasz
(Also offered as RELG 641.) This class will cover the rise and development of the nation's religious groups, from first contact to the present day. The focus will be on the social impact of the groups and how they influenced the development of American life.

606./460. Western Films. (3) Hutton
Intended to complement courses in the history of the American West. It will deal with the role of Westerns in the development of the American film industry. The approach will be interdisciplinary and utilize approaches from the fields of history, literature and film. (Fall)

607./461. The Western Hero. (3) Hutton
This course examines the evolution of the western hero. In fiction, history and film the western hero has mirrored the development of the nation, always responding to a rapidly changing society—and more often than not defining it.

608./462. Women in the U.S. West. (3) Scharff, Reyes
History of women in the western United States from the colonial period to the present, with attention to women's work and family roles, common stereotypes of western women, sex roles on the frontier and why women's suffrage was first achieved in the West.

643./463. Hispanic Frontiers in North America. (3)
Reyes, Truett
History of colonial encounters, Indian-European exchanges and conflicts, environmental transformations and changing identities at the northern frontiers of New Spain and Mexico. From the time of Columbus to 1848.

644./464. U.S.–Mexico Borderlands. (3) Truett
History of the U.S.–Mexico borderlands and its various native and immigrant communities from 1848 to the present. Focus on cultural and economic linkages, ethnic and military struggles, and formation of new identities on the border.

645./465. History of Mexican Immigration. (3) Reyes
This course examines the history of Mexican immigration to the U.S. We review historical interpretations of the broader political economy of colonial, 19th and 20th century America to contextualize past and current Mexican immigration.

646./466. Native American Southwest. (3) Truett
In this class we will explore the history of Native American groups and their relationships to dominant cultures and nations in the American Southwest and Northern Mexico.

648./468. Society and Development in Latin America, 1492–Present. (3) Bieber
Overview of social and economic trends in Latin America, stressing labor systems, social structure, trade, demography and industrialization.

649./469. Inter-American Relations. (3) Hall
Relations among the American nations since 1810 and with other world powers. Stresses U.S. role in the region after 1900, as well as tendencies to curb that influence. Guerrilla warfare, revolutionary networks and Third World ideology covered.

650./470. Labor and Working Class in Latin America. (3) Hutchison
This course traces the evolution of Latin American labor systems in the modern period.
651./471. Women in Early Latin America. (3) Gauderman, Hall
A historical exploration of the place of women within the social systems of pre-Columbian and colonial Latin America. Will explore the gendered dimensions of the economy, politics and culture in indigenous and Spanish societies.

652./472. Women in Modern Latin America. (3) Bieber, Hall, Hutchison
Course will focus on women in Latin America, 1821–present, through various historical developments. Will explore political themes, such as suffrage, revolution and military regimes and social dimensions of class, race, ethnicity, work and family.

653./473. Indigenous Peoples of Latin America. (3) Bieber, Gauderman
Historical overview of indigenous peoples of Spanish and Portuguese America from pre-colonial times to the present. Emphasis on cultural history, contact and change and policies impacting native American Groups.

654./474. Slavery and Race Relations. (3) Bieber
Overview of slavery, the slave trade and post-emancipation race relations in the U.S., the Caribbean and Latin America.

655./475. The Cuban Revolution, 1959 to Present. (3)
(Also offered as SOC 484.) Background to revolution since 1898; emphasis on period since 1959.

656./476. Latin American Religions. (3) Hutchison
Religious experience, movements and communities in Latin America, from conquest to the present. Examines the cultural interactions that have shaped belief and practice, and politics—particularly the influence of Catholicism and of native and African religions.

660./480. Christians and Spices: The Western Impact on Asia. (3) Porter
The era of European expansion in Asia from Vasco da Gama to circa 1900; sources of European expansion, the early struggles and conquests, colonial systems and imperialism.

661./481. Islam. (3) Risso
(Also offered as RELG 661.) Topics include the development of Islamic law and theory; philosophy and mysticism; ritual and art. The political, social and economic ramifications of Islam will be emphasized.

662./482. Raj: India During British Rule. (3) Risso
Covering the two centuries from 1756 through 1947, this course includes inter-cultural contacts, economic issues and the developments of both Indian and Muslim nationalisms.

See Foreign Languages and Literatures.

ITALIAN

INTERNATIONAL STUDIES

Asian Studies
Jonathan Porter, Chairperson
Mesa Vista 1104
MSC06 3760
1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 277-5214
jporter@unm.edu

Advisory Committee
Lori Brau, Foreign Languages and Literatures
Andrew Burgess, Religious Studies
Krishna Kandath, Communication & Journalism
Noel Pugach, History

Undergraduate Major
The interdepartmental major requires 36 hours from the approved Asian Studies course list (below). Of these, 21 must be 300-level or above. Thirty-six credit hours total: 3 hours Senior Thesis (COMP, HIST, PHIL, POLS, RELG 453); 6 hours History; 6 hours Philosophy or Religious Studies; 3 hours Geography, Anthropology, Economics, Political Science or Sociology; 12 hours in an Asian language; 6 hours elective; 453 may not be counted twice. Each student will be required to declare a regional concentration and to have the proposed course distribution approved by the Asian Studies Committee at the beginning of the junior year. Regional concentrations are: East Asia, South Asia and the Middle East. A Senior Thesis is required. The student may choose a topic within a single discipline or culture, or may elect an interdisciplinary and/or cross-cultural approach. The Asian Studies Committee will appoint two thesis readers, normally the primary supervisor and another faculty member from an appropriate field. Three copies of the thesis must be submitted. Modification of the language requirement may be made on an individual basis with the approval of the Committee Chairperson.

Undergraduate Minor
An interdepartmental minor in Asian Studies consists of at least 18 hours in courses selected from the approved list below, including at least 3 hours in history, 3 hours in philosophy or religious studies and 3 hours in geography, anthropology or languages. It is recommended that the student take appropriate language courses. No more than 9 hours may be selected in any one department, and courses used to satisfy the major field may not be applied to the minor.

Approved Asian Studies Courses
The following courses have been approved (see appropriate departmental listings for course descriptions and prerequisites):

AFAM 106, 107, 206, 207; ANTH 328; ARTH 429 when the topic is appropriate; CJ 314, 413 when the topic is appropriate; COMP 331; ECON 450, 478; UHON 302; GEOG 336; HIST 251, 252, 323, 324, 340, 341, 380, 381, 382, 383, 384, 386, 387, 388, 480, 481, plus 492 and 496 when topic is appropriate; CHIN 101, 102, 201, 202, 297, 301, 302; JAPN 101, 102, 201, 202, 297, 301, 302, 320, 339, 411; MLNG 106, 107; PHIL 334, 336, 337, 346, 438, 439, 440, 449; POLS 478; RELG 107, 109, 230, 231, 232, 233, 234, 323, 324, 325, 326, 438, 439, 440, 442, 447/547 when topic is appropriate; 448, 449, 481; SOCI 221, 478; UHON 221, 222 when “Eastern Legacy,” 301, 302 when topic is appropriate; WMST 331 when topic is appropriate; Asian Studies Senior Thesis given as COMP, HIST, PHIL, RELG or POLS 453. For information about Arabic, Hebrew, Classical Chinese, Persian and Sanskrit see the Asian Studies Committee Chairperson.

European Studies
Chistine Sauer, Director
Steve Bishop, Assistant Director
2005 Economics Building (SSCI)
MSC05 3060
1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 277-1963; eurost@unm.edu
http://www.unm.edu/~eurost/

Participating Faculty
Susanne Baackman, Foreign Languages and Literatures
Judith Bennahum, Theatre and Dance
Steve Bishop, Foreign Languages and Literatures
Melissa Bokovoy, History
James L. Boone, Anthropology
Pamela Cheek, Foreign Languages and Literatures
Richard Coughlin, Sociology
Monica Cyrino, Foreign Languages and Literatures
Helen Darnico, English
Rachele Duke, Foreign Languages and Literatures
European Studies office). All students must take 12 hours of courses in a European language other than English or the equivalent (testing out or taking a 300 level or above course in the language). Students are further required to take a minimum of 3 hours in courses with predominantly European content and focus from three of the following four general areas:

1) Fine Arts (Art/Art History, Dance, Media Arts, Music, Theatre)
2) History
3) Literature and Philosophy (English, Comparative Literature, Foreign Languages and Literatures, Philosophy)
4) Social Science (Anthropology, Economics, Geography, Political Science, Sociology)

In addition to the distribution requirements outlined above, students must take an additional 9 hours from the courses in the approved European Studies catalog (list available on Web site or in European Studies office).

The non-language courses must meet the following guidelines:

No more than 6 hours below the 300 level;
No more than 9 hours in any one department; and
No more than 3 hours in undergraduate readings or individual studies courses.

NOTE: The list of approved courses, or European Studies catalog, is a compilation of all undergraduate courses offered by The University of New Mexico which are devoted mostly to European orientations. These include, in addition to those offered in the College of Arts and Sciences, certain courses in the College of Fine Arts and the Schools of Architecture and Planning, Management and Law. The list is available on the European Studies Web site and in the European Studies office. The list is not necessarily complete since new courses are added every year, and students are therefore encouraged to ask about courses not found on the list that appear to satisfy the requirements.

Russian Studies

Mesa Vista Hall 2094
MSC06 3760
1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 277-2451, 277-4428

For general current information about the program contact the department of History; for advisement and pertinent information about the individual fields of specialization, contact individual faculty members of the committee.

Committee in Charge
Melissa Bokovoy, History
Gregory Gleason, Political Science
Natasha Kolchevskaya, Foreign Languages and Literatures
Byron Lindsey, Foreign Languages and Literatures
Carole Nagengast, Anthropology
Richard Robbins, History

Introduction

The combined major in Russian Studies is administered by the interdepartmental committee listed above. The goal of the program is to provide the student with a broad knowledge of modern Russia and Eastern Europe through the study of humanities, language, literature and the social sciences. Study of the Russian language beyond a reading knowledge is required. The major does not require a minor for graduation, though one is offered.
Major Study Requirements

I. The Core—(27 semester hours)

RUSS 201 and 202
(Intermediate Russian: 3 + 3 credits) 6

RUSS 301 and 302
(Advanced Russian: 3 + 3 credits) 6

RUSS 339
(Russian Culture and History through Film AOA HIST 325 and MA 339: 3 credits) 3

RUSS 338 or 340
(Russian Literature and Culture in Translation, 338, or Topics in Russian Literature, 340: 3 credits both are taught in translation) 3

HIST 315, 316 or 317
(History of Russia, three different (select two) chronological periods: 3 + 3 credits) 6

POLS 357 Russian and Eurasian Government and Politics 3

Total 27

II. Electives—(9 hours)
Including, but not limited to the following:

RUSS 401/402 or 407 or any other Russian Literature in Translation course;

HIST 300 (when offered with Russian content), 313, 314, 424, 674;
POLS 220, 240, 440;
ECON 450.

Minor Study Requirements

The minor in Russian Studies requires 23 semester hours: 14 hours of Russian language and 9 hours of Russian, History, Political Science and/or Economics.

LATIN

see Foreign Languages and Literatures.

LATIN AMERICAN STUDIES

Kimberly Gauderman, Director
Latin American and Iberian Institute
MSC02 1690
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Professors
Garth Bearden, Anthropology
Clancy Clements, Spanish and Portuguese
Donald Coes, Economics
David Craven, Art History
Philip Gonzales, Sociology
Linda Hall, History
Kim Hill, Anthropology
Hillard Kaplan, Anthropology
Enrique Lamadrid, Spanish and Portuguese
Antoinette Sedillo López, Law
Margaret Montoya, Law
Jennifer Moore, Law
Carole Nagengast, Anthropology
Mark Peceny, Political Science
Cynthia Radding, History
Elizabeth Rapaport, Law
Tey Diana Rebollo, Spanish and Portuguese
James Richardson, Community and Regional Planning
Susan Tiano, Sociology
Nelson Valdés, Sociology
Gloria Valencia-Weber, Law
Howard Waitzkin, Sociology

Associate Professors
Holly Barnet-Sanchez, Art History
Judy Bieber, History
Melissa Binder, Economics
Teresa Córdova, Community and Regional Planning
Susan Dever, Media Arts
Robert Fiala, Sociology
Les Field, Anthropology
William Fleming, Community and Regional Planning
Kimberly Gauderman, History
Raul de Gouveia, Management
David Henkel, Community and Regional Planning
Ana Magdalena Hurtado, Anthropology
Elizabeth Hutchinson, History
Claudia Isaac, Community and Regional Planning
Celia López-Chávez, University Honors
Kimberlé López, Spanish and Portuguese
Miguel López, Spanish and Portuguese
Judy Maloof, Spanish and Portuguese
Kathryn McKnight, Spanish and Portuguese
Margo Millner, Spanish and Portuguese
Rosalita Mitchell, Education
Suzanne Oakdale, Anthropology
Christine Sierra, Political Science
William Stanley, Political Science
Rena Torres-Cacuillois, Spanish and Portuguese
Richard Wood, Sociology

Assistant Professors
Jennifer Ahlfeldt, Art History
Alejandra Ballesta, Spanish and Portuguese
Dane DiGregorio, Management
Matias Fontenla, Economics
Benjamin Goldfrank, Political Science
Raymond Hernández-Durán, Art History
Leila Lehmen, Spanish and Portuguese
Nancy López, Sociology
Barbara Reyes, History
Enrique Sanabria, History
Eleuterio Santiago-Díaz, Spanish and Portuguese
Andrew Schrank, Sociology
Doug Thomas, Management
Catherine Travis, Spanish and Portuguese
Sam Truett, History

Introduction

This is an interdepartmental program offering the bachelor’s, master’s and doctoral degrees. The program is academically supervised by the Interdisciplinary Committee on Latin American Studies (ICLAS) in the College of Arts and Sciences and administered by the Director of Latin American Studies.

Undergraduate Major Study Requirements

The undergraduate program provides a solid foundation in language skills and area competence that can be valuable in business, public service or further professional training.

The major in Latin American Studies consists of a minimum of 36 hours, including the required courses outlined in A, B, C, D and E below. Students will work closely with the Academic Advisor and the Director of Latin American Studies in planning their program of study and must receive approval for all course work in fulfillment of the major.

A. Languages of Latin America (maximum of 12 hours counted toward the major): Students are required to achieve proficiency in two Latin American languages. There are three tracks for fulfilling the language requirement:

1) Spanish track with Portuguese support skills, requiring Spanish 301-302 and Portuguese 275 or 276.

2) Portuguese track with Spanish support skills, requiring Portuguese 311-312 and Spanish 101-102.
Honors candidates must register for 6 hours of Latin American content courses from one of the following three areas:

1. Humanities: Art History; Brazilian Literature & Culture; History; Media Arts; Religious Studies; Spanish American Literature & Culture.

2. Social and Natural Sciences: Anthropology; Biology; Community and Regional Planning; Economics; History; Political Science; Sociology; Women Studies.

3. A core area focused on a particular theme (such as environment and ecology, development, gender, U.S.-Latin American relations, etc.) developed jointly by the student and the Director of Latin American Studies.

B. Core Courses (15 hours): Students will select 15 hours of Latin American content courses from one of the following three areas:

C. Electives (minimum of 9 hours) with Latin American content as needed to complete 36 hours.

D. Of the courses completed for the Latin American Studies major, at least 18 hours must be at the 300 level or higher.

E. Courses from at least three different disciplines must be included in the major.

F. At least half of the required credit hours for the major must be taken in residence on the main campus at UNM. The Director of Latin American Studies may approve substitutions on a case-by-case basis.

Brazilian Studies Concentration

Participants in the Latin American Studies undergraduate major may earn a Concentration in Brazilian Studies by completing the Portuguese language track requirement and five of the following courses: History 376, History 377, Portuguese 200, Portuguese 335, Philosophy 388, Portuguese 414 or 415. The Director of Latin American Studies may approve the substitution of other courses with substantial Brazil content.

Minor Study Requirement

The minor in Latin American Studies consists of a minimum of 24 credit hours including 4 hours of Spanish 301 and 302 or Portuguese 311 and 312, 12 credit hours in one of the core areas listed above; and 6 credit hours of elective courses.

Approved Electives


Departmental Honors

Students seeking honors in Latin American Studies should consult with the Director of Latin American Studies and submit a formal letter of application during their junior year. Honors candidates must register for 6 hours of Latin American Studies 497 and 499 and complete a Senior Honors Thesis which will be orally defended.

Graduate Program

Graduate Advisors

Kimberly Gauderman, Director of Latin American Studies
Amanda Wolfe, Academic Advisor

Application Deadlines

Fall semester and Summer session: February 1 (with financial aid consideration)
April 1 (without financial aid consideration)
Spring semester: November 1 (without financial aid consideration)

Degrees Offered

M.A. in Latin American Studies (MALAS)

Students concentrate in two areas chosen from the following: Anthropology (with an emphasis in either Archaeology, Ethnology, or Human Evolutionary Ecology), Art History, Brazilian Literature & Culture, Community & Regional Planning, Economics, Gender Studies, History (with an emphasis in either Latin America To 1810 or Latin America Since 1810), Human Rights, International Management, Political Science, Religion & Philosophy, Sociology, Spanish American Literature, and Spanish Linguistics. The combination of concentrations must ensure that the program is interdisciplinary. For example, students selecting History with an emphasis in Latin America To 1810 as one concentration may not select History with an emphasis in Latin America Since 1810 as the second concentration. Students also are required to have no more than one interdisciplinary concentration. For example, a student may not choose both Human Rights and Gender Studies.

Concentration/Emphases requirements.

Select from the following list of courses for each concentration/emphases. Substitutions for these courses will be considered on a case-by-case basis.

Anthropology Concentration.


Art History Concentration.


Brazilian Literature and Culture Concentration.


Economics Concentration.


Gender Studies Concentration.

HIST 628, 692, SPAN 439**, SPAN 639.

History Concentration.

Emphases. Latin America to 1810: HIST 518, 560, 570, 571, 576, 643, 644, 648, 651, 653, 654, 665, 666, 688, 692. Students pursuing this emphasis generally take HIST 686. This course may be substituted upon approval from the Director of Latin American Studies. Latin America Since 1810: HIST 572, 573, 574, 575, 577, 645, 648, 649, 650, 652, 653, 654, 655, 656, 685, 687, 688, 689, 690. Students
pursuing this emphasis generally take HIST 687. This course may be substituted upon approval from the Director of Latin American Studies.

Human Rights Concentration.
ANTH 593, ECON 423*, HIST 574, 575, 653, LAW 505, 537, 541, 548, 593, 657.

International Management Concentration.
511, 524, 574, 583, 594, 595, 597.

Political Science Concentration.
POLS 511, 512, 520, 521, 540, 541.

Religion & Philosophy Concentration.
ANTH 533, HIST 656, PHIL 588, 589, PHIL 590, SOC 422, SOC 532.

Sociology Concentration.
SOC 461*, 484*, 503, 506, 508, 509, 513, 520, 528, 584.

Spanish American Literature Concentration.

Spanish Linguistics Concentration.
SPAN 443**, 540, 542, 543, 545, 546, 547, 548, 549. Students with limited background in Spanish Linguistics are encouraged to take SPAN 350 and 352.

Variations may occur from year to year in the availability of faculty members to support concentrations. Such changes in faculty availability are beyond the control of the Latin American Studies program. Thus, it may occasionally be impossible for students to obtain sufficient coursework and advisement in one or more concentrations described herein. Therefore students' choices of concentrations require the prior approval of the Director of Latin American Studies.

Ph.D. in Latin American Studies


Concentration requirements.
Select from the following list of courses for each concentration. Substitutions for these courses will be considered on a case-by-case basis.

M.A. in Latin American Studies

Applications: In addition to the materials required by the University of New Mexico Office of Graduate Studies, the following items must be submitted directly to the Latin American Studies Program: three letters of recommendation, a letter of intent, an academic writing sample, unofficial copies of transcripts, and GRE scores.

Prerequisites: The Bachelor’s degree is required. Background work in the social sciences and humanities related to Latin America is recommended. At least two years of undergraduate course work (or equivalent language training) in either Spanish or Portuguese is required prior to admission. Applicants with otherwise strong qualifications but with limited Spanish competence may be admitted on the condition that they complete Spanish 352, Advanced Grammar, within their first year of graduate study.

Degree Requirements

Plan I (thesis option): 36 credit hours. Students must select two areas of concentration within the MALAS program. Students have the option of completing 9 credit hours in one concentration and 15 credit hours in the other concentration or completing 12 credit hours in each concentration. The remaining 12 credit hours are divided between 6 hours of program electives and 6 hours of thesis credits.

Students under the Plan I option must complete a minimum of 12 credits in graduate seminars numbered 500 or above (excluding 551 or 552 Problems courses) and 6 hours of thesis credits numbered 599. Students should consult with the Academic Advisor to determine which courses are considered seminars. Students are required to present an oral defense of the thesis before a thesis committee composed of at least two faculty members in one area of concentration and one faculty member from the second area of concentration. Students also are required to sit for the comprehensive examination in the second area of concentration, administered by three faculty members from that concentration.

Plan II (non-thesis option): 36 credit hours. Students must select two areas of concentration within the MALAS program. Students have the option of completing 9 credit hours in one concentration and 15 credit hours in the other concentration or completing 12 credit hours in each concentration. The remaining 12 credit hours are comprised of electives. Students are required to sit for the comprehensive examinations in both areas of concentration. The examinations are administered by a Committee on Studies composed of two faculty members from each concentration.

Under the Plan II option, students must complete a minimum of 12 credits in graduate seminars numbered 500 or above (excluding 551 or 552 Problems courses). Students should consult with the Academic Advisor to determine which courses are considered seminars.

To maintain and improve language proficiency during graduate studies, students under both Plan I and II who are not concentrating in Brazilian Literature & Culture, Spanish American Literature, or Spanish Linguistics will be required to take an upper division language course: Spanish 307 or above; Portuguese 311 or above; or a course in one of Latin America’s indigenous languages. If the course is available for graduate credit, it can count as one of the student’s elective courses.

Dual degrees: The Interdisciplinary Committee on Latin American Studies coordinates the five dual degree programs noted below. The student applying to any dual degree program is required to meet entrance and other requirements of both programs.

Students wishing to add one of these dual degree options after their initial enrollment must apply to that program within three semesters. Acceptance into the second program will establish dual degree status for the student.

MALAS/MA: Offered jointly with the Robert O. Anderson Schools of Management (ASM), this program is designed to train management professionals with special expertise in Latin America. The dual degree reduces requirements to complete the two degrees by approximately 12 hours, to a
minimum of 57 hours and a maximum of 72 hours past the Bachelor’s, depending on the number of waivers granted by ASM for core requirements. Competency in Spanish or Portuguese is required for admission to the dual degree. Applicants must meet entrance requirements for both programs; applications should be submitted simultaneously to both programs.

In order to meet the MBA requirements, a student must complete 48 credit hours of study, unless the student is eligible to waive some of the courses if waivers are granted by ASM; a total of 33 credit hours must be completed. MBA core requirements include MGT 501, 502, 504, 506, 508, 511, 520, 522, 526, 598. Students must complete 30 hours of core courses or be waived from these courses (with the exception of MGT 598). Students must also complete 18 hours of elective management courses.

For the Latin American Studies component, students are required to complete 24 credit hours, including a minimum of 9 hours in each of two areas of concentration chosen from the following: Anthropology (with an emphasis in either Archaeology, Ethnology, or Human Evolutionary Ecology), Art History, Brazilian Literature & Culture, Community & Regional Planning, Economics, Gender Studies, History (with an emphasis in either Latin America To 1810 or Latin America Since 1810), Human Rights, International Management, Political Science, Religion & Philosophy, Sociology, Spanish American Literature, and Spanish Linguistics. See concentration/emphasis requirements listed under M.A. in Latin American Studies (MALAS). The combination of areas must ensure that the program is interdisciplinary. For example, a student must ensure that the program is interdisciplinary. For example, a student selecting History with an emphasis in Latin America To 1810 as one concentration may not select History with an emphasis in Latin America Since 1810 as the second concentration. Students are required to have no more than one interdisciplinary concentration. For example, a student may not choose both Human Rights and Gender Studies. The remaining 6 hours may be used for thesis (under Plan I) or electives (under Plan II).

Under Plan I, students are required to present an oral defense of the thesis before a thesis committee composed of at least two faculty members in one area of concentration and one faculty member from the second area of concentration. Students also are required to sit for the comprehensive examination in the second area of concentration, administered by three faculty members from that concentration. Under Plan II, students are required to sit for the comprehensive examination in both areas of concentration. The examinations are administered by a Committee on Studies composed of two faculty members from each concentration.

Under both Plans I and II, students must complete a minimum of 6 credits in graduate seminars numbered 500 or above (excluding 551 or 552 Problems courses). Students should consult with the Academic Advisor to determine which courses are considered seminars.

MALAS/MCRP: The joint master’s program in Latin American Studies and Community & Regional Planning is designed for students who are interested in the professional practice of planning in a Latin American context.

The Community & Regional Planning Program at the University of New Mexico is dedicated to planning and advocating for sustainable communities and ecosystems throughout the Southwest region and Latin America. MALAS/MCRP graduates possess the knowledge and skills necessary to support planning by diverse human communities throughout the Western Hemisphere. MALAS/MCRP students learn to assist Latin American communities to create community-based emphasis in either Spanish or Portuguese (at least two years of undergraduate course work or equivalent language training) and basic course work in economics (micro and/or macro) and statistics. Deficit courses in economics and statistics may be made up after admission to the program.

The program requires a minimum of 54 hours of graduate credit (compared to 72 hours if the two degrees were pursued separately). The required graduate credit hours include: 1) CRP 578, a 3 credit hour bridge seminar; 2) 27 credit hours of course work and thesis in Community & Regional Planning; and 3) 24 credit hours of course work in Latin American Studies. For the 24 credit hours in Community & Regional Planning, students must complete CRP 500, 510, 511, 521, 545 (or 580), 588, and 599. For the 24 credits in Latin American Studies, students must complete a minimum of 9 hours in each of two areas of concentration chosen from the following: Anthropology (with an emphasis in either Archaeology, Ethnology, or Human Evolutionary Ecology), Art History, Brazilian Literature & Culture, Community & Regional Planning, Economics, Gender Studies, History (with an emphasis in either Latin America To 1810 or Latin America Since 1810), Human Rights, International Management, Political Science, Religion & Philosophy, Sociology, Spanish American Literature, and Spanish Linguistics. See concentration/emphasis requirements listed under M.A. in Latin American Studies (MALAS). The combination of areas must ensure that the program is interdisciplinary. For example, a student selecting History with an emphasis in Latin America To 1810 as one concentration may not select History with an emphasis in Latin America Since 1810 as the second concentration. Students also are required to have no more than one interdisciplinary concentration. For example, a student may not choose both Human Rights and Gender Studies. Each candidate is required to prepare a thesis (Plan I). The Master’s examination will consist of an oral examination at the final presentation of the thesis; this examination will include coverage of the student’s two areas of concentration in Latin American Studies. The student’s Committee on Studies, comprised of at least two faculty members in one area of concentration and one faculty member from the second area of concentration, presides over the examination.

Students must complete a minimum of 6 credits in graduate seminars numbered 500 or above (excluding 551 or 552 Problems courses). Students should consult with the Academic Advisor to determine which courses are considered seminars.

MALAS/MSN: The Latin American Studies Program and the College of Nursing offer a dual graduate degree program leading to a Master of Arts in Latin American Studies and a Master of Science in Nursing. The program prepares nurses for leadership roles in health care delivery systems serving populations in Latin American countries or Hispanic populations within the United States. Students must select a concentration within Nursing and two concentrations within Latin American Studies. The program offers both the thesis option (requiring 53 graduate credit hours) and the non-thesis option (requiring 56 graduate credit hours). The program requires two to three years of full-time study including summers for completion. Students may also complete the program on a part time basis but are required to complete all course work within the university’s seven-year limit. Prerequisites to the program are competence in either Spanish or Portuguese (at least two years of undergraduate course work or equivalent language training).

The program requires a minimum of 20 credit hours in Nursing courses and 20 credit hours in Latin American Studies courses, plus 13 additional cross-counted hours under Plan I (thesis option) or 16 hours under Plan II (non-thesis option). The 20 credit hours of Nursing must include the following core courses: Nursing 501, 503, 505, 507, 511. Additional credit hours (depending on the area) will be required in one of the following concentrations: Acute Care Nurse Practitioner, Clinical Nurse Specialist, Community Health, Family Nurse Practitioner, Nursing Administration, and Nursing Education.
The 20 credit hours of Latin American Studies must include 9 hours in each of two areas of concentration chosen from the following: Anthropology (with an emphasis in either Archaeology, Ethnology, or Human Evolutionary Ecology), Art History, Brazilian Literature & Culture, Community & Regional Planning, Economics, Gender Studies, History (with an emphasis in either Latin America To 1810 or Latin America Since 1810), Human Rights, International Management, Political Science, Religion & Philosophy, Sociology, Southwest Studies, Spanish American Literature, and Spanish Linguistics. See concentration/emphases requirements listed under the appropriate program (MALAS). The combination of areas must ensure that the program is interdisciplinary. For example, students selecting History with an emphasis in Latin America To 1810 as one concentration may not select History with an emphasis in Latin America Since 1810 as the second concentration. Students also are required to have no more than one interdisciplinary concentration. For example, a student may not choose both Human Rights and Gender Studies. Students must complete a minimum of 6 credits in graduate seminars numbered 500 or above (excluding 551 or 552 Problems courses). Students should consult with the Academic Advisor to determine which courses are considered seminars.

Students opting for Plan I (thesis option) must complete 6 credit hours of Nursing 599. Students are required to present an oral defense of the thesis before a thesis committee composed of four faculty members (two from Nursing and two from Latin American Studies), representing the chosen areas of concentration.

Students opting for Plan II (non-thesis option) must complete 9 credit hours of elective credits to be chosen in either or both programs. The comprehensive examination will consist of a professional paper and an oral examination. The topic of the paper will be determined in the student’s final semester and will be approved by the examination committee, composed of two faculty members from Nursing and two faculty members from Latin American Studies representing the chosen areas of concentration. A limited time is allowed for the preparation of the paper.

This dual degree is currently under review. Please consult with the Academic Advisor of Latin American Studies to verify that applications are currently being accepted for the MALAS/MSN dual degree.

MALAS/JD: This dual degree program is intended to prepare legal professionals for work in Latin America or with Hispanic peoples in the United States by combining legal training with Latin American language and area studies. The program enables students to develop professional skills directly applicable to Latin American nations and populations. Prerequisites to the program are competence in either Spanish or Portuguese (at least two years of undergraduate course work or equivalent language training). The program requires 80 credit hours of Law course work that must include 9 credit hours of international law, 24 credit hours of Latin American Studies course work, and a 3 credit hour elective course containing subject matter linking Law and Latin American Studies.

The first-year Law curriculum consists of required courses that emphasize methods of legal reasoning, policy analysis, and the analysis of legal institutions. During their second and third years, students can choose from approximately 100 elective courses in developing individualized programs suited to their career goals.

The Latin American Studies component requires that students complete a minimum of 9 hours in each of two areas of concentration chosen from the following: Anthropology (with an emphasis in either Archaeology, Ethnology, or Human Evolutionary Ecology), Art History, Brazilian Literature & Culture, Community & Regional Planning, Economics, Gender Studies, History (with an emphasis in either Latin America To 1810 or Latin America Since 1810), Human Rights, International Management, Political Science, Religion & Philosophy, Sociology, Spanish American Literature, and Spanish Linguistics. See concentration/emphases requirements listed under M.A. in Latin American Studies (MALAS). The combination of areas must ensure that the program is interdisciplinary. For example, students selecting History with an emphasis in Latin America To 1810 as one concentration may not select History with an emphasis in Latin America Since 1810 as the second concentration. Students also are required to have no more than one interdisciplinary concentration. For example, a student may not choose both Human Rights and Gender Studies. The remaining 6 credit hours may be used for electives. Students must complete a comprehensive examination in one area of concentration and complete an article length professional paper (jointly supervised by one member of the Law faculty and one non-Law Latin American-specialized faculty member) in the student’s other area of concentration.

MALAS/MA in LLSS: The Latin American Studies Program and the College of Education offer a dual degree program leading to master’s degrees in Latin American Studies and Language, Literacy and Sociocultural Studies. This program is intended to allow education professionals to enhance their secondary school teaching with Latin American topics in the humanities and social sciences. The program combines advanced professional development in education with advanced interdisciplinary study of Latin America and is designed to help students integrate the two fields through coordinated advisement and bridge courses.

The program requires 51 credit hours of course work for students who hold teaching certificates. It includes three components: 1) 21 credit hours of Language, Literacy and Sociocultural Studies courses with a concentration in social studies; 2) 21 credit hours of Latin American Studies course work with at least 9 hours in each of two areas of concentration chosen from the following: Anthropology (with an emphasis in either Archaeology, Ethnology, or Human Evolutionary Ecology), Art History, Brazilian Literature & Culture, Community & Regional Planning, Economics, Gender Studies, History (with an emphasis in either Latin America To 1810 or Latin America Since 1810), Human Rights, International Management, Political Science, Religion & Philosophy, Sociology, Spanish American Literature, and Spanish Linguistics. See concentration/emphases requirements listed under M.A. in Latin American Studies (MALAS). The combination of areas must ensure that the program is interdisciplinary. For example, students selecting History with an emphasis in Latin America To 1810 as one concentration may not select History with an emphasis in Latin America Since 1810 as the second concentration. Students also are required to have no more than one interdisciplinary concentration. For example, a student may not choose both Human Rights and Gender Studies. The remaining 3 credit hours may be used for electives; and 3) 9 credit hours of bridge courses.

Students must complete a minimum of 6 credits in graduate seminars numbered 500 or above (excluding 551 or 552 Problems courses). Students should consult with the Academic Advisor to determine which courses are considered seminars.

All students follow Plan II (non-thesis) and are required to sit for the comprehensive examinations in both areas of concentration. The examinations are administered by a Committee on Studies composed of two faculty members from each concentration.
Ph.D. in Latin American Studies

The Ph.D. in Latin American Studies is designed to meet the needs of a small number of students whose career goals would be best advanced by an inter-disciplinary doctorate. Such students would include individuals who seek employment in small colleges where the ability to teach across disciplines would be an advantage and those who seek non-academic positions in fields such as museum work, international cultural exchange, diplomacy or other roles in which having skills in two disciplines, combined with Latin American area expertise, would be more useful than somewhat more extensive training within one discipline. Students primarily interested in academic employment in research institutions will generally be better served by earning a doctorate within a single discipline.

Applications: In addition to the materials required by the University of New Mexico Office of Graduate Studies, the following items must be submitted directly to the Latin American Studies Program: three letters of recommendation, a letter of intent, an academic writing sample, unofficial copies of transcripts, and GRE scores.

Prerequisites: A master’s degree in the intended primary concentration or in Latin American Studies with appropriate areas of concentration is required. Specific entrance requirements may vary depending on the student’s intended concentration. Each application for admission is screened by the department of the projected primary concentration before being approved by the Director of Latin American Studies.

Degree Requirements

The program requires a minimum of 54 hours of graduate credit work (not including dissertation) beyond the Bachelor’s degree. This work must include a primary concentration consisting of at least 30 credit hours and a secondary concentration of at least 15 credit hours. The remaining 9 credit hours may be elective credits or additional course credits in the primary or secondary concentrations. Primary concentrations include: Anthropology, Art History, Brazilian Literature & Culture, History, Political Science, Sociology, Spanish American Literature, and Spanish Linguistics. Secondary concentrations include all of the above as well as Economics and International Management. See concentration requirements listed under Ph.D. in Latin American Studies.

A Committee on Studies must be formed by the end of the first semester of residency and a program of studies developed and approved by the Director of Latin American Studies by the end of the second semester. The Committee on Studies will be composed of three members from the student’s primary concentration and two members from the secondary concentration. Under no circumstances will the comprehensive examinations be administered by less than the approved five-member committee.

Competence is required in two languages chosen from Spanish, Portuguese, French, Haitian Creole, or Latin American indigenous languages. (Basic competence is considered the equivalent of the successful completion of advanced level course work in the primary language and two semesters or more of study in the second language.) Comprehensive examinations, administered by the student’s Committee on Studies, covering the primary and secondary concentrations will be given at the completion of all course work. The written exam in the primary concentration will be followed by an oral exam. General requirements for the Ph.D. are set forth in earlier pages of this catalog. Students must write and successfully defend a dissertation.

Latin American Studies (LTAM)

Latin American Studies is an interdisciplinary program. In addition to the courses listed below, Latin American content courses can be found under the following departmental headings: Anderson Schools of Management (International Management), Anthropology, Art History, Community and Regional Planning, Economics, History, Law, Philosophy, Political Science, Portuguese, Religious Studies, Sociology, and Spanish.

400. Topics in Latin American Studies. (3) ∆ Will vary from instructor to instructor, but will be an in-depth analysis of special topics related to Latin America. For course content, consult the Schedule of Classes. The course may be repeated without limit provided the topics vary.

497. Independent Studies. (1-3 to a maximum of 3) [1-3 to a maximum of 6] ∆ Prerequisite: permission of program chairperson or instructor.

499. Senior Honors Thesis. (3) Prerequisite: 497. Restriction: permission of instructor.

500. Topics in Latin American Studies. (3) ∆ Will vary from instructor to instructor, but will be an in-depth analysis of special topics related to Latin America. For course content, consult the Schedule of Classes. The course may be repeated without limit provided the topics vary.

504. Seminar in Latin American Studies. (3) (Also offered as SPAN 504, HIST 690, 688.)

525. Proseminar on Latin American Politics. (3) (Also offered as SOC 525.)

551. Master’s Problems. (1-3 to a maximum of 12) [1-3] ∆ Guided individual research and reading. Students may include up to 12 credit hours in their Master’s program and 6 additional credit hours at the Ph.D. level.

578. Latin American Development and Planning. (3) (Also offered as SOC 508 and CRP 578.) Interdisciplinary seminar focusing on area topics in Latin American planning, development and urbanization. It is the core course for the LAS/IRSCP dual-degree program.

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

651. Latin American Doctoral Problems. (1-3) ∆ Students may include no more than 6 credit hours in their Ph.D. program.

699. Latin American Studies Dissertation. (3-12) Offered on a CR/NC basis only.

Linguistics

Lingüística

Sherman E. Wilcox, Chairperson
Humanities Bldg. 526
MSC03 2130, Linguistics
1 University of New Mexico
Albuquerque, NM 87131
(505) 277-6353 FAX (505) 277-6355
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Web site: http://www.unm.edu/~lingvist

Professors
William Croft, Ph.D., Stanford University
Vera P. John-Steiner, Ph.D., University of Chicago
Sherman E. Wilcox, Ph.D., The University of New Mexico

Associate Professors
Melissa Axelrod, Ph.D., University of Colorado (Boulder)
Larry P. Gorbet, Ph.D., University of California (San Diego)
Jill P. Morford, Ph.D., University of Chicago
Caroline L. Smith, Ph.D., Yale University
Phyllis Perrin Wilcox, Ph.D., The University of New Mexico

Assistant Professors
Sardian J. Shaffer, Ph.D., The University of New Mexico
Catherine E. Travis, Ph.D., La Trobe University (Australia)

236 ARTS AND SCIENCES
**Signed Language Interpreting**

The B.S. major in Signed Language Interpreting requires the following courses: SIGN 201, 210, 211, 212, 214, 310, 352, 360, 411, 412, 418, 419 and LING 101. Students majoring in Signed Language Interpreting must be approved by the department.

**Languages**

An interdisciplinary B.A. major in languages is offered through the Department of Foreign Languages and Literatures in conjunction with the Department of Spanish and Portuguese. The Department of Linguistics makes available several courses that qualify for this major. Consult with the advisor in the Department of Foreign Languages and Literatures.

**Minor Study Requirements**

The minor in Linguistics requires 21 hours of courses numbered 200 or above: 12 hours of required linguistics courses (LING 292, 303, 304, and 322) and 9 hours of electives. The electives may be selected from courses in linguistics or from courses in other departments which have been approved by the Department of Linguistics.

**Minor in Navajo Language and Linguistics**

The minor in Navajo Language and Linguistics requires 21 hours of Navajo language and Navajo linguistics courses: NVJO 101–102, 201–202, 311, 312 and 401. Nine additional hours must be selected from the following courses or from approved electives from Linguistics, LLSS or Native American Studies: LING 292, 331, and 415.

**Major or Minor in the College of Education**

For the major, composite major or minor in language arts, bilingual education, teaching English to speakers of other languages (TESOL), and reading, see the Bilingual/TESOL Education, Elementary Education and Secondary Education section of this catalog.

**Departmental Honors**

A student seeking departmental honors in the Department of Linguistics (for majors in either Linguistics or Signed Language Interpreting) should identify a research project during the junior year in consultation with an appropriate professor and should submit a proposal in the form of a letter to the department chairperson.

If the proposal is approved by the department chairperson, the student should enroll in LING 498 the second semester of the senior year. These 6 hours of honors work are in addition to the minimum number of hours required for the major.

**Graduate Programs**

**Application Deadlines**

- **Fall semester:** March 31 for M.A. and January 15 for Ph.D.
- **Spring semester:** None accepted for Ph.D.; October 31 for M.A.
- **Summer semester:** None accepted for Ph.D.; March 31 for M.A.

All applications seeking financial aid must be received by January 15.
Degrees Offered

M.A. in Linguistics

The Department of Linguistics offers the Master of Arts degree in linguistics with flexibility in selection of an area of study. This degree is offered under Plan I (24 hours plus thesis) or Plan II (32 hours) according to the regulations set forth in earlier pages of this catalog, except that a minimum of 12 hours of 500-level courses is required.

Minimum prerequisites for pursuing the M.A. in linguistics are 18 hours of basic linguistics, including introductory linguistic analysis, phonetics, phonological analysis, grammatical analysis, introductory sociolinguistics and introductory psycholinguistics. Deficiencies in these prerequisites may be made up after admission to the program but such course work may not be counted toward the degree.

Candidates for the master’s degree must complete 18 hours of core course work, including one course in each of the following areas: phonology (502, 503), syntax (523), semantics and discourse (525, 529), psycholinguistics (560, 563, 565, 566, 568, 569L), sociolinguistics (533, 535, 539) and language change (546). The remaining required hours are selected by the candidate, with the approval of the Graduate Advisor.

Computational Linguistics

In addition to the course work for the Linguistics M.A., the concentration in Computational Linguistics requires five prerequisite Computer Science courses, three recommended graduate-level Computer Science courses plus two additional electives or two plus nine thesis hours. One of three Master’s examination questions must address an area of Computational Linguistics.

Native American Languages of the Southwest

The Department of Linguistics offers the M.A. in Linguistics with an Emphasis in Native American Languages of the Southwest. The program is designed so as to take advantage of the resources in the Departments of Linguistics, Native American Studies, and Anthropology, as well as the College of Education. The emphasis on Native American Languages is designed to fit with the department’s interest in functional grammar and sociolinguistics. Candidates for the M.A. degree under the thesis Plan I must complete 24 hours of course work in linguistics. The candidate will choose one of three focus areas: 1) field research on Native American languages, 2) issues in bilingual education, or 3) Navajo studies. Four courses in the chosen focus area, and one course from either of the other two focus areas, are required.

Ph.D. in Linguistics

Admission to the Ph.D. program is highly selective. The following criteria must be met: 1) completion of course work equivalent to the University of New Mexico M.A. in Linguistics with an average of B+ or better; 2) Pass with Distinction on the University of New Mexico M.A. Comprehensive Exam or the submission of a research paper of publishable quality; and 3) willingness of a University of New Mexico Linguistics faculty member to serve as the student’s mentor.

The Ph.D. program requires a minimum of 48 graduate credit hours including at least 18 hours of coursework beyond the M.A. Required courses are: 1) a total of two of the following phonetics and phonology courses – 502, 503, 505; 2) syntax – 523; 3) a total of two of the following four courses – 524, 529, 548, or a seminar on cognitive grammar (currently offered as Ling. 554); 4) at least one methods course; and 5) three advanced seminars in the areas of preparation for the comprehensive examination. These required courses include some that were required for the MA and courses taken for that degree may be included as fulfilling the requirements for the Ph.D. as well.

Research skills required for the Ph.D. are 1) reading, writing, and conversational ability in a language other than the student’s native language (this requirement may be fulfilled by 4 semesters of college language courses with a grade of B or better); 2) knowledge of the structure of a non-Indo-European language; and 3) coursework in statistics up to and including analysis of variance or the equivalent.

At the end of their coursework Ph.D. candidates are required to take a comprehensive examination over three areas of specialization.

Please contact the department for more detailed information on admissions and requirements for the M.A. and Ph.D. programs or consult the Web site, http://www.unm.edu/~linguist.

Computational Linguistics

The Ph.D. Major in Linguistics with a concentration in Computational Linguistics requires that the student complete a minimum of 48 hours of graduate credit course work that includes up to 30 hours of appropriate courses from the M.A., but at least 18 hours must be course work beyond the M.A. At least 24 hours must be completed at UNM and at least 18 hours must be at the 500 or 600 level. Students must fulfill the following requirements: 1) One 500-level course each in phonology, grammar and discourse, and computer science beyond what is required for the M.A.; 2) at least one methods course (which may include an appropriate course from Computer Science); 3) three advanced seminars in the areas of preparation for the comprehensive examination; 4) a comprehensive examination over three areas of specialization, two of which shall be in the core areas of linguistics, and one in the area of computational linguistics; 5) reading, writing, and conversational ability in a language other than the student’s native language plus proficiency in a computer language; 6) knowledge of the structure of a non-Indo-European language; and 7) course work in formal modeling or quantitative methods.

Speech and Hearing Sciences

The Department offers a concentration in the linguistics doctoral program for students interested in combining the study of Speech and Hearing Sciences with Linguistics. Requirements for students who have a master’s degree in Speech-Language Pathology are: LING 504; LING 522; LING 531; LING 567; LING 502 or 503; LING 523; LING 532, 533, or 535. Requirements for students who have a master’s degree in Linguistics: SHS 510; LING 506; SHS 431; SHS 550; SHS 507; SHS 530 or LING 560; one additional SHS course on disorders. Requirements for all students in the concentration: a second graduate course in phonetics and phonology (chosen from LING 502, 503, or 505); LING 529; and the following (specific courses must be approved by the comprehensive examination committee): a graduate level course in statistics, a graduate level course in research methods (not SHS 506); three seminars, one in each of the comprehensive examination areas. Students in the concentration must also meet all other requirements for the Linguistics Ph.D.

Linguistics (LING)

101. Introduction to the Study of Language. (3) (Also offered as ANTH 110.) Broad overview of the nature of language: language structure, biology of language, language learning, language and thought, bilingualism, social and regional variation and educational implications. Intended to
fulfill breadth requirements in any college. 101 and ANTH 110 may not both be counted for credit.

292. Introduction to Linguistic Analysis. (3) Basic concepts and technical vocabulary of language as a structured system: phonology, morphology, syntax, semantics. Emphasis on descriptive linguistics; some attention to language change and variation. Presumes no prior knowledge of linguistics.

295. Special Topics in Current Language Issues. (3 to a maximum of 12) \^ Special topics motivated by expertise of instructor and interest of students. Topics such as language and gender, language and politics, animal communication, language and aging and languages of the world. May be repeated for credit as topic varies. [Offered upon demand]

303. English Phonetics. (3) Smith
(Also offered as CJ, SHS 303.) An introduction to the physiological mechanisms underlying speech production, linguistic classification and transcription of speech sounds, acoustic properties of speech sounds, relationship between phonetics and phonology, and applications to speech pathology.

304./504. Phonological Analysis. (3) Smith
(Also offered as ANTH 317.) Phonetic principles and phonological theory, descriptive analysis of phonological systems, transcriptional practice, and problems from selected languages. Prerequisite: 303.

322./522. Grammatical Analysis. (3) Axelrod, Gorbet
(Also offered as ANTH 318.) Principles of morphological and syntactic analysis and introduction to functional and formal theories of grammar. Descriptive analysis of grammatical structures and problems from a variety of languages. Prerequisite: 292 or SIGN 305.

331./531. Language in Society. (3) Axelrod
Introduction to sociolinguistics. Topics: social dialects, societal multilingualism, language contact, language attitudes, language policy and planning, the role of language in binding and defining communities. Prerequisites: 101 or 292 or 440.

334./534. Language and Gender. (3) Axelrod
(Also offered as WMST 334.) This course provides an introduction to linguistic analyses of language used by and about women and men, exploring how language is used in constructing ourselves and others as men and women, gay, straight, or transgendered.

359./559. Language and Culture. (3) Basso, Dinwoodie, Gorbet
(Also offered as ANTH 310 and CJ 319.) Examination of the interrelations of language and speech with other selected aspects of culture and cognition. Prerequisites: 101 or 292 or ANTH 110.

367./567. Psychology of Language. (3) Morford
(Also offered as PSY 367.) Theoretical and methodological issues in psycholinguistics, including comprehension, speech perception and production, language acquisition, bilingualism, brain and language, reading. Prerequisites: 292 or PSY 265 or SIGN 305.

*401–402. Topics: American Indian Languages. (3, 3 to a maximum of 12) \^ Introductory study of a Native American language, selected according to availability of instructor and student interest. May be repeated for credit as the topic varies.

406./506. Introduction to Experimental Phonetics. (3) Smith
Introduction to experimental methods used in the study of speech. Laboratory exercises in computer-based measurement of acoustic and aerodynamic data. Acoustic theory illustrated by sounds in diverse languages. Introduction to speech technology. Prerequisite: 303.

*407. Sanskrit I. (3) (Also offered as MLNG, RELG 407.) An introduction to the Sanskrit language in conjunction with readings from classical Sanskrit literature in translation.

*408. Sanskrit II. (3) (Also offered as MLNG, RELG 408.) The continuation of Sanskrit I: the completion of the study of Sanskrit grammar and an introduction to the reading of Sanskrit texts.

412./512. Morphology. (3) Axelrod, Bybee
An introduction to principles underlying structure of words and paradigms in languages of different types. How word structure reflects cognitive organization and how it is affected by child language acquisition and historical change. Prerequisite: 322.

413./513. Linguistic Field Methods. (3) Axelrod, Gorbet
(Also offered as ANTH 413.) Practice in transcribing from oral dictation, phonemic analysis, introduction to problems of morphology. Prerequisites: 304 and 322. Restriction: permission of instructor. [Offered upon demand.]

415./515. Native American Languages. (3) Axelrod
(Also offered as ANTH 415.) Survey of Indian languages of North America, with special emphasis on languages of New Mexico. Topics: linguistic structure in particular languages and language families; relationship of languages and cultures; and language loss, maintenance and preservation.

425./525. Semantic Analysis. (3) Axelrod, Croft, Travis
An introduction to the study of sentence and word level meaning in the languages of the world, emphasizing the role of speaker and hearer, linguistic and extralinguistic context, lexical semantics, and grammatical meaning. Prerequisites: 292 or SIGN 305.

429./529. Discourse Analysis. (3) Axelrod, Travis
Introduction to the relationship of morphosyntax to the structure of discourse in the languages of the world. Topics: method and theory in the analysis of spoken and written discourse; basic notions such as topic, focus and cohesion. Prerequisite: 322.

432./532. Spanish-English Bilingualism. (3) Axelrod
(Also offered as LLSS 445.) An introduction to issues in bilingualism with emphasis on Spanish and English in the Southwest. Topics: language maintenance and shift, language policy and education, borrowing and codeswitching, first and second language acquisition, language attitudes.

435./535. Societal Bilingualism. (3) Differential use of languages in multilingual societies; attitudinal correlates of use; language maintenance and shift in relation to other social change; language loyalty and group identification. Prerequisite: 331.

436./536. Language and Education in Southwest Native American Communities. (3) (Also offered as LLSS 460/560 and NAS *460.) This course explores the historical context of education and its impact on Native American communities of the Southwest. Topics include native language acquisition, bilingualism, language shift, and language revitalization efforts in native communities and schools.

440./540. Introduction to Linguistics. (3) Axelrod
Broad overview of the field of linguistics; principles and practices of linguistic analysis, sociolinguistics, psycholinguistics and educational linguistics. Oriented primarily to the needs of present and prospective teachers.

441./541. English Grammars. (3) Beene
(Also offered as ENGL 441.) A survey of various grammar models and their applications to analysis of the English language. Prerequisite: ENGL 240.
446./546. Introduction to Language Change. (3) Bybee, Croft
(Also offered as ANTH 416.) Theories and methods of comparative and historical linguistics, emphasizing change in English, Indo-European and Native American languages. Prerequisite: 304.

447./547. Old English. (3 to a maximum of 6) Δ
(Also offered as ENGL 447./547.) An introduction to the grammar, syntax, and phonology of Old English. Prepares students for more advanced studies in this and later periods.

449./549. Middle English Language. (3)
(Also offered as ENGL 449./549.) Comprehensive study of Middle English dialects and the development of Middle English from Old English. Prepares students for Middle English literature.

460./560. Child Language. (3) John-Steiner, Morford
(Also offered as PSY 422.) Theories, methodologies and findings in child language from birth to late childhood. Emphasizes implications of child language data for linguistic and psycholinguistic theories; Topics: biological foundations; pre-linguistic communication; phonological, syntactic, semantic and pragmatic development; bilingualism. Prerequisite: LING/PSY 367.

469L./569L. Experimental Psycholinguistics. (3) Morford
(Also offered as PSY 469L.) Laboratory course in psycholinguistics; review of classic issues and research. Provides an opportunity to learn basic research methods in experimental psycholinguistics and gain skills necessary to conduct independent research. Prerequisites: 367 or PSY 367.

490./590. Topics in Linguistics. (1-3 to a maximum of 12) Δ
Special topics motivated by expertise of instructor and interest of students.

495. Undergraduate Problems. (1-6) Δ
For original individual study project approved by instructor. Maximum of 6 hrs. creditable to linguistics major or minor. Restriction: permission of instructor.

498. Reading and Research for Honors. (3) Restriction: permission of instructor.

499. Honors Thesis. (3) Prerequisite: 498.

502. Generative Theories of Phonology. (3) Bybee, Smith
The basic organizational units of phonology: features, segments, syllables, words, suprasegmental, tone, stress and intonation. Topics: natural phonological processes, diachronic changes, and typological variation involving these units. Prerequisite: 304 or 504 or SPAN 545.

503. Usage-based Phonology. (3) Bybee, Smith
The nature of phonological representations in the lexicon and the interaction of morphology, syntax, and language use with phonology. Topics: underspecification, lexical phonology, cognitive phonology, rules, schemas, and productivity. Prerequisite: 304 or 504 or SPAN 545.

504./304. Phonological Analysis. (3) Smith
(Also offered as ANTH 517.) Phonetic principles and phonological theory, descriptive analysis of phonological systems, transcriptional practice, and problems from selected languages. Prerequisite: 303 or SPAN 350.

505. Survey of Phonetic Theory. (3) Smith
Advanced topics in phonetics. Acoustic and articulatory study of sounds in different languages; phonetic universals; models of speech production and perception; prosody; relation between phonetics and phonology. Prerequisites: 304 or 504 or SPAN 545.

506./406. Introduction to Experimental Phonetics. (3) Smith
Introduction to experimental methods used in the study of speech. Laboratory exercises in computer-based measurement of acoustic and aerodynamic data. Acoustic theory illustrated by sounds in diverse languages. Introduction to speech technology. Prerequisite: 303 or SPAN 350.

512./412. Morphology. (3) Axelrod, Bybee
An introduction to principles underlying structure of words and paradigms in languages of different types. How word structure reflects cognitive organization and how it is affected by child language acquisition and historical change. Prerequisite: 322 or 522 or SPAN 351.

513./413. Linguistic Field Methods. (3) Axelrod, Gorbet
(Also offered as ANTH 512) Practice in transcribing from oral dictation, phonemic analysis, introduction to problems of morphology. Prerequisites: (304 or 504 or SPAN 350) and (322 or 522). (Offered upon demand)

515./415. Native American Languages. (3) Axelrod
(Also offered as ANTH 515.) Survey of Indian languages of North America, with special emphasis on languages of New Mexico. Particular languages and such issues as classification; language structure; relationship of languages and cultures; and language loss, maintenance and preservation.

521. Formal Syntactic Theories. (3) Axelrod, Croft
The study of universals of syntax from a generative or formal perspective. Description of cross-linguistic phenomena in at least two formal theories, such as Government and Binding, Generalized Phrase Structure Grammar or Lexical Functional Grammar. Prerequisite: 322 or 522.

522./322. Grammatical Analysis. (3) Axelrod, Gorbet
Principles of morphological and syntactic analysis and introduction to functional and formal theories of grammar. Descriptive analysis of grammatical structures and problems from a variety of languages. Prerequisite: 292 or SIGN 305 or SPAN 351.

523. Functional Syntactic Theories. (3) Axelrod, Croft, Travis, S. Wilcox
(Also offered as ANTH 513.) Description and explanation of morphological, syntactic, and discourse phenomena, both in language-specific and typological perspective, in terms of their cognitive representations and the cognitive and interactional processes in which they function. Prerequisite: 322 or 522 or SPAN 351.

525./425. Semantic Analysis. (3) Axelrod, Croft, Travis
An introduction to the study of sentence and word level meaning in the languages of the world, emphasizing the role of speaker and hearer, linguistic and extralinguistic context, lexical semantics, and grammatical meaning. Prerequisite: 292 or SIGN 305 or SPAN 351.

529./429. Discourse Analysis. (3) Axelrod, Travis
Introduction to the relationship of morphology to the structure of discourse in the languages of the world. Topics: method and theory in the analysis of spoken and written discourse; basic notions such as topic, focus and cohesion. Prerequisite: 322 or 522 or SPAN 351.

531./331. Language in Society. (3) Axelrod
Introduction to sociolinguistics. Topics: social dialects, societal multilingualism, language contact, language attitudes, language policy and planning, the role of language in binding and defining communities. Prerequisite: 101 or 292 or 440.

532./432. Spanish-English Bilingualism. (3) (Also offered as LLSS 545.) An introduction to issues in bilingualism with emphasis on Spanish and English in the Southwest. Topics: language maintenance and shift, language policy and education, borrowing and code-switching, first and second language acquisition, language attitudes.
533. [533./433.] Sociolinguistic Variation. (3) Linguistic variability in relation to social status and situational context, attitudinal correlates of language stratification and sociolinguistic change in progress. Prerequisite: 331 or 531.

534./334. Language and Gender. (3) Axelrod (Also offered as WMST 534.) This course provides an introduction to linguistic analyses of language used by and about women and men, exploring how language is used in constructing ourselves and others as men and women, gay, straight or transgendered.

535./335. Societal Bilingualism. (3) Differential use of languages in multilingual societies; attitudinal correlates of use; language maintenance and shift in relation to other social change; language loyalty and group identification. Prerequisite: 331 or 531.

536./336. Language and Education in Southwest Native American Communities. (3) (Also offered as LLSS 460/560 and NAS *460.) This course explores the historical context of education and its impact on Native American communities of the Southwest. Topics include native language acquisition, bilingualism, language shift, and language revitalization efforts in native communities and schools.

539. Seminar in Sociolinguistics. (3 to a maximum of 12) ∆ Variable topics such as variation theory, language planning, pidgins and creoles, language attitudes and dialectology.

540./440. Introduction to Linguistics. (3) Axelrod Broad overview of the field of linguistics; principles and practices of linguistic analysis, sociolinguistics, psycholinguistics and educational linguistics. Oriented primarily to the needs of present and prospective teachers.

541./441. English Grammars. (3) Beene (Also offered as ENGL 541.) A survey of various grammar models and their applications to analysis of the English language. Prerequisite: ENGL 240.

545./446. Introduction to Language Change. (3) Bybee, Croft (Also offered as ANTH 516.) Theories and methods of comparative and historical linguistics, emphasizing change in English, Indo-European, and Native American languages. Prerequisite: 304 or 504 or SPAN 545.

547./447. Old English. (3 to a maximum of 6) ∆ (Also offered as ENGL 547./447.) An introduction to the grammar, syntax, and phonology of Old English. Prepares students for more advanced studies in this and later periods.

548. Grammaticization. (3) Bybee Grammaticization is the historical process by which words in constructions become grammatical units. The course examines this process across languages, focusing on mechanisms of change and implications for typology, universals and synchronic analysis. Prerequisite: 412 or 512 or 322 or 522 or SPAN 443** or SPAN 542.

549./449. Middle English Language. (3) (Also offered as ENGL 549./449.) Comprehensive study of Middle English dialects and the development of Middle English from Old English. Prepares students for Middle English literature.

554. Seminar in Linguistic Theory. (3 to a maximum of 12) ∆ (Also offered as ANTH 514.) Current topics and issues in phonology, syntax or semantics. Maximum 12 credits.

559./359. Language and Culture. (3) Basso, Dinwoodie, Gorbet (Also offered as ANTH 511 and CJ 519.) Examination of the interrelations of language and speech with other selected aspects of culture and cognition. Prerequisites: 101 or 292 or ANTH 110.

560./460. Child Language. (3) John-Steiner, Morford (Also offered as PSY 522.) Theories, methodologies and findings in child language from birth to late childhood. Emphasizes implications of child language data for linguistic and psycholinguistic theories. Topics: biological foundations; pre-linguistic communication; phonological, syntactic, semantic and pragmatic development; bilingualism. Prerequisite: 367 or 567 or PSY 367.

565. Seminar in Thought and Language. (3) John-Steiner (Also offered as PSY, EDPY 565.) The role of language in human cognition is approached from a sociocultural framework. Topics: semiotic systems, languages of the mind, categorization, problem solving, and cognitive pluralism.

566. Psycholinguistics of Bilingualism. (3) Morford (Also offered as PSY 566.) Examination of psycholinguistic research relating to adult and childhood bilingualism. Topics: bilingual memory and lexical representation, language separation and interaction in production, code switching and mixing, neurolinguistics, and childhood bilingualism. Prerequisite: 367 or 567 or PSY 367.

567./367. Psycholinguistics of Language. (3) Morford (Also offered as PSY 367.) Theoretical and methodological issues in psycholinguistics, including comprehension, speech perception and production, language acquisition, bilingualism, brain and language, reading. Prerequisite: 292 or PSY 265 or SIGN 305.

568. Seminar in Psycholinguistics. (3 to a maximum of 12) ∆ Morford (Also offered as PSY 569.) Restriction: permission of instructor.

569L./469L. Experimental Psycholinguistics. (3) Morford (Also offered as PSY 469L.) Laboratory course in psycholinguistics; review of classic issues and research. Provides an opportunity to learn basic research methods in experimental psycholinguistics and gain skills necessary to conduct independent research. Prerequisites: 367 or 567 or PSY 367.

590./490. Topics in Linguistics. (1-3 to a maximum of 12) ∆ Special topics motivated by expertise of instructor and interest of students.

595. Graduate Problems. (1-6 to a maximum of 24) ∆ Original independent study project approved by instructor. Restriction: permission of instructor.

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

699. Dissertation. (3-12) Original research for doctoral dissertation in Linguistics. Available only to doctoral students who have been advanced to candidacy. Taken under supervision of dissertation director. Offered on a CR/NC basis only.

Navajo (NVJO) (No major offered. For minor study requirements, see Linguistics.)

101–102. Elementary Navajo for Non-Native Speakers. [Elementary Navajo.] (3, 3) Willink Beginning Navajo for students with no previous exposure to the language. Development of all four language skills, with emphasis on listening and speaking. (101–Fall, 102–Spring)
103. [103–104.] Basic Medical Navajo. (3, 3) Willink Fundamentals of Navajo for students in the medical profession. Does not satisfy language requirement of College of Arts and Sciences. (Offered upon demand)

105. Written Navajo for Native Speakers. [Written Navajo.] (3) Willink Introduction to Navajo writing and reading; for native speakers of Navajo only. 101 and 105 may not both be counted for credit.

201–202. Intermediate Navajo. (3, 3) Willink Intermediate Navajo for students who have completed 102 or 105, or equivalent. Continued development of all four skills. Prerequisite: (101–102) or 105. (201–Fall, 202–Spring)

206. Creative Writing and Advanced Reading. (3) Willink For native speakers of Navajo only. Prerequisite: 105.

311./511. Navajo Verb System I. (3) This course emphasizes Navajo grammar and introduces students to the prefix template of the Navajo verb. Verb paradigms in the imperfective are covered using a variety of literary and cultural materials. Prerequisite: 202 or 206.

312./512. Navajo Verb System II. (3) The course continues study of the verb paradigms in Navajo and introduces the perfective, usitative, iterative, progressive and future modes using a variety of literary and cultural material. Discussion includes Navajo aspectual variation, stem alternations and conjugation patterns. Prerequisite: 301.

315./515. Advanced Navajo. (3) An examination of Navajo syntax, including voice alternations (passive, causative), relative and subordinate clause constructions and discourse structure. Prerequisite: 202.

401./501. Navajo Linguistics. (3 to a maximum of 12) ∆ Introduction to linguistics in Navajo including phonetics and phonology, grammar, semantics, pragmatics and sociolinguistics. Prerequisite: 202.

495. Undergraduate Problems. (1-6 to a maximum of 6) ∆ Willink Restriction: permission of instructor.

501./401. Navajo Linguistics. (3 to a maximum of 12) ∆ Introduction to linguistics in Navajo including phonetics and phonology, grammar, semantics, pragmatics and sociolinguistics. Prerequisite: 202.

511./311. Navajo Verb System I. (3) This course emphasizes Navajo grammar and introduces students to the prefix template of the Navajo verb. Verb paradigms in the imperfective are covered using a variety of literary and cultural materials. Prerequisite: 202 or 206.

512./312. Navajo Verb System II. (3) The course continues study of the verb paradigms in Navajo and introduces the perfective, usitative, iterative, progressive and future modes using a variety of literary and cultural material. Discussion includes Navajo aspectual variation, stem alternations and conjugation patterns. Prerequisite: 301.

515./315. Advanced Navajo. (3) An examination of Navajo syntax, including voice alternations (passive, causative), relative and subordinate clause constructions and discourse structure. Prerequisite: 202.

595. Graduate Problems. (1-6) Original independent study project approved by instructor. Restriction: permission of instructor.

Signed Language Interpreting (SIGN)

(For major study requirements, see Linguistics.)

201. Introduction to Signed Language. (3) Naughton, Santiago, P. Wilcox Overview of signed language studies and related issues. Introduction to American Sign Language (ASL); signed communication systems most frequently used by deaf and hard of hearing individuals; the study of fingerspelling.

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

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

212. Fingerspelling I. (3) Santiago, P. Wilcox Assists the student in acquiring fluent fingerspelling ability through the use of visual and expressive drills. Videotapes of a variety of fingerspelling styles will be used to ensure that the student acquires a comprehensive background. Prerequisite: 201. Restriction: permission of instructor.

214. Lexical Semantics for Transliteration. (3) P. Wilcox Examines polysemy of the English lexicon which transliterators must be concerned with, ranging from semantic prototypes to word meanings which are essentially fluid. Signs representing English morphology are also discussed. Prerequisite: 201. Restriction: permission of instructor.

305. Signed Language Linguistics. (3) S. Wilcox Examines linguistic research on signed languages, primarily ASL: phonetics, phonology, morphology, syntax and semantics. Also covers signed language sociolinguistics, psycholinguistics, language acquisition (first and second) and neurolinguistics. Prerequisite: 210 and LING 101. Restriction: permission of instructor.

310. American Sign Language III. (3) Rudy Designed to help students improve their expressive skills and general conversational competence in ASL relative to phonology, lexical items, syntax and discourse. Focuses on semantic appropriateness and accuracy of particular lexical items, appropriate use of non-manual behaviors and the use of context to determine meaning. Prerequisite: 211. Restriction: permission of instructor.

320. American Sign Language IV. (3) Rudy Intensive practical involving receptive/expressive skills in complex grammatical structures, dialogue and storytelling. Intensive study of transcription techniques and their applications to ASL research and documentation. Prerequisite: 310. Restriction: permission of instructor.

352. Language and Culture in the Deaf Community, Part 1. (3) S. Wilcox An introduction to Deaf culture. Examines the language, education, social and political aspects and art forms of Deaf people from an anthropological point of view.

353. Language and Culture in the Deaf Community, Part 2. (3) Continues developing a thorough understanding of the issues related to signed languages and Deaf culture. Cross-cultural issues and the history of Deaf people also will be addressed. Taught in ASL. Prerequisite: 310 and 352.
355. Deaf History and Literature. (3) Naughton, Rudy
A study of the history of Deaf people, the Deaf community and an overview of all genres of Deaf literature. Topics include educational, social, political and economic aspects of the Deaf community from the Deaf perspective. By permission of Program Coordinator.
Prerequisite: 320. Restriction: permission of instructor.

*360. The Interpreting Profession. (3) P. Wilcox
Addresses the mental processes essential to interpretation and transliteration. In addition to exercises used to develop interpreting strategies such as memory retention, message analysis, decalage, etc., the student is introduced to the interpreter’s Code of Ethics and business practices of the professional interpreter.
Prerequisites: 212 and 214 and 310 and 352 and LING 101. Restriction: permission of instructor.

*411. Consecutive Interpretation. (3) Shaffer
Theory and practice of consecutive interpretation. Topics: message analysis, attention, cultural mediation, reducing interference from the source language. Equal time is spent with ASL & English texts.
Prerequisite: 360 and ENGL 102. Restriction: permission of instructor.

*412. Simultaneous Interpretation. (3) Shaffer
Theory and practice of simultaneous interpretation. Topics: control of source-language input, team interpreting, self-monitoring and repair, preparation, providing feedback and special situations such as interpreting in medical settings.
Prerequisite: 411 and ENGL 102. Restriction: permission of instructor.

*418. Signed Language Interpreting Research. [Seminar in Signed Language Interpreting] (3) S. Wilcox
A detailed study of current trends and practices in signed language interpreting and evaluation, along with similarities and differences between signed language and spoken language interpreting. Introduction to interpreting process models and assessment models and discussion of current research in the field of interpreting. Students will conduct a small-scale research project and participate in a debate of issues surrounding the interpreting profession.

*419. Practicum in Signed Language Interpreting. 1-3 to a maximum of 4) [1-4 to a maximum of 4] Shaffer
Supervised practicum interpreting and transliterating in a variety of community and academic settings, including elementary through post-secondary classrooms, medical situations, vocational rehabilitation, platform and television interpreting and so forth. Supervised preparation for future private practice employment.
Prerequisite: 360. Restriction: permission of instructor.

*490. Topics in Signed Language. (1-6 to a maximum of 12) \( \Delta \)

495. Undergraduate Problems. (1-6 to a maximum of 6) [1-6 to a maximum of 24] \( \Delta \)
Restriction: permission of instructor.
Introduction

Mathematics is fundamental to the formulation and analysis of scientific theories, is a rich and independent field of inquiry, and its study is excellent preparation for life in our highly specialized society. Active research throughout the mathematical subdisciplines, spurred on in part by advances in computing technology, leads to new perspectives and applications. The major in mathematics combines broad study of fundamental theories with in-depth investigation of particular subjects chosen from pure, applied and computational mathematics. A degree in mathematics, either alone or in combination with study in another field, is excellent preparation for careers in industry, universities and research institutes. The major in mathematics with the mathematics education option satisfies all the requirements for a license to teach mathematics at the secondary level in New Mexico.

Statistics is the science of collecting and analyzing data. Statisticians interact with researchers in all the various disciplines of science, engineering, medicine, social science and business to develop scientifically sound methods in those areas. Most course work in the department is devoted to understanding current methods and the reasoning behind them. A degree in statistics prepares students for careers in industry, government and research institutes. The major in statistics prepares students for careers in industry, government, universities and research institutes, as well as being excellent preparation for professional programs in medicine, law, business administration and public policy and administration.

High School Students. In order to graduate from the University of New Mexico, all students are required to take a minimum of 3 credits of mathematics course work at the college algebra (MATH 121) level or above. To prepare for this level of study, high school students must take two years of algebra and one year of geometry prior to admission. Students should take mathematics during their senior year of high school, and also take the SAT or ACT examination during that year, for the best preparation and placement into mathematics courses at the University of New Mexico. Students planning to major in any scientific or technological field should take more advanced mathematics courses in high school. Placement in Mathematics or Statistics courses at UNM is based on the most recent ACT/SAT Math scores.

A beginning student who wishes to take MATH 163 or a more advanced course must have departmental approval.

A student who wishes to enroll in a course requiring a prerequisite must earn a grade of C (not C-) or better in the prerequisite course.

Flow Chart for Beginning Courses

A student’s preparation determines the starting course in any sequence.

Transitional courses

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<th>121</th>
<th>180 ...</th>
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<td>100</td>
<td>120</td>
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<td>129</td>
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<td>Stat 145</td>
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Calculus for biological and social sciences

180 — 181

Mathematics major sequence

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<tr>
<th>162</th>
<th>163</th>
<th>264</th>
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<td>314</td>
<td>321</td>
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Statistics major sequence

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<th>162</th>
<th>163</th>
<th>264</th>
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Engineering sequence

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<th>264</th>
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Elementary education sequence

| 111 | 112 | 215 |

Elementary education students not prepared for MATH 111 will begin with MATH 100.

Restrictions

1. Credit not allowed for both MATH 162 and 180.
2. Credit not allowed for both MATH 163 and 181.
3. Credit not allowed for both MATH 314 and 321.
4. Credit not allowed for both MATH 401 and 501.
5. Credit not allowed for both MATH 322 and 422.
6. Students who have credit for any courses numbered MATH 121 and above may not take IS-M 100 or MATH 120 for credit.
7. Students who have credit for any courses numbered 162 and above may not take MATH 120, 121, 123 or 150 for credit. (Students with MATH 180/181 may take MATH 123 for credit).
8. A student may not take an examination to validate credit in mathematics courses.
9. Mathematics or Statistics course work dating back more than five years cannot automatically be counted as fulfillment of a prerequisite. Students with older course work who feel they have retained subject knowledge are encouraged to take the COMPASS placement tests offered through the University of New Mexico Testing Center.

Mathematics Major Study Requirements

See separate listing under Statistics for additional degree concentrations.

The following is required of all Mathematics majors:

1. 162, 163, 264, 321 (linear algebra); 321 and 401 are not required in Mathematics Education; 401 is not required in Mathematics of Computation.
2. Assignment of an advisor. Students must be assigned a faculty advisor as soon as they decide to major in mathematics. It is important for students to work closely with their advisors in designing a suitable concentration.
3. Knowledge of a computing language at the level of CS 152L is required.
Concentration I (Pure Mathematics). The concentration in Pure Mathematics requires MATH 322, 327, and 402 and five of the following courses: 313, 319, 331, 421, 431, 434, 441, 462, 472. Students who are unfamiliar with mathematical abstraction are encouraged to take 327 as early in their program as possible.

Concentration II (Applied Mathematics). The concentration must include MATH 311 or 402, 312, 313, 316, 375. Both 311 and 402 can be taken for credit. If 402 is not chosen, then the concentration must include one of 441, 462, 463, 464, 466, 471 or 472. Students are strongly encouraged to take science and engineering courses with significant mathematical content.

Concentration III (Math Education). Undergraduates seeking secondary certification in Mathematics may be enrolled in either the College of Arts and Sciences or the College of Education. Mathematics major and minor requirements differ somewhat between the two colleges. The requirements for an A&S major are: MATH 321 (or 314), 305, 306, 338, STAT 345 and at least 12 hours from MATH 307, 308, 309, 311, 317, 319, 322, 331, 375, 401, 406 or other upper division courses approved by the math-education advisor.

Concentration IV (Mathematics of Computation). This concentration requires, along with the usual Math major requirements, the following:

1. MATH 375, 464 and 471; four of 312, 316, 317, 318, 319, 322; one of STAT 345, MATH 441. Note that MATH 401 is not required for this concentration but is recommended for students contemplating advanced study in mathematics.
2. A minor in Computer Science. Currently this includes 22 CS hours of which the following are required: CS 152L, 261, 251L, ECE 238L, CS 257L and two of CS 341L, 351L and 361L.

The CS advisor may make exceptions where appropriate. See the CS department catalog for substitution and restrictions.

Concentration V (Distributed). In addition to the usual mathematics major requirements, this concentration requires completion of MATH 317 or 327 or STAT 345 and at least two of the following 10 groups of courses. Reasonable substitutions, approved by the student’s advisor, are allowed. The remainder of the required 27 credits at the 300 level and above may be chosen by the student with the approval of the advisor.

1. 401 and 402 (Analysis)
2. 322 and 421 (Algebra)
3. 431 and either 331 or 434 (Topology/Geometry)
4. 319 and one of 317, 318, 327 (Discrete Mathematics)
5. Two of 312, 316, 462, 463, 466 (Differential Equations)
6. 311 and 313 (Multivariate and Complex Calculus)
7. 375 and either 464 or 471 (Computational Mathematics)
8. STAT 345 and STAT 427 (Applied Statistics)
9. 441 and STAT 453 (Statistics Theory, preparation for second actuarial exam)
10. 472 and an approved course, possibly in another department, in image processing

Additional information for Mathematics majors:

1. Each Mathematics major should be in regular contact with their faculty advisor to discuss his or her program of studies.
2. Since many graduate schools require a reading knowledge of one or two foreign languages, it is desirable that an undergraduate take three semesters of at least one of the following: French, German, Russian.
3. A student who would like to have a course offered which is listed as offered on demand should discuss the possibility with the department chairperson.

Mathematics Minor Study Requirements

MATH 264 and 12 hours in Mathematics and Statistics courses numbered above 300. At least 6 of the 12 hours must be in courses labeled Math. Note that a separate statistics minor is available. 1) The pass/fail (CR/NC) option may not be used for minor study and the grades in all mathematics and statistics courses must be C (not C-) or better. Courses required for a major may not be used to fulfill minor requirement.

Minor in Statistics Requirements for Mathematics Major

MATH 264 and STAT 145, 345, 427, 428, and an additional 3 hours of Statistics in courses numbered 300 and above. All 12 hours in courses 300 level and above must be in courses labeled STAT. Note that a separate Mathematics Minor for Statistics majors is available. The pass/fail (CR/NC) option may not be used for minor study and the grades in all statistics courses must be a C (not C-) or better.

Departmental Honors

Requirements for departmental honors in Mathematics are 1) a 3.5 GPA in Mathematics and Statistics courses and a 3.2 overall GPA; 2) notification to department honors advisor no later than two full semesters prior to graduation; 3) completion of a project based on 6 credits of MATH 499 (project outline to be presented to the Mathematics Undergraduate Honors Committee [MUHC] for approval); 4) final written report to be submitted to MUHC for approval; and 5) seminar to be given at the end of the project. These requirements are in addition to the major requirements.

Graduate Program

Graduate Advisors

Contact the department for assignment of a faculty graduate advisor.

Application Deadlines

Fall semester: November 1
Spring semester: January 15 (with financial aid)
April 30 (without financial aid)

Mathematics Degrees Offered

See separate listings under Statistics for additional degree concentrations.

M.S. in Mathematics

Concentrations: pure mathematics, applied mathematics.

The Master of Science in Mathematics degree is offered by the Department of Mathematics and Statistics in the concentration of pure mathematics and applied mathematics. The student planning to study pure mathematics is expected to have taken the courses usually included in an undergraduate mathematics major, that is, linear algebra, abstract algebra and advanced calculus. To pursue the program in applied mathematics the student should have taken advanced calculus, linear algebra and have some familiarity with differential equations and scientific computing. Promising students lacking an adequate undergraduate background may be admit-
The Master of Science in Mathematics degree is awarded under either Plan I 26 hours and 6 hours thesis (thesis option) or Plan II 32 hours (non-thesis option). There is no minor requirement. The thesis option is best suited for students seeking jobs in industry or government laboratories. At least 18 hours (Plan I) or 24 hours (Plan II) of the program must be in the department. Knowledge of a foreign language is not required.

It is possible to earn a master’s degree on a part-time basis at the Los Alamos Center for Graduate Studies. The training office at this Center should be consulted for details.

**Ph.D. in Mathematics**

Concentrations: pure mathematics, applied mathematics.

The Doctor of Philosophy in Mathematics degree is offered by the department with concentrations in the areas of pure mathematics and applied mathematics. Knowledge of one foreign language chosen from French, German or Russian is expected.

General requirements for both the M.S. and Ph.D. degrees are given in the earlier pages of the catalog. Lists of required courses, the number of hours that must be taken in courses labeled Math and various concentrations may be found in the Handbook for Graduate Students in Mathematics. Copies of the Handbook can be found on the Web site: http://www.math.unm.edu/gradhandbook/handbook.html.

**NOTE:** MATH 501 and 502 cannot be counted toward hours needed for graduate degrees in Mathematics and Statistics.

**Graduate Minor in Mathematics**

For a graduate minor at least 9 hours of work in mathematics or statistics approved by both the student’s major department and the Department of Mathematics and Statistics are required. A student may receive a Master of Arts in Education and the Department of Mathematics and Statistics are encouraged to take MATH 321 and 401. Students desiring to take a course who do not have the indicated prerequisite should consult with the course instructor.

**Statistics Major Study Requirements**

The following is required of all Statistics majors.

1. Assignment of a faculty advisor. Students must go to the Department of Mathematics and Statistics to be assigned an advisor from the Statistics Group as soon as they decide to major in statistics.
2. STAT 145 or approved equivalent.
3. STAT 145, 345, 427, 428 and an additional 3 hours of mathematics or statistics in courses above 300. All 12 hours must be in courses labeled MATH. MATH 264 and 12 hours of Mathematics courses numbered 300 or higher and approved by the Departmental Honors. These courses must be C (not C-) or better.
4. One year of calculus, STAT 145, 345, 427, 428 and 314 or 321. Preparation for the second actuarial exam consists of the courses STAT 453 and 461. For information on actuarial careers and other exams consult a Statistics advisor.
5. At least 21 hours of statistics courses numbered 250 or above with a grade of C (not C-) or better. These must include STAT 345, 427, 428, 440 and 445.
6. Enrichment courses: At least 6 additional hours of courses numbered 300 or higher and approved by the student’s undergraduate advisor. These can be taken in an appropriate discipline of the student’s choice, for example: anthropology, biology, business, chemistry, computer science, economics, engineering, mathematics, psychology and statistics. These courses may overlap with the student’s minor.
7. The pass/fail (CR/NC) option may not be used in courses taken to satisfy requirements 2, 4 and 5. All grades in these courses must be C (not C-) or better.

**Statistics Minor Study Requirements**

One year of calculus, STAT 145, 345, 427, 428 and an additional 3 hours of mathematics or statistics in courses numbered 250 and above. The pass/fail (CR/NC) option may not be used for minor study and the grades in all mathematics and statistics courses must be C (not C-) or better.

**Minor in Mathematics Requirements for a Statistics Major**

MATH 264 and 12 hours of Mathematics courses numbered above 300. All 12 hours must be in courses labeled MATH. (Note that a separate Statistics Minor for Mathematics majors is available.) The pass/fail (CR/NC) option may not be used for minor study and the grades in all mathematics courses must be C (not C-) or better.

**Departmental Honors**

Requirements for departmental honors in Statistics are 1) a 3.5 GPA in major courses and a 3.2 overall GPA; 2) notification to department honors advisor no later than two full semesters prior to graduation; 3) completion of a project based on 6 credits of STAT 495 (project outline to be presented to the Statistics Undergraduate Honors Committee [SUHC] for approval); 4) final written report to be submitted to SUHC for approval; and 5) seminar to be given at the end of the project. These requirements are in addition to the major requirements.

**Graduate Program**

**Graduate Advisors**

Contact the department for assignment of a faculty graduate advisor.

**Application Deadlines**

- Fall semester: February 15 (with financial aid)
- Spring semester: November 1
- April 30 (without financial aid)

**Statistics Degrees Offered**

**M.S. in Statistics**

Concentrations: applied statistics, theoretical statistics.

The Master of Science degree student should have taken introductory statistics, linear algebra and a calculus sequence including multivariable calculus. Promising students lacking an adequate undergraduate background may be admitted to the graduate program but will be required to remove undergraduate deficiencies.

The Master of Science in Statistics degree is awarded under either Plan I 26 hours and 6 hours thesis (thesis option) or Plan II 32 hours (non-thesis option). There is no minor requirement. At least 18 hours (Plan I) or 24 hours (Plan II) of the program must be in the department. Knowledge of a foreign language is not required.

Additional information for statistics majors.

1. For students interested in a career in actuarial science, preparation for the first actuarial exam consists of the courses MATH 162, 163, 264 and 314 or 321. Preparation for the second actuarial exam consists of the courses STAT 453 and 461. For information on actuarial careers and other exams consult a Statistics advisor.

2. Students planning on pursuing a graduate degree in Statistics are encouraged to take MATH 321 and 401.
Ph.D. in Statistics

The Doctor of Philosophy in Statistics degree is offered by the Statistics Program. Knowledge of a computer language is required, but knowledge of a foreign language is not.

General requirements for both the M.S. and Ph.D. degrees are given in the earlier pages of the catalog. Lists of required courses, the number of hours that must be taken in courses labeled STAT and various concentrations can be found in the Handbook for Statistics Graduate Students obtained from the Statistics Web page: http://stat.unm.edu/stats

Graduate Minor in Statistics

For a graduate minor at least 9 hours of work in statistics approved by both the student’s major department and the Statistics Program faculty are required. (For a Masters using Plan II, 12 credit hours are required.)

Students desiring to take a course who do not have the indicated prerequisites should consult with the course instructor.

NOTE: STAT 538 and 539 cannot be counted toward the hours needed for graduate degrees in Mathematics and Statistics.

Mathematics (MATH)

I. Introductory Courses

IS-M 100. Algebraic Problem Solving. (3) Includes signed numbers, solving linear equations, formulas, graphing, solving systems of equations and applications. Also covers exponents and polynomials, factoring and quadratics. Satisfactory completion of MATH 100 meets prerequisite for MATH 120. Offered on a CR/NC basis only.

106. Problems in Intermediate Algebra. (1) Study session for 120 with an emphasis on problem solving. Corequisite: 120. Offered on a CR/NC basis only. (Fall, Spring)

107. Problems in College Algebra. (1) Study session for 121 with an emphasis on problem solving. Corequisite: 121. Offered on a CR/NC basis only. (Fall, Spring)

109. Problems in Elements of Calculus. (1) Study session for 123 with an emphasis on problem-solving. Corequisite: 120. Offered on a CR/NC basis only. (Fall, Spring)

110. Problems in College Algebra. (1) Study session for 121 with an emphasis on problem solving. Corequisite: 121. Offered on a CR/NC basis only. (Fall, Spring)

111. Problems in Elementary Calculus. (1) Study session for 123 with an emphasis on problem-solving. Corequisite: 120. Offered on a CR/NC basis only. (Fall, Spring)

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

120. Intermediate Algebra. (3) Preparation for MATH 121, 129 and STAT 145. Covers linear equations and inequalities, polynomials, factoring, exponents, radicals, fractional expressions and equations, quadratic equations, perimeter, areas of simple geometric shapes, and logarithms. Emphasis on problem solving skills. The grading scale for this class is A+ to B-. CR/NC.

Prerequisites: ACT=>19 or SAT=>450 or IS-M 100 or Compass Pre-Algebra >56 or Algebra >33. (Summer, Fall, Spring)


Prerequisite: ACT=>22 or SAT=>510 or MATH 120 or Compass Algebra >54 or College Algebra >33. (Summer, Fall, Spring)

123. Trigonometry. (3) Definition of the trigonometric functions, radian and degree measure, graphs, basic trigonometric identities, inverse trigonometric functions, complex numbers, polar coordinates and graphs, vectors in 2 dimensions. May be taken concurrently with MATH 150.

Prerequisite: ACT=>25 or SAT=>570 or MATH 121 or Compass College Algebra >54. (Summer, Fall, Spring)


Prerequisite: ACT=>22 or SAT=>510 or MATH 120 or Compass Algebra >54 or College Algebra >33. (Summer, Fall, Spring)

150. Pre-Calculus Mathematics. (3) In-depth study of polynomial, rational, exponential and logarithmic functions and their graphs. Includes the fundamental theorem of algebra, systems of equations, conic sections, parametric equations and applications in geometry. Exploration of the graphing calculator. May be taken concurrently with MATH 123. Meets New Mexico Lower Division General Education Common Core Curriculum Area II: Mathematics.

Prerequisite: ACT=>25 or SAT=>570 or MATH 121 or Compass College Algebra >54.

162. Calculus I. (4) Derivative as a rate of change, intuitive, numerical and theoretical concepts, applications to graphing, linearization and optimization. Integral as a sum, relation between integral and derivative, and applications of definite integral. Meets New Mexico Lower Division General Education Common Core Curriculum Area II: Mathematics (NMCCN 1614).

Prerequisite: (ACT=28-31 or SAT=640-700 or MATH 150 or Compass College Algebra >66) and (MATH 123 or Compass Trig >59) or (ACT=>32 or SAT=>720). (Summer, Fall, Spring)

163. Calculus II. (4) Transcendental functions, techniques of integration, numerical integration, improper integrals, sequences and series with applications, complex variables and parametrization of curves.

Prerequisite: C (not C-) or better in MATH 162. (Summer, Fall, Spring)

180. Elements of Calculus I. (3) Limits of functions and continuity, intuitive concepts and basic properties; derivative as rate of change, basic differentiation techniques, application of differential calculus to graphing and minima-maxima problems; exponential and logarithmic functions with applications. Meets New Mexico Lower Division General Education Common Core Curriculum Area II: Mathematics (NMCCN 1613).

Prerequisites: ACT=>26 or SAT=>600 or MATH 121 or MATH 150 or Compass College Algebra >66. (Summer, Fall, Spring)
181. Elements of Calculus II. (3)  
Includes the definite integral, multivariate calculus, simple differential equations, basic review of trigonometry and its relation to calculus. 
Prerequisites: 180. (Summer, Fall, Spring)

264. Calculus III. (4)  
Vector operations, vector representation of planes and curves, functions of several variables, partial derivatives, gradient, tangent planes, optimization, multiple integrals in Cartesian cylindrical and spherical coordinates, vector fields, line integrals and Green’s theorem.  
Prerequisite: C (not C-) or better in 163. (Summer, Fall, Spring)

Footnote: 1 See Restrictions earlier in Mathematics and Statistics.

II. Courses for Teachers and Education Students

The following courses are intended primarily for undergraduate and graduate students in the College of Education and for others seeking teaching certification. Other persons may be admitted to these courses by permission of the department chairperson.

111. Mathematics for Elementary and Middle School Teachers I. (3)  
The intuitive and logical background of arithmetic; properties of sets; algorithms of arithmetic in base ten and other bases; properties of the integers, mathematical terminology; elements of number theory; problem solving.  
Prerequisites: ACT=>19 or SAT=>450 or IS-M 100 or Compass Pre-Algebra >56 or Algebra >33. (Summer, Fall, Spring)

112. Mathematics for Elementary and Middle School Teachers II. (3)  
The properties of the rational number system; extension to the irrationals; decimal and fractional representation of real numbers; geometry.  
Prerequisite: C (not C-) or better in MATH 111. (Summer, Fall, Spring)

215. Mathematics for Elementary and Middle School Teachers III. (3)  
Topics from probability and statistics, coordinate geometry and measurement, and algebra; some applications of mathematics; elements of logic; enrichment topics for the classroom.  
Prerequisites: 112. (Summer, Fall, Spring)

300. Computing in the Mathematics Curriculum. (3)  
Use of computers and graphing utilities in the mathematics classroom. Introduction to hardware and commercial software. Applications of selected programming languages to the teaching of mathematics.  
Prerequisite: 162 or 181.

305. Mathematics from a Historical Perspective. (3)  
A survey of mathematical developments prior to 1800; emphasis on problem solving techniques; comparison of older and more modern methods.  
Prerequisite: 163. (Fall)

306. College Geometry. (3)  
An axiomatic approach to fundamentals of geometry, both Euclidean and non-Euclidean. Emphasis on historical development of geometry. [Spring]

308. Theory and Practice of Problem Solving. (3)  
An experience in mathematical invention and discovery at the level of high school geometry and algebra that includes a deeper look at sequences, series, and recursions. [Offered upon demand]  
Prerequisite: 180 or 162. Corequisite: 306.

309. Applications of Mathematics. (3)  
An experience in mathematical invention and discovery at the level of high school geometry and algebra that includes a deeper look at sequences, series, and recursions.  
Prerequisite: 181 or 163.

338. Mathematics for Secondary Teachers. (3)  
Topics from secondary mathematics presented from an advanced standpoint and designed to meet the needs of pre- and in-service teachers. Open only to prospective and in-service teachers of mathematics.  
Prerequisite: 163 or 181. (Fall)

339. Topics in Mathematics for Elementary and Middle School Teachers. (1-3, no limit)  
Principles and problems of teaching of mathematics. Open only to in-service and prospective teachers. May be repeated for credit by permission of instructor. (Offered upon demand)  
Restriction: permission of instructor.

350. Topics in Mathematics for Secondary Teachers.  
(1-3, no limit)  
Principles and problems of teaching of mathematics. Open only to in-service and prospective teachers. May be repeated for credit by permission of instructor. (Offered upon demand)  
Restriction: permission of instructor.

Footnote: 2 These courses are available for graduate credit for Masters Programs in the College of Education.

III. Upper-Level Undergraduate Courses

311. Vector Analysis. (3)  
Vector algebra, lines, planes; vector valued functions, curves, tangent lines, arc length, line integrals; directional derivative and gradient; divergence, curl, Gauss’ and Stokes’ theorems, geometric interpretations.  
Prerequisite: 264. (Summer, Fall, Spring)

**312. Partial Differential Equations for Engineering. (3)  
Solution methods for partial differential equations; science and engineering applications; heat and wave equations, Laplace’s equation; separation of variables; Fourier series and transforms; special functions.  
Prerequisites: 264, 316. (Summer, Fall, Spring)

**313. Complex Variables for Engineering. (3)  
Theory of functions of a complex variable with applications to physical and engineering problems.  
Prerequisite: 264. Recommended: 311. (Spring)

**314. Linear Algebra with Applications. (3)  
Prerequisite: 163 or 181. (Summer, Fall, Spring)

**316. Applied Ordinary Differential Equations. (3)  
An introduction to the algebraic theory of ordinary differential equations. Topics to be covered: elementary theory of ordinary differential equations, numerical methods, phase-plane analysis, introduction to Laplace transformations.  
Prerequisite: 163. 264 is recommended. (Summer, Fall, Spring)

**317. Elementary Combinatorics. (3)  
Basic enumeration including combinations, permutations, set and integer partitions, distributions, and rearrangements, binomial and multinomial theorems together with pigeon-hole and inclusion-exclusion principles and mathematical induction principles. Discrete probability, elementary ordinary generating functions, recurrence relations, and sorting algorithms.  
Prerequisite: 163 or 181. (Fall)

Footnote: 2 These courses are available for graduate credit for Masters Programs in the College of Education.
**318. Graph Theory.** (3) 
Trees, connectivity, planarity, colorability, and digraphs; algorithms and models involving these concepts. Restriction: permission of instructor. (Spring)

**319. Theory of Numbers.** (3) 
Divisibility, congruences, primitive roots, quadratic residues, diophantine equations, continued fractions, partitions, number theoretic functions. (Spring)

**321. Linear Algebra.** (3) ^1 
Linear transformations, matrices, eigenvalues and eigenvectors, inner product spaces. Prerequisite: 264. (Fall, Spring)

322. Modern Algebra I. (3) 
Groups, rings, homomorphisms, permutation groups, quotient structure, ideal theory, fields. Prerequisite: 264. (Fall)

**327. Introduction to Mathematical Thinking and Discrete Structures.** [Discrete Structures.] (3) 
Course will introduce students to the fundamentals of mathematical proof in the context of discrete structures. Topics include logic, sets and relations, functions, integers, induction and recursion, counting, permutations and combinations and algorithms. Students who do not have the prerequisite may seek permission of the instructor. Prerequisite: 162 and 163. (Fall)

**331. Survey of Geometry.** (3) 
Topics from affine, projective, Euclidean and hyperbolic geometries. Prerequisites: 163 and (314 or 321). [Offered upon demand]

**356. [356.] Symbolic Logic.** (4) 
(Also offered as PHIL 356.) This is a first course in logical theory. Its primary goal is to study the notion of logical entailment and related concepts, such as consistency and contingency. Formal systems are developed to analyze these notions rigorously.

**375. Introduction to Numerical Computing.** (3) 
(Also offered as CS 375.) An introductory course covering such topics as solution of linear and nonlinear equations; interpolation and approximation of functions, including splines; techniques for approximate differentiation and integration; solution of differential equations; familiarization with existing software. (Fall, Spring)

391. Advanced Undergraduate Honors Seminar. (1-3 to a maximum of 8) ^2 
Advanced problem solving. Especially recommended for students wishing to participate in the Putnam Intercollegiate Mathematics Competition. Restriction: permission of instructor. [Offered upon demand]

393. Topics in Mathematics. (3, no limit) ^3 
Selected topics from analysis, algebra, geometry, statistics, model building, interdisciplinary studies and problem solving. [Offered upon demand]

401**501. Advanced Calculus I.** (4) 
Rigorous treatment of calculus in one variable. Definition and topology of real numbers, sequences, limits, functions, continuity, differentiation and integration. Students will learn how to read, understand and construct mathematical proofs. Prerequisite: 264 and two courses at the 300+ level. (Fall, Spring)

402**502. Advanced Calculus II.** (3) 
Generalization of 401/501 to several variables and metric spaces: sequences, limits, compactness and continuity on metric spaces; interchange of limit operations; series, power series; partial derivatives; fixed point, implicit and inverse function theorems; multiple integrals. Prerequisite: 401.

**412. Nonlinear Dynamics and Chaos.** (3) 
Qualitative study of linear and nonlinear ordinary differential equations and discrete time maps including stability analysis, bifurcations, fractal structures and chaos; applications to biology, chemistry, physics and engineering. Prerequisites: 264 and 314 or 316.

**415. [415.] History and Philosophy of Mathematics.** [Philosophy of Mathematics.] (3) 
(Also offered as PHIL 415.) A historical survey of principal issues and controversies on the nature of mathematics. Emphasis varies from year to year. Students who do not have prerequisite may seek permission of instructor. Prerequisite: 356 or 456.

421. Modern Algebra II. (3) 
Theory of fields, algebraic field extensions and Galois theory for fields of characteristic zero. Prerequisite: 322 or 422. (Alternate Springs)

**422. Modern Algebra for Engineers.** (3) 
Groups, rings and fields. (This course will not be counted in the hours necessary for a mathematics major.) Prerequisite: 264. (Fall)

431. Introduction to Topology. (3) 
Metric spaces, topological spaces, continuity, algebraic topology. Prerequisite: 401. (Alternate Falls)

434./534. Introduction to Differential Geometry. (3) 
Elementary theory of surfaces, differential forms, integral geometry and Riemannian geometry. Prerequisite: 311 or 402. [Offered upon demand]

**439. [439.] Topics in Mathematics.** (1-3, no limit) ^4 
[Offered upon demand]

441. [441./527.] Probability. (3) 
(Also offered as STAT 461/561.) Mathematical models for random experiments, random variables, expectation. The common discrete and continuous distributions with application. Joint distributions, conditional probability and expectation, independence. Laws of large numbers and the central limit theorem. Moment generating functions. Prerequisite: 264. (Fall)

462./512. Introduction to Ordinary Differential Equations. (3) 
Linear systems. Existence and uniqueness theorems, flows, linearized stability for critical points, stable manifold theorem. Gradient and Hamiltonian systems. Limit sets, attractors, periodic orbits, Floquet theory and the Poincare Map. Introduction to perturbation theory. Prerequisite: 314 or 321, 316. 401. (Fall)

463./513. Introduction to Partial Differential Equations. (3) 
Classification of partial differential equations; properly posed problems; separation of variables, eigenfunctions and Green's functions; brief survey of numerical methods and variational principles. Prerequisites: 312, 313, 314 or 321, one of 311 or 402. (Spring)

464./514. Applied Matrix Theory. (3) 
Determinants; theory of linear equations; matrix analysis of differential equations; eigenvalues, eigenvectors and canonical forms; variational principles; generalized inverses. Prerequisite: 314 or 321. (Fall)

**466. Mathematical Methods in Science and Engineering.** (3) 
Special functions and advanced mathematical methods for solving differential equations, difference equations and integral equations. Prerequisites: 311, 312, 313, 316. (Spring)

**471. Introduction to Scientific Computing.** (3) 
(Also offered as CS 471.) Introduction to scientific computing fundamentals, exposure to high performance programming language and scientific computing tools, case studies of scientific problem solving techniques.
Classification of partial differential equations; properly posed
513./463. Introduction to Partial Differential Equations. (3)
Prerequisites: 314, or 321, 316, 401. {Fall}
Introduction to perturbation theory.
Torsors, periodic orbits, Floquet theory and the Poincare Map.
Gradient and Hamiltonian systems. Limit sets, attractors.
Linear systems. Existence and uniqueness theorems, flows, linearized stability for critical points, stable manifold theorem. Gradient and Hamiltonian systems. Limit sets, attractors, periodic orbits, Floquet theory and the Poincare Map. Introduction to perturbation theory.
Prerequisites: 314, or 321, 316, 401. (Fall)

513./463. Introduction to Partial Differential Equations. (3)
Classification of partial differential equations; properly posed problems; separation of variables, eigenfunctions and Green's functions; brief survey of numerical methods and variational principles.
Prerequisites: 312, 313, 314 or 321, one of 311 or 402. (Spring)

514./464. Applied Matrix Theory. (3)
Determinants; theory of linear equations; matrix analysis of differential equations; eigenvalues, eigenvectors and canonical forms; variational principles; generalized inverses.
Prerequisite: 314 or 321. (Fall)

519. Selected Topics in Number Theory. (3, no limit) △

520. Abstract Algebra I. (3)
Theory of groups, permutation groups, Sylow theorems. Introduction to ring theory, polynomial rings. Principal ideal domains.
Prerequisite: 322. (Fall)

521. Abstract Algebra II. (3)
Continuation of 520. Module theory, field theory, Galois theory.
Prerequisites: 321, 520. (Spring)

530. Algebraic Geometry I. (3)
Basic theory of complex affine and projective varieties. Smooth and singular points, dimension, regular and rational mappings between varieties, Chow's theorem.
Prerequisites: 431, 521, 561. (Alternate Falls)

531. Algebraic Geometry II. (3)
Continuation of 530. Degree of a variety and linear systems. Detailed study of curves and surfaces.
Prerequisite: 530. (Alternate Springs)

532. Algebraic Topology I. (3)
Introduction to homology and cohomology theories. Homotopy theory, CW complexes.
Prerequisites: 431, 521. (Alternate Falls)

533. Algebraic Topology II. (3)
Continuation of 532. Duality theorems, universal coefficients, spectral sequence.
Prerequisite: 532. (Alternate Springs)

534./434. Introduction to Differential Geometry. (3)
Elementary theory of surfaces, differential forms, integral geometry, Riemannian geometry.
Prerequisite: 311 or 402. (Offered upon demand)

535. Foundations of Topology. (3)
Basic point set topology. Separation axioms, metric spaces, topological manifolds, fundamental group and covering spaces.
Prerequisite: 401.

536. Introduction to Differentiable Manifolds. (3)
Concept of a manifold, differential structures, vector bundles, tangent and cotangent bundles, embedding, immersions and submersions, transversality, Stokes' theorem.
Prerequisite: 536. (Alternate Falls)

537. Riemannian Geometry I. (3)
Theory of connections, curvature, Riemannian metrics, Hopf-Rinow theorem, geodesics, Riemannian submanifolds.
Prerequisite: 536. (Alternate Falls)

538. Riemannian Geometry II. (3)
Continuation of MATH 537 with emphasis on adding more structures. Riemannian submersions, Bochner theorems with relation to topology of manifolds. Riemannian Foliations, Complex and Kaehler geometry, Sasakian and contact geometry.
Prerequisite: 537.

539. Selected Topics in Geometry and Topology. (3, no limit) △


549. Selected Topics in Probability Theory. (3, no limit) ∆ (Also offered as STAT 569.)

551. Problems. (1-3, no limit) †

557. Selected Topics in Numerical Analysis. (3, no limit) ∆ (Also offered as CS 557.) Possible topics include approximation theory, two point boundary value problems, quadrature, integral equations and roots of nonlinear equations.

561. Functions of a Complex Variable I. (3) Analyticity, Cauchy theorem and formulas, Taylor and Laurent series, singularities and residues, conformal mapping, selected topics. Prerequisite: 311 or 402. (Fall)

562. Functions of a Complex Variable II. (3) The Mittag-Leffler theorem, series and product expansions, introduction to asymptotics and the properties of the gamma and zeta functions. The Riemann mapping theorem, harmonic functions and Dirichlet's problem. Introduction to elliptic functions. Selected topics. Prerequisite: 561. (Fall)

563. Measure Theory. (3) Functions of one and several real variables, measure theory, starting with Lebesque measure and integration. Product measures. Measure on spaces of functions. Prerequisite: 401 or 510. (Fall)

565. Harmonic Analysis. (3) Fourier analysis on the circle, real line and on compact and locally compact groups. Prerequisite: 563. (Offered upon demand)

568. Stochastic Differential Equations. (3) Basic theory of stochastic differential equations with applications. The presentation will be at a level accessible to scientists, engineers and applied mathematicians. Prerequisites: 316, 441 and some familiarity with elementary PDEs. (Offered upon demand)

569. Selected Topics in Analysis. (3, no limit) ∆


572/472. Fourier Analysis and Wavelets. (3) Discrete Fourier and Wavelet Transform. Fourier series and integrals. Expansions in series of orthogonal wavelets and other functions. Multiresolution and time/frequency analysis. Applications to signal processing and statistics. Prerequisite: 314, 321 or 401 or permission of the instructor. (Offered upon demand)

573. Partial Differential Equations. (3) Equations of first order, classification of equations and systems, elliptic equations and introduction to potential theory, hyperbolic equations and systems, parabolic equations. Prerequisite: 463. (Alternate Falls)

576. Numerical Linear Algebra. (3) Selected advanced topics in numerical linear algebra. Prerequisite: 504. (Alternate Springs)

577. Numerical Ordinary Differential Equations. (3) Numerical methods for initial value and/or boundary value problems. Prerequisites: 462, 504, 505. (Offered upon demand)

578. Numerical Partial Differential Equations. (3) Introduction to the numerical analysis of partial differential equations. Prerequisites: 463, 504, 505. (Alternate Falls)

579. Selected Topics in Applied Mathematics. (3, no limit) ∆

581. Functional Analysis I. (3) Normed vector spaces, including Hilbert and Banach spaces. Linear operators on these spaces, with an emphasis on applications. Prerequisite: 510. (Offered upon demand)

582. Functional Analysis II. (3) Advanced topics in function spaces and linear operators. Prerequisite: 581.


584. Methods of Applied Mathematics II. (3) Eigenfunction expansions for ordinary and partial differential operators, Euler-Lagrange equations, Hamilton’s principle, calculus of variations, brief complex variable theory, special functions, transform and spectral theory, asymptotic expansions. Prerequisites: 312 and 314 and 316 and 401. (Alternate Springs)

598. Practicum. (1-6 to a maximum of 6) † Practicum involves a project of an applied nature which may be done in conjunction with an industrial laboratory, a research institution or another department of the University. It is expected the student will become acquainted with a field of application in science or engineering and complete a project of use and interest to workers in that field. A final written report is required.

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

605. Graduate Colloquium. (1-1 to a maximum of 4) Students present their current research.

639. Seminar in Geometry and Topology. (1-3) ∆ May be repeated for credit, no limit.

649. Seminar in Probability and Statistics. (1-3, no limit) ∆ (Also offered as STAT 649.)

650. Reading and Research. (1-6 to a maximum of 12) †

669. Seminar in Analysis. (1-3, no limit) ∆
679. Seminar in Applied Mathematics. (1-3, no limit) Δ
689. Seminar in Functional Analysis. (1-3)
699. Dissertation. (3-12)
Offered on a CR/NC basis only.

Statistics (STAT)

145. Introduction to Statistics. (3)
Techniques for the visual presentation of numerical data, descriptive statistics, introduction to probability and basic probability models used in statistics, introduction to sampling and statistical inference, illustrated by examples from a variety of fields.
Prerequisite: ACT = >22 or SAT = >510 or MATH 120. {Summer, Fall, Spring}

**345. Elements of Mathematical Statistics and Probability Theory. (3)
An introduction to probability including combinatorics, Bayes' theorem, probability densities, expectation, variance and correlation. An introduction to estimation, confidence intervals and hypothesis testing.
Prerequisite: MATH 181 or MATH 163. {Summer, Fall, Spring}

425./525. SAS® Programming. (3)
A detailed introduction to the SAS® programming language. Topics covered include reading data, storing data, manipulating data, data presentation, graphing, and macro programming. SAS® software will be used.
Prerequisites: 345, 427.

427/**527. Advanced Data Analysis I. (3)
Statistical tools for scientific research, including parametric and non-parametric methods for ANOVA and group comparison, simple linear and multiple linear regression, and basic ideas of experimental design and analysis. Emphasis placed on the use of statistical packages such as Minitab® and SAS®.
Prerequisite: 145. (Fall)

428/**528. Advanced Data Analysis II. (3)
A continuation of 427 that focuses on methods for analyzing multivariate data and categorical data. Topics include MANOVA, principal components, discriminant analysis, classification, factor analysis, analysis of contingency tables including log-linear models for multidimensional tables and logistic regression.
Prerequisite: 427.

434./534. Contingency Tables and Dependence Structures. (3)
This course examines the use of log-linear models to analyze count data. It also uses graphical models to examine dependence structures for both count data and measurement data.
Prerequisites: 345, 427.

440./540. Regression Analysis. (3)
Prerequisites: 427 and some familiarity with matrix algebra. {Fall}

445./545. Analysis of Variance and Experimental Design. (3)
Prerequisite: 440. {Spring}

453./553. Statistical Inference with Applications. (3)
Transformations of univariate and multivariate distributions to obtain the special distributions important in statistics. Concepts of estimation and hypothesis testing in both large and small samples with emphasis on the statistical properties of the more commonly used procedures, including student's t-tests, F-tests and chi-square tests. Confidence intervals. Performance of procedures under non-standard conditions (i.e., robustness).
Prerequisite: 461. {Spring}

461./561. Probability. (3)
(Also offered as MATH 441.) Mathematical models for random experiments, random variables, expectation. The common discrete and continuous distributions with application. Joint distributions, conditional probability and expectation, independence. Laws of large numbers and the central limit theorem. Moment generating functions.
Prerequisite: MATH 264. {Fall}

470./570. Industrial Statistics. (3)
Basic ideas of statistical quality control and improvement. Topics covered: Deming's 14 points and deadly diseases, Pareto charts, histograms, cause and effect diagrams, control charts, sampling, prediction, reliability, experimental design, fractional factorial, Taguchi methods, response surfaces.
Prerequisite: 345.

472./572. Sampling Theory and Practice. (3)
Basic methods of survey sampling: simple random sampling, stratified sampling, cluster sampling, systematic sampling and general sampling schemes; estimation based on auxiliary information; design of complex samples and case studies.
Prerequisite: 345. {Alternate Falls}

474./574. Biostatistical Methods: Survival Analysis and Logistic Regression. (3)
A detailed overview of methods commonly used to analyze medical and epidemiological data. Topics include the Kaplan-Meier estimate of the survivor function, models for censored survival data, the Cox proportional hazards model, methods for categorical response data including logistic regression and probit analysis, generalized linear models.
Prerequisite: 428 or 440.

476./576. Multivariate Analysis. (3)
Tools for multivariate analysis including multivariate ANOVA, principal components analysis, discriminant analysis, cluster analysis, factor analysis, structural equations modeling, canonical correlations and multidimensional scaling.
Prerequisite: 428 or 440. {Offered upon demand}

477./577. Introduction to Bayesian Modeling. (3)
An introduction to Bayesian methodology and applications. Topics covered include: probability review, Bayes' theorem, prior elicitation, Markov chain Monte Carlo techniques. The free software programs WinBUGS and R will be used for data analysis.
Prerequisites: 461 and (427 or 440). {Alternate Springs}

479. Topics in Statistics. (3) Δ
Modern topics not covered in regular course offerings. May be repeated for credit, no limit.

481./581. Introduction to Time Series Analysis. (3)
Introduction to time domain and frequency domain models of time series. Data analysis with emphasis on Box-Jenkins methods, Topics such as multivariate models; linear filters; linear prediction; forecasting and control.
Prerequisite: 461. {Alternate Springs}

495. Individual Study. (1-3 to a maximum of 6) Δ
Guided study, under the supervision of a faculty member, of selected topics not covered in regular course offerings.

525./425. SAS® Programming. (3)
A detailed introduction to the SAS® programming language. Topics covered include reading data, storing data, manipulating data, data presentation, graphing, and macro programming. SAS® software will be used.
Prerequisites: 345, 427.
**527/427. Advanced Data Analysis I. (3)**  
Statistical tools for scientific research, including parametric and non-parametric methods for ANOVA and group comparisons, simple linear and multiple linear regression and basic ideas of experimental design and analysis. Emphasis placed on the use of statistical packages such as Minitab® and SAS®. Course cannot be counted in the hours needed for graduate degrees in Mathematics and Statistics. Prerequisite: 145. (Fall)

**528/428. Advanced Data Analysis II. (3)**  
A continuation of 527 that focuses on methods for analyzing multivariate data and categorical data. Topics include MANOVA, principal components, discriminate analysis, classification, factor analysis, analysis of contingency tables including log-linear models for multidimensional tables and logistic regression. Prerequisite: 527.

**531. Statistical Genetics I. (3)**  
A detailed examination of the statistical methods used in analyzing genetic data. Topics covered include the estimation of allele frequencies, testing for Hardy-Weinberg equilibrium, classical and complex segregation analysis, linkage analysis for Mendelian and complex diseases, and the detection of allelic association. Popular genetic software will be used for data analysis. Prerequisites: 345, 427. (Alternate Falls)

**532. Statistical Genetics II. (3)**  
A continuation of 531. Topics covered include statistical methods for describing variation in quantitative traits, methods of mapping and characterizing quantitative trait loci and other current topics in statistical genetics, including the analysis of microarray data and phylogenetic methods. Popular genetic software will be used for data analysis. Prerequisite: 531. (Alternate Springs)

**534/434. Contingency Tables and Dependence Structures. (3)**  
This course examines the use of log-linear models to analyze count data. It also uses graphical models to examine dependence structures for both count data and measurement data. Prerequisites: 345, 527.

**538. Biostatistical Methods I for Public Health and Medical Sciences. (3)**  
Covers basic statistical methods, including statistical summaries and inference. Methods of summarizing data include graphical displays and numerical summaries. Statistical inference includes hypothesis testing and confidence intervals. Methods for continuous and categorical data are studied. Prerequisite: B or better in MATH 121. (Fall)

**539. Biostatistical Method II for Public Health and Medical Sciences. (3)**  
Covers basic models used in the statistical analysis of studies in the medical sciences and public health field, with an emphasis on epidemiology. Linear regression, analysis of variance, logistic regression, and survival models are studied. Prerequisite: 538. (Spring)

**540/440. Regression Analysis. (3)**  
Simple regression and multiple regression. Residual analysis and transformations. Matrix approach to general linear models. Model selection procedures, nonlinear least squares, logistic regression. Computer applications. Prerequisites: 527, some familiarity with matrix algebra. (Fall)

**545/445. Analysis of Variance and Experimental Design. (3)**  
A data-analytic course. Multifactor ANOVA. Principles of experimental design. Analysis of randomized blocks, Latin squares, split plots, etc. Random and mixed models. Extensive use of computer packages with interpretation, diagnostics. Prerequisite: 540. (Spring)

546. Theory of Linear Models. (3)  

547. Multivariate Analysis and Advanced Linear Models. (3)  
Hotelling T2, multivariate ANOVA and Regression, classification and discrimination, principal components and factor analysis, clustering, graphical and computational techniques, topics in linear models. Prerequisite: 546. (Alternate Springs)

553/453. Statistical Inference with Applications. (3)  
Transformations of univariate and multivariate distributions to obtain the special distributions important in statistics. Concepts of estimation and hypothesis testing in both large and small samples with emphasis on the statistical properties of the more commonly used procedures, including Students t-tests, F-tests and chi-square tests. Confidence intervals. Performance of procedures under non-standard conditions (i.e., robustness). Prerequisite: 561. (Spring)

556. Advanced Statistical Inference I. (3)  
Theory and methods of point estimation, sufficiency and its applications. Prerequisite: 553, 561 and MATH 510. (Alternate Falls)

557. Advanced Statistical Inference II. (3)  
Standard limit theorems, hypothesis testing, confidence intervals and decision theory. Prerequisite: 556. (Alternate Springs)

561/461. Probability. (3)  
Mathematical models for random experiments, random variables, expectation. The common discrete and continuous distributions with application. Joint distributions, conditional probability and expectation, independence. Laws of large numbers and the central limit theorem. Moment generating functions. Prerequisite: MATH 264. (Fall)

565. Stochastic Processes with Applications. (3)  
(Also offered as MATH 540.) Markov chains and processes with applications. Classification of states. Decompositions. Stationary distributions. Probability of absorption, the gambler's ruin and mean time problems. Queueing and branching processes. Introduction to continuous time Markov processes. Jump processes and Brownian motion. Prerequisite: 561. (Offered on demand)

567. Advanced Probability. (3)  
(Also offered as MATH 541.) A measure theoretic introduction to probability theory. Construction of probability measures. Distribution and characteristic functions, independence and zero-one laws. Sequences of independent random variables, strong law of large numbers and central limit theorem. Conditional expectation. Martingales. Prerequisite: MATH 563. (Alternate Springs)

569. Selected Topics in Probability Theory. (3, no limit)  
(Also offered as MATH 549.)
572./472. Sampling Theory and Practice. (3)  
Basic methods of survey sampling; simple random sampling, stratified sampling, cluster sampling, systematic sampling and general sampling schemes; estimation based on auxiliary information; design of complex samples and case studies. 
Prerequisite: 345. (Alternate Falls)

574./474. Biostatistical Methods: Survival Analysis and Logistic Regression. (3)  
A detailed overview of methods commonly used to analyze medical and epidemiological data. Topics include the Kaplan-Meier estimate of the survivor function, models for censored survival data, the Cox proportional hazards model, methods for categorical response data including logistic regression and probit analysis, generalized linear models. 
Prerequisite: 528 or 540.

576./476. Multivariate Analysis. (3)  
Tools for multivariate analysis including multivariate ANOVA, principal components analysis, discriminant analysis, cluster analysis, factor analysis, structural equations modeling, canonical correlations and multidimensional scaling. 
Prerequisite: 528 or 540. (Offered upon demand)

577./477. Introduction to Bayesian Modeling. (3)  
An introduction to Bayesian methodology and applications. Topics covered include: probability review, Bayes' theorem, prior elicitation, Markov chain Monte Carlo techniques. The free software programs WinBUGS and R will be used for data analysis. 
Prerequisites: 561 and (527 or 540). (Alternate Springs)

579. Selected Topics in Statistics. (3, no limit) ∆

581./481. Introduction to Time Series Analysis. (3)  
Introduction to time domain and frequency domain models of time series. Data analysis with emphasis on Box-Jenkins methods. Topics such as multivariate models; linear filters; linear prediction; forecasting and control. 
Prerequisite: 561. (Alternate Springs)

582. Advanced Time Series Analysis. (3)  
Prerequisite: 581. (Alternate Falls)

585. Nonparametric and Robust Methods. (3)  
Statistical methods that are insensitive to the distribution of the data. Sign tests, Kolmogorov-Smirnov tests, rank tests including the Wilcoxon, Mann-Whitney, Kruskal-Wallis and Friedman tests. Robust estimation including M estimators, L estimators and R estimators. 
Prerequisite: 561. (Offered upon demand)

586. Nonparametric Curve Estimation and Image Reconstruction. (3)  
Nonparametric regression, density estimation, filtering, spectral density estimation, image reconstruction and pattern recognition. Tools include orthogonal series, kernels, splines, wavelets and neural networks. Applications to medicine, engineering, biostatistics and economics. 
Prerequisite: 561. (Offered upon demand)

590. Statistical Computing. (3)  
A detailed examination of essential statistical computing skills needed for research and industrial work. Students will use S-Plus, Matlab and SAS® to develop algorithms for solving a variety of statistical problems using resampling and simulation techniques such as the bootstrap, Monte Carlo methods and Markov chain methods for approximating probability distributions. Applications to linear and non-linear models will be stressed. 
Prerequisite: 528.

595. Problems. (1-3, no limit) †
sustainable peace, by using the disciplinary frames found within the College of Arts & Sciences. History, philosophy, sociology, political science, economics, literature, communications, journalism and psychology all offer ways of understanding the patterns of conflict we see in our lives and in the world. In both classroom and experiential learning, students are invited to think critically about our world, to act creatively, and to fashion their own and our collective future in a holistic and supportive educational environment.

Ultimately, the goals of the Peace Studies minor reinforce the overall goals of liberal arts education – to inform, to enrich and to strengthen humanistic values in our society. The minor offers a unique, interdisciplinary addition to existing programs at the University of New Mexico and is readily integrated into undergraduate programs in other schools and colleges in the university. Careers in law, education, management, and fine arts are enhanced by the study of conflict and its peaceful resolution, no less than more obvious career paths in foreign service, criminology, media and communications, politics, psychology, and human services.

The UNM Peace Studies Program is a collaborative association of UNM faculty, staff, students and administrators with affiliated organizational and community members. The program affirms the citizenship role of the University, participates in campus and community events relevant to establishing a just and sustainable peace.

**Peace Studies Minor Study Requirements**

The minor in Peace Studies will require the successful completion of 24 credit hours: 12 hours of required courses, with the remaining 12 hours taken from four groups of electives, one from each group (see course listing below).

**Required Courses – 12 credit hours**

- Entry/Social Science: POLS 240 International Politics 3
  - or —
  - SOC 221 Global Issues 3
  - or —
  - Entry/Natural Science: PHYC 105 Physics and Society 3
  - or —
  - ENVS 101 The Blue Planet 3

**Internship**: Peace Studies Internship* 3  
**Closing**: Peace Studies Seminar** 3

*The Peace Studies Internship entails placement with a community-based organization active in the field of conflict resolution, peacemaking and/or social justice. This volunteer placement is arranged by the student in consultation with the Advisor, and must be supervised by a faculty member. **The Seminar requirement may be satisfied through a relevant upper level course specifically designated as the Peace Studies Seminar for a particular semester by the Peace Studies Program Committee, such as SOC 398 Peace & Conflict or SOC 398 Nonviolent Alternatives to Conflict.

**Distributed Elective Courses – 12 credit hours**

One course required from each of the following groups. These are suggested courses; substitution of courses of similar nature will satisfy the distribution requirement with approval of the program committee.

**Group I – Thought, Ideology and Ethics of War and Peace**

- AMST 320 T/Globalization Theory & Practice 3
- AMST 182 Environment, Science & Technology 3
- ANTH 420 Ethics in Anthropology 3
- CJ 318 Language, Thought and Behavior 3
- ECON 204 Origins and Development of Economic Thought 3
- ENGL 320 Language and Diversity 3
- LING 490 T/Rhetoric of War 3
- PHIL 102 Current Moral Problems 3
- PHIL 358 Ethical Theory 3
- PHIL 441 Philosophical Movements/Contemporary 3

**Group II – Methodology and Practice of Conflict Resolution**

Suggested courses:

- AMST 300 T/Globalization & Nonviolent Resistance 3
- AMST 310 Nonviolence Issues 3
- ANTH 251 Forensic Anthropology 3
- ANTH 453 Advanced Forensic Anthropology 3
- ARTH 429 T/Visible Agendas 3
- BIOL 402 T/Bioterrorism 3
- CJ 221 Interpersonal Communication 3
- CJ 314 Intercultural Communication 3
- CJ 320 Mediation 3
- FLC Conflict and Reconciliation 3
- POLS 442 International Peacekeeping and Conflict Resolution 3
- PSY 374 Cross-cultural Psychology 3
- PSY 450 T/Psychological Trauma 3
- WMST 279 Intercultural Communication Between Women 3

**Group III – Conflict and Conflict Resolution at the International Level**

Suggested courses:

- AFAM 303 Black Religion and Liberation 3
- ANTH 339 Human Rights in Anthropology 3
- SOC 461 Dynamics of Social Change 3
- GEOG 140 World Regional Geography 3
- GEOG 360 Land as Resource Management 3
- HIST 311 History of World War I 3
- HIST 338 History of World War II Era 3
- HIST 339 Vietnam War Era 3
- HIST 426 History of the Holocaust 3
- HIST 440 Atomic America 3
- POLS 320 T/Islam and Politics 3
- POLS 320 T/Middle Eastern Politics 3
- POLS 342 American Foreign Policy 3
- POLS 345 Inter-American Relations 3
- POLS 356 Political Developments in Latin America 3
- POLS 440 International Conflict, Arms Control & Disarmament 3
- SOC 221 Global Issues 3
- FLC World Religions/Violence in the Name of God 3
- WMST 331 Third World Women 3
- WMST 339 Women and Cultural Violence 3
- WMST 379 T/Women, War and Peace Movements 3

**Group IV – Conflict and Conflict Resolution at the National and Sub-national Level**

Suggested courses:

- ANTH 130 Cultures of the World 3
- HIST 322 History of the Women’s Rights Movement 3
- HIST 428 Women, War and Revolution 3
- POLS 307 Politics of Ethnic Groups 3
- POLS 313 Women and the Law 3
- POLS 322 Politics of Human Rights 3
- POLS 441 Civil Wars 3
- SOC 216 Dynamics of Prejudice 3
- SOC 416 Race & Cultural Relations 3
- SOC 331 Collective Behavior 3
- WMST 353 Women and Creativity 3

**Suggested courses:**

- POLS 260 Political Ideas 3
- POLS 362 Modern Political Theory 3
- SOC 312 Causes of Crime 3
- RELG 247 Ecology and Spirit 3
- UHON 302 Semi/Modern Terrorism & US Constitution 3

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PHILOSOPHY

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John Bussanich, Ph.D., Stanford University
Russell B. Goodman, Ph.D., The Johns Hopkins University
George Frederick Schueler, Ph.D., University of California (Berkeley)
John Taber, Ph.D., Universitat Hamburg

Associate Professors
Barbara Hannan, Ph.D., University of Arizona
Iain Thomson, Ph.D., University of California (San Diego)

Assistant Professors
Kelly Becker, Ph.D., University of California (San Diego)
Mary Domski, Ph.D., Indiana University
Richard Haynes, Ph.D., University of Toronto
Brent Kalar, Ph.D., Harvard University

Professors Emeriti
Helena Ellstein, Ph.D., University of Warsaw
Donald Lee, Ph.D., University of California (San Diego)
Paul F. Schmidt, Ph.D., Yale University
Fred Gillette Sturm, Ph.D., Columbia University
Howard N. Tuttle, Ph.D., Brandeis University

Introduction

Philosophy is a fundamental academic discipline which is related to all areas of human concern. Philosophy courses will be helpful to students in each of the arts and sciences, as well as in professional fields of study. The major and minor programs in philosophy are designed to serve several different functions: 1) the central focus of a liberal arts degree program; 2) a key component in an interdisciplinary program; 3) preparation for graduate work in education, law, medicine, politics, social work and theology; and 4) preparation for graduate work in philosophy. Students are invited to discuss with the departmental undergraduate advisor the role philosophy courses might play in specific programs of study.

Major Study Requirements

Thirty-one hours distributed as follows:

- 201 Greek Philosophy
- 202 Modern Philosophy
- 356 Symbolic Logic
- 358 Ethical Theory
- 352 Theory of Knowledge
- 371 Classical Social and Political Philosophy
- 372 Modern Social and Political Philosophy
- 381 Philosophy of Law and Morals

Three electives, two of which must be at the 300 level or above.

Outside the department, the following courses are recommended: POLS 315 or 316 (Constitutional Law).

Minor Study Requirements

Eighteen or 19 hours including either 156 or 356; at least two of the following: 101, 201, 202; with 9 additional hours at the 300 or above level. If 101 is included it must be taken before any 300 or above level course which is counted toward the minor.

Note: Only courses in which a student has received a C grade or better (not C-) will be accepted toward the major or minor.

Interdepartmental Majors

The Department of Philosophy cooperates with the Department of Economics in administering an interdepartmental Economics-Philosophy major and with the Department of English in administering an interdepartmental English-Philosophy major. Descriptions of these programs are given under the headings of Economics-Philosophy and English-Philosophy.

Interdisciplinary Majors and Minors

The Philosophy department participates fully in the following interdisciplinary programs which offer undergraduate minors and/or majors within the College of Arts and Sciences: Asian Studies (see International Studies); European Studies (see International Studies); Latin American Studies; Period Minor (see Comparative Literature); Peace Studies, Religious Studies; and Science Technology and Society.

Departmental Honors

Students desiring to read for honors in philosophy should 1) discuss requirements of the program with the departmental honors advisor; 2) establish a committee on studies during the junior year; and 3) enroll in PHIL 497 and 499 for at least a total of 6 hours credit.

Graduate Program

Graduate Director
Kelly Becker

Applications Deadlines:
Fall semester: Ph.D.–Only students who apply by January 31 are assured of consideration. M.A.–Only students who apply by March 1 are assured of consideration.
Spring semester: M.A.–Only students who apply by November 1 are assured of consideration. No Spring admissions for Ph.D. program.
Degrees Offered

M.A. in Philosophy
Ph.D. in Philosophy

Applicants to the Graduate Program in Philosophy must take the Graduate Record Examination and submit a writing sample of not more than 20 typed pages on a philosophical topic. The department is committed to the study of a range of traditions and approaches in philosophy. It requires that each student receive broad training in all basic areas of the discipline. Joint courses and programs are available with several other departments.

The M.A. is offered under either Plan I or Plan II.

In addition to the general requirements for the Ph.D. stated elsewhere in this catalog, the department requires that each student enroll in a minimum number of graduate-level seminars, demonstrate reading competence in one foreign language and satisfactorily complete a preliminary and a comprehensive examination.

The Philosophy Department encourages students who wish to obtain Master’s Degrees in two departments to see Dual Graduate Degrees. Cooperative study leading to a Ph.D. in American Studies, with a concentration in Philosophy, is available. Consult American Studies in this catalog.

Degree Requirements

M.A. I. 24 credit hours with no language requirement.
M.A. II. 32 credit hours with no language requirement.
Ph.D. 48 credit hours with one language requirement.

A detailed explanation of all requirements for both the M.A. and the Ph.D. degrees and of the functions of the departmental Graduate Advisory Committee is available upon request. Prospective students are urged to secure this material.

Graduate Minor in Philosophy

Students will need to meet the following requirements (beyond the Office of Graduate Studies minimum requirements) in order to receive a graduate minor in philosophy:

Plan I: A minimum of 9 hours of course work credit, of which 3 hours must be seminar credit and no more than 3 hours of independent study.
Plan II: A minimum of 12 hours course work credit, of which 6 hours must be seminar credit and no more than 3 hours of independent study.

Philosophy (PHIL)

101. Introduction to Philosophical Problems. (3)
Philosophical issues and methodology illustrated through selected problems concerning values, knowledge, reality; and in social, political and religious philosophy. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts (NMCCN 1113).

102. Current Moral Problems. (3)
Ethical issues arising in contemporary society, e.g., sexual morality, preferential treatment, racism, punishment, war, world food distribution.

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

111. Humanities I. (3)
Comparative introduction to the development of human civilizations emphasizing philosophic thought, religious practice and artistic expression. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts.

156. Reasoning and Critical Thinking. (3)
The purpose of this course is to help students learn how to analyze, critique and construct arguments in context, in other words, how to read and write argumentative essays. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts.

201. Greek Philosophy. (3)
An introductory survey of early and classical Greek philosophy. Figures: the Presocratics, Socrates, Plato and Aristotle. Topics: beginnings of scientific thought; theories of the self; the concept of being; ethical relativism, happiness, theories of justice.

202. Modern Philosophy. (3)
An historical study from the Renaissance through Kant.

204. Greek Civilization. (3)
(Also offered as CLST, HIST, ARTH 204.) An interdisciplinary introduction to the ancient world as the foundation of modern civilization. Lectures on classical art, history, literature and philosophy. (Spring)

205. Roman Civilization. (3)
(Also offered as CLST, HIST, ARTH 205.) An interdisciplinary introduction to ancient Rome. Lectures on Roman literature, history, art and philosophy.

244. Introduction to Existentialism. (3)
An examination of the works of writers such as Kierkegaard, Nietzsche, Kafka and Sartre who emphasize such issues as death, decision, rebellion and faith.

245. Professional Ethics. (3)
Examination of social and ethical problems associated with the business, engineering, medical and legal professions. Meets New Mexico Lower Division General Education Common Core Curriculum Area V: Humanities and Fine Arts.

258. Introduction to Moral Philosophy. (3)
An introduction to philosophical issues arising in the study of morality, such as relativism, subjectivism and freedom of will.

308./508. Medieval European Philosophy. (3)
Major thinkers from Augustine through Ockham. Prerequisite: 201.

311./531. Ch’ an and Zen Buddhist Philosophy. (3)
(Also offered as RELG 331.) An examination of key writings by Chinese Ch’an teachers (e.g., Huineng and Tung Shan), medieval Japanese Zen teachers (e.g., Eisai and Dogen) and modern Japanese thinkers (e.g., Suzuki and Nishitani). Prerequisite: 101 or 108 or 201 or 202 or 336.

332./532. American Philosophy. (3)
A survey of American philosophical thought, emphasizing transcendentalism and pragmatism. Coverage of such figures as Emerson, Thoreau, Peirce, James, Dewey, Rorty, Putnam and Cavell. Prerequisite: 101 or 201 or 202.

334./534. Philosophies of India. (3)
Upanishads, Bhagavad-gita, Jainism, Buddhism, the six Hindu systems and recent developments. Prerequisite: 101 or 201 or 202.

335./535. Topics in Indian Philosophy. (3 to a maximum of 12) [3 to a maximum of 18] ∆ Prerequisite: 334.
336./356. Chinese Philosophy I. (3) 
The development of Chinese thought from pre-Confucian
times through the T'ang dynasty.

337./357. Chinese Philosophy II. (3) 
Chinese thought from the Sung dynasty to the present.

341. Topics in Philosophy. (1-3 to a maximum of 12) 
[1-3] Δ
An investigation of some important philosophic debates.

342. Selected Philosophers. (3 to a maximum of 12) [3 to a maximum of 18] Δ
A treatment of the thought of a major philosopher.

343./353. Contemporary Continental Philosophy. (3) 
A survey of main themes in Dilthey, Husserl, Scheler, 
Heidegger, Merleau-Ponty, Sartre, Hermeneutics, 
Structuralism, Deconstruction and the Frankfurt School.
Prerequisite: 202.

344./354. Nineteenth-Century Philosophy. (3) 
From Kant through Hegel, Marx, Schopenhauer, Kierkegaard, 
Mill, Nietzsche. 
Prerequisite: 202.

346./356. Twentieth-Century Philosophy. (3 to a maximum of 12) [3] ∆
Twentieth-century philosophies.
Prerequisite: 202 or 344.

348./358. Comparative Philosophy. (3) 
A comparative study of the Buddhist, Chinese, European, 
Indian and Islamic philosophical traditions with reference to 
ontology, epistemology, axiology and sociopolitical thought.
Prerequisite: 201 or 202 or 334.

350./350. Philosophy of Science. (3) 
This course is a survey of the main epistemological, ontological and conceptual issues that arise from or concern the methodology and content of the empirical sciences.
Prerequisite: 156 or 356.

352./352. Theory of Knowledge. (3) 
Problems and theories of epistemology.
Prerequisite: 101 or 201 or 202.

354. Metaphysics. (3) 
Problems and theories of metaphysics. Topics may include: investigation into the structure of things and their properties, identity and individuation, causation, necessity and possibility, universals, mind and body, space and time, God, truth and naturalism.
Prerequisite: 101 or 201 or 202.

356. Symbolic Logic. (4) 
(Also offered as MATH 356.) This is a first course in logical theory. Its primary goal is to study the notion of logical entailment and related concepts, such as consistency and contingency. Formal systems are developed to analyze these notions rigorously.

358. Ethical Theory. (3) 
Inquiry concerning goodness, rightness, obligation, justice and freedom.
Prerequisite: 101 or 102 or 201 or 202.

360./360. Christian Classics. (3) 
(Also offered as RELG 360.) A study of major writings in the Christian tradition, written by such persons as Origen, Augustine, Aquinas, Luther, Calvin and Teresa of Avila.
Prerequisite: one course in Religious Studies or Philosophy.

361./361. Modern Christian Thought. (3) 
(Also offered as RELG 361.) Background of the intellectual issues facing Roman Catholic and Protestant traditions today.
Prerequisite: one course in Religious Studies or Philosophy.

363./363. Environmental Ethics. (3) 
Close reading of contemporary writings by naturalists, lawyers, theologians and philosophers on the philosophical aspects of environmental problems.

365./365. Philosophy of Religion. (3) 
(Also offered as RELG 365.) Philosopher analysis of some major concepts and problems in religion.
Prerequisite: 156 or 201 or 202 or RELG 264.

367./367. Philosophy of Art and Aesthetics. (3) 
Philosophical investigation of concept and theories of art and literature. Possible topics include the nature, definition and criteria of art; its functions; form and content; aesthetic experience; evaluation; artist's/author's status; meaning; reception; hermeneutics and representation.
Prerequisite: one course in Philosophy.

371./371. Classical Social and Political Philosophy. (3) 
From Plato to Hobbes.
Prerequisite: 101 or 201.

372./372. Modern Social and Political Philosophy. (3) 
From Hobbes to present.
Prerequisite: 101 or 202 or 371.

381./381. Philosophy of Law and Morals. (3) 
Nature and function of public law and its relation to moral belief.
Prerequisite: 201 or 202 or 358.

384./384. Philosophy of Mind. (3) 
A study of certain issues connected with the nature and status of minds.
Prerequisite: 201 or 202 or 352 or 354.

388./388. Topics in Brazilian Thought. (3) 
(Also offered as RELG 388.) A philosophical analysis of selected topics from Brazilian intellectual history and contemporary Brazilian thought in the areas of art, economics, literature, philosophy, politics, religion, theatre and society.
Prerequisite: one course in Philosophy.

389./389. Latin American Thought I. (3) 
(Also offered as HIST, RELG, SOC 389.) Pre-Columbian thought through independence ideologies.
Prerequisite: one course in Philosophy.

390./390. Latin American Thought II. (3) 
(Also offered as HIST, RELG, SOC 390.) Positivism through contemporary thought.
Prerequisite: one course in Philosophy.

402./402. Plato. (3) 
Prerequisite: 101 or 201.

403./403. Aristotle. (3) 
Prerequisite: 101 or 201.

404./404. Augustine. (3) 
(Also offered as RELG 404.) 
Prerequisite: 201 or RELG 360

406./406. Descartes. (3) 
Prerequisite: one course in Philosophy.

409./409. Hume. (3) 
Prerequisite: 202.

410./410. Kant. (3) 
Prerequisite: 202.

413./413. Kierkegaard. (3) 
(Also offered as RELG 413.)

415/415. History and Philosophy of Mathematics. 
[Philosophy of Mathematics.] (3) 
(Also offered as MATH 415.) A historical survey of principal issues and controversies on the nature of mathematics. Emphasis varies from year to year. Student who does not have prerequisite may seek permission of instructor. 
Prerequisite: 356 or 456.

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421./521. Heidegger. (3)  
422./522. Wittgenstein. (3)  
438./538. Buddhist Philosophy–India. (3)  
(Also offered as RELG 438.) A survey of Hinayana and Mahayana philosophical thought as it developed in South Asia, together with its religious, historical and social context.  
439./539. Buddhist Philosophy–China. (3)  
(Also offered as RELG 439.) Development of Buddhist thought in China and East Asia from T'ang dynasty to the present.  
440./540. Buddhist Sutras Seminar. (3 to a maximum of 12)  
(Also offered as RELG 440.) Two-week, intensive summer course at Jemez Bodhi Manda Zen Center. Study of both theory and practice with visiting professors from various universities. Opportunity for directed meditation for interested participants.  
441. Philosophical Movements. (3 to a maximum of 12)  
[3 to a maximum of 24]  
Topic varies.  
Prerequisite: one previous course in Philosophy.  
442. Individual Philosophers. (3 to a maximum of 12)  
[3 to a maximum of 24]  
Figure varies.  
Prerequisite: one course in Philosophy.  
445./545. Philosophy of Language. (3)  
Philosophies of meaning with special attention to the relations between language and thought.  
Prerequisite: 202 or 352.  
449./549. The Bhagavad Gita and Yoga. (3)  
(Also offered as RELG 449.) A study of this very important text of Hindu thought and the philosophies of Samkhya and Yoga, which serve as its background.  
453. Asian Studies Thesis. (3)  
(Also offered as COMP, HIST, POLS, RELG, 453.) Supervised research in one or more disciplines leading to an undergraduate thesis for the major in Asian Studies.  
480./580. Philosophy and Literature. (3 to a maximum of 12)  
(Also offered as ENGP 480.) Selected philosophical movements and their relationships to literary masterpieces.  
Prerequisites: one course in Philosophy.  
485/585. Philosophical Foundations of Economic Theory. (3)  
(Also offered as ECPF 485.)  
Prerequisites: ECON 105, ECON 106.  
497. Honors Seminar. (3 to a maximum of 9)  
[3 to a maximum of 27]  
For departmental honors in philosophy. (Offered upon demand)  
498. Reading and Research. (1-3, repeatable to a maximum of 4 times)  
[1-3]  
For departmental honors. (Offered upon demand)  
502./402. Plato. (3)  
503./403. Aristotle. (3)  
504./404. Augustine. (3)  
(Also offered as RELG 504.)  
506./406. Descartes. (3)  
508./308. Medieval European Philosophy. (3)  
Major thinkers from Augustine through Ockham.  
509./409. Hume. (3)  
510./410. Kant. (3)  
513./413. Kierkegaard. (3)  
(Also offered as RELG 513.)  
514. 20th-Century European Theory. (3)  
(Also offered as SOC 514.) Analytical Marxism, Nietzsche, Spengler, Sociobiology, Foucault, Sarte, Lukacs, The Frankfurt School.  
515./415. History and Philosophy of Mathematics.  
[Philosophy of Mathematics.] (3)  
A historical survey of principal issues and controversies on the nature of mathematics. Emphasis varies from year to year.  
520. Graduate Proseminar in Philosophy. (1-3)  
The course serves as an introduction to graduate study in philosophy at the University of New Mexico. This includes introduction to the faculty and their research interests, as well as an opportunity for scholarly interaction with fellow graduate students. Offered on a CR/NC basis only.  
521./421. Heidegger. (3)  
522./422. Wittgenstein. (3)  
526. Seminar in Asian Philosophers. (3 to a maximum of 12)  
[3 to a maximum of 27]  
531./331. Ch’an and Zen Buddhist Philosophy. (3)  
(Also offered as RELG 531.) An examination of key writings by Chinese Ch’an teachers (e.g., Huineng and Tung Shan), medieval Japanese Zen teachers (e.g., Elsai and Dogen) and modern Japanese thinkers (e.g., Suzuki and Nishitani).  
Prerequisite: 101 or 108 or 201 or 202 or 336.  
532./332. American Philosophy. (3)  
A survey of American philosophical thought, emphasizing transcendentalism and pragmatism. Coverage of such figures as Emerson, Thoreau, Peirce, James, Dewey, Rorty, Putnam and Cavell.  
534./334. Philosophies of India. (3)  
Upanishads, Bhagavad-gita, Jainism, Buddhism, the six Hindu systems and recent developments.  
535./335. Topics in Indian Philosophy. (3 to a maximum of 12)  
[3 to a maximum of 18]  
536./336. Chinese Philosophy I. (3)  
The development of Chinese thought from pre-Confucian times through the T’ang dynasty.  
537./337. Chinese Philosophy II. (3)  
Chinese thought from the Sung dynasty to the present.  
538./438. Buddhist Philosophy–India. (3)  
(Also offered as RELG 538.) A survey of Hinayana and Mahayana philosophical thought as it developed in South Asia, together with its religious, historical and social context.  
539./439. Buddhist Philosophy–China. (3)  
Development of Buddhist thought in China and East Asia from T’ang dynasty to the present.  
540./440. Buddhist Sutras Seminar. (3 to a maximum of 12)  
(Also offered as RELG 540.) Two-week, intensive summer course at Jemez Bodhi Manda Zen Center. Study of both theory and practice with visiting professors from various universities. Opportunity for directed meditation for interested participants.  
541. Seminar in Philosophical Movements. (3 to a maximum of 18)  
[3 to a maximum of 27]  
542. Seminar in Individual Philosophers. (3 to a maximum of 18)  
[3 to a maximum of 27]

544./344. Nineteenth-Century Philosophy. (3) From Kant through Hegel, Marx, Schopenhauer, Kierkegaard, Mill, Nietzsche.

545./345. Philosophy of Language. (3) Philosophies of meaning with special attention to the relations between language and thought.


548./348. Comparative Philosophy. (3) A comparative study of the Buddhist, Chinese, European, Indian and Islamic philosophical traditions with reference to ontology, epistemology, axiology and sociopolitical thought.

549./349. The Bhagavad Gita and Yoga. (3) A study of this very important text of Hindu thought and the philosophies of Samkhya and Yoga, which serve as its background.

550./350. Philosophy of Science. (3) This course is a survey of the main epistemological, ontological and conceptual issues that arise from or concern the methodology and content of the empirical sciences.

551. M.A. Problems. (1-3, repeatable to a maximum of 6 times) [1-3] Δ

552./352. Theory of Knowledge. (3) Problems and theories of epistemology.

554. Seminar in Metaphysics & Epistemology. (3 to a maximum of 18) Δ

556. Seminar in Philosophical Logic. (1-6) Δ This course consists of a close examination of a topic in logical theory in the philosophy of logic or in a philosophical area that utilizes the methods of logic or is relevant to issues in logical theory. May be repeated six times for credit providing topic varies.

558. Seminar in Value Theory. (3 to a maximum of 18) Δ

559. [559./359.] Philosophy of Biology. (3) This course consists of a close and critical examination of selected philosophical issues that arise from the methodological and conceptual content of evolutionary biology.

560./360. Christian Classics. (3) (Also offered as RELG 560.) A study of major writings in the Christian tradition, written by such persons as Origen, Augustine, Aquinas, Luther, Calvin and Teresa of Avila.

561./361. Modern Christian Thought. (3) (Also offered as RELG 561.) Background of the intellectual issues facing Roman Catholic and Protestant traditions today.

563./363. Environmental Ethics. (3) Close reading of contemporary writings by naturalists, lawyers, theologians and philosophers on the philosophical aspects of environmental problems.

565./365. Philosophy of Religion. (3) (Also offered as RELG 565.) Philosophic analysis of some philosophical issues connected with the nature and status of minds.

566./366. Philosophy of Art and Aesthetics. (3) Philosophic analysis of certain topics connected with the nature and status of minds.


572./372. Modern Social and Political Philosophy. (3) From Hobbes to present.

580./380. Philosophy and Literature. (3 to a maximum of 12) Δ Selected philosophical movements and their relationships to literary masterpieces.


584./384. Philosophy of Mind. (3) A study of certain issues connected with the nature and status of minds.

585./385. Philosophical Foundations of Economic Theory. (3) Prerequisites: ECON 105, 106.

588./388. Topics in Brazilian Thought. (3) A philosophical analysis of selected topics from Brazilian intellectual history and contemporary Brazilian thought in the areas of art, economics, literature, philosophy, politics, religion, theatre and society.

589./389. Latin American Thought I. (3) Pre-Columbian thought through independence ideologies.

590./390. Latin American Thought II. (3) Positivism through contemporary thought.

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

609. Ph.D. Problems. (1-3, repeatable to a maximum of 6 times) Δ

699. Dissertation. (3-12) Offered on a CR/NC basis only.

PHILOSOPHY-ECONOMICS

See Economics-Philosophy.

PHILOSOPHY-ENGLISH

See English-Philosophy.

PHYSICS AND ASTRONOMY

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Bernd Bassalleck, Ph.D., University of Karlsruhe
Kevin E. Cahill, Ph.D., Harvard University
Carlton M. Caves, Ph.D., California Institute of Technology
Ivan H. Deutsch, Ph.D., University of California (Berkeley)
PHYSICS AND ASTRONOMY

Introduction

Students in the Department of Physics and Astronomy at the University of New Mexico find themselves immersed in a stimulating atmosphere arising from their exposure to the teaching and research activities of 27 regular faculty members, another dozen research, adjunct, and part-time faculty members, a dozen postdoctoral research associates and from their interactions with well over 50 undergraduate majors and 100 graduate students. The atmosphere is enriched by activities of the Center for Advanced Studies, the Consortium for Advanced Research in Optics and Photonics, and the Laboratory for Applied Optics and Quantum Electronics. The faculty and students in the Department carry out with neighboring laboratories such as Sandia National Laboratories, the Los Alamos National Laboratory, the New Mexico Center for High Technology Materials, and with institutes, universities and other centers of learning and research such as the Center for High Technology Materials, and with local industries such as Sandia National Laboratories, the Los Alamos National Laboratory, and the University of New Mexico. The students are exposed to the latest developments in physics and related fields and to the latest research results. The students are exposed to the latest developments in physics and related fields and to the latest research results.

Application Procedures

Prospective candidates for both undergraduate and graduate degrees should contact the Department’s Academic Advisor by phone, e-mail, or at the following address:

J. A. Panitz, Ph.D., Pennsylvania State University

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Undergraduate Program

The basic courses PHYC 160, 160L, 161, 161L, 262, 262L and MATH 162, 163 and 264 are prerequisite to all 300-level and higher physics and astronomy courses, and are required prerequisites for major and minor study in physics and in astrophysics. Students are not allowed to receive credit for both PHYC 151 and 160, nor for both PHYC 152 and 161.

The B.S. degrees are designed as a beginning and foundation for students planning to continue their studies in graduate school and are, therefore, preparatory to professional training in physics or astrophysics.

The B.A. degree is designed for people interested in physics, astrophysics and science in general who are not seeking a career in scientific research. Rather, these students should use the flexibility within the program to choose minors or an additional major in other areas, such as management, education, communications, journalism, economics, history, political science, etc.

For the degree of B.S. in Physics: PHYC 290, 301, 303, 304, 307L, 308L, 330, 405, 406, 491, 492, 493L; MATH 311, 312, 316, 321; CHEM 121L–122L; and one 3-hour Physics course numbered above 300. PHYC 451 and 452 cannot be substituted for the 3-hour elective course numbered above 300.

For the degree of B.S. in Physics with a concentration in Optics: PHYC 301, 302, 303, 304, 307L, 330, 405, 406; MATH 311, 312, 316, 321; CHEM 121L, 122L; CS 151L; two Optics electives; two Science/Engineering/Math electives and an UG optics laboratory course currently designed. Further details are available from the Department of Physics and Astronomy.

For the degree of B.S. in Astrophysics: ASTR 271; PHYC 330; two courses chosen from PHYC 303, 307L or 405; three additional 3-hour, upper-level courses in Physics or Astronomy, one of which must be in Astronomy; MATH 311, 316.

Minor Study Requirements

Freshmen students planning to major or minor in physics or astrophysics who have the necessary mathematics usually take PHYC 160, 160L and MATH 162 in their first semester and PHYC 161, 161L and MATH 163 in their second semester. There is some flexibility in these prerequisites. Academic advisement prior to actual registration is required each semester for students majoring in physics or astrophysics.

Students are not allowed to receive credit for both PHYC 151 and 160, nor for both PHYC 152 and 161.

The B.S. degrees are designed as a beginning and foundation for students planning to continue their studies in graduate school and are, therefore, preparatory to professional training in physics or astrophysics.

The B.A. degree is designed for people interested in physics, astrophysics and science in general who are not seeking a career in scientific research. Rather, these students should use the flexibility within the program to choose minors or an additional major in other areas, such as management, education, communications, journalism, economics, history, political science, etc.

For the degree of B.S. in Physics: PHYC 290, 301, 303, 304, 307L, 308L, 330, 405, 406, 491, 492, 493L; MATH 311, 312, 316, 321; CHEM 121L–122L; and one 3-hour Physics course numbered above 300. PHYC 451 and 452 cannot be substituted for the 3-hour elective course numbered above 300.

For the degree of B.S. in Physics with a concentration in Optics: PHYC 301, 302, 303, 304, 307L, 330, 405, 406; MATH 311, 312, 316, 321; CHEM 121L, 122L; CS 151L; two Optics electives; two Science/Engineering/Math electives and an UG optics laboratory course currently designed. Further details are available from the Department of Physics and Astronomy.

For the degree of B.S. in Astrophysics: ASTR 271; PHYC 330; two courses chosen from PHYC 303, 307L or 405; three additional 3-hour, upper-level courses in Physics or Astronomy, one of which must be in Astronomy; MATH 311, 316.

Graduate Program

Students wishing to enter the M.S. or the Ph.D. programs in Physics must have an undergraduate degree in physics or its equivalent. Their undergraduate program of studies must have included courses in thermodynamics, electricity and magnetism, quantum mechanics and classical mechanics.

The department also offers the M.S. and the Ph.D. degrees in Physics with a concentration in Biomedical Physics. For details, please refer to our Web site at http://panda.unm.edu. The Optical Science and Engineering (OSE) M.S. and Ph.D. programs are multidisciplinary and assume an undergraduate background including optics, optical engineering, and/or optoelectronics.

There is no foreign language requirement for graduate degrees in physics or OSE. Proficiency in at least one computer language is encouraged.

Under the terms of an agreement between the University of New Mexico and Los Alamos National Laboratory (LANL), candidates for a doctoral degree in Physics or Optical Science and Engineering may conduct research for the dissertation at LANL. Certain conditions have been specified by LANL for the acceptance of students for research at Los Alamos and each case is considered on an individual basis. See Center for Graduate Studies at Los Alamos in the General Information Section of this catalog.
M.S. in Physics

The Master of Science in Physics is offered under either Plan I (with thesis) or Plan II (without thesis). Under Plan I a minimum of 24 semester hours of graduate work in physics and mathematics (exclusive of thesis) is required. Under Plan II, 32 semester hours of graduate work in physics and mathematics are to be taken. Included in this 32 hours must be at least 4 semester hours in research problems courses (551, 552, 650).

Under both plans, the graduate work offered for the master’s degree must include PHYC 503, 505, 511 and 521. In addition, if material equivalent to PHYC 466 or 467 and one of the advanced labs (PHYC 476L, 477L or 493L) is not included in the student’s prior education, these courses must also be taken for the graduate degree. Details must be discussed with a graduate advisor each semester.

A master’s degree program in physics is also offered at the Los Alamos Center for Graduate Studies.

M.S. in Optical Science and Engineering


The optics program is jointly administered by the Department of Physics & Astronomy (Panda) and the Department of Electrical & Computer Engineering (ECE). This program features an internship option under which a student can apply qualified industrial/government laboratory research along with successfully completed course work toward the degree. Under Plan I (thesis based), a minimum of 24 hours of course work and 6 hours of thesis credit is required. Under Plan II-a (non thesis, course-based), a minimum of 33 hours of course work, including 3 hours of research seminar (PHYC 500/501) and four electives chosen from a departmental list available from the student’s department advisor. More information about the Optical Science and Engineering Program is available online: http://www.optics.unm.edu

Ph.D. in Physics

The Doctor of Philosophy in Physics requires a minimum of 48 semester hours of graduate work exclusive of dissertation. These hours must include PHYC 503, 505, 511, 521, 522/ASTR 537, a laboratory or experimental problems course, four seminars (PHYC 550 and/or 551) and four electives chosen from a departmental list available from the student’s department advisor. Details MUST be discussed with a graduate advisor each semester. In addition, if the student has not previously taken courses equivalent to PHYC 466/467, then those courses must be included in the Ph.D. course work.

Ph.D. in Optical Science and Engineering

Current research areas: Ultrafast optics and photonics, laser physics and engineering, optical imaging, quantum optics, optoelectronic devices, fiber lasers and amplifiers, optical communication, optical materials, optical lithography, nonlinear optics, integrated optics, quantum computing, bio-optics, nano-photonics, and laser cooling.

An extensive selection of optics courses is available to the student considering graduate studies in Optical Science and Engineering. Considerable interaction occurs with the Center for High Technology Materials and the optical research groups at the Air Force Research Laboratory, Sandia National Laboratories, Los Alamos National Laboratory and other organizations in Albuquerque. These facilities offer extensive opportunities for research work toward both the M.S. and the Ph.D. degrees.

The Doctor of Philosophy in Optical Science and Engineering requires a minimum of 52 semester hours of graduate work exclusive of dissertation. These hours must include PHYC 463, 464, 466/467, 511, 521, 554, 555 and one of 476L/477L, 522, 530, 564, 566, or 569. Students are encouraged to take two semesters of PHYC 500/501 (Advanced Seminar). Details must be discussed with a graduate advisor each semester.

More information about the Optical Science and Engineering Program is available online: http://www.optics.unm.edu
General Interest Courses in Physics and Astronomy

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

ASTR 101L. Astronomy Laboratory. (1)
Intended as an adjunct to ASTR 101, this course deals with elementary techniques in astronomical observations. Two hrs. Pre- or corequisite: ASTR 101.

ASTR 109. Selected Topics in Astronomy. (1-3 to a maximum of 12)
Designed as a follow-up course to 101. This course will focus on one topic in astronomy for an in-depth investigation of its core concepts and implications. May be repeated but topics must be substantially different from semester to semester. Prerequisites: 101. (Offered upon demand.)

PHYC 102. Introduction to Physics. (3)
Designed to introduce non-science majors to basic concepts, laws and skills in physics, in various applications to ordinary life. Energy, momentum, force, wave phenomena, electric charge and light are discussed, also basic properties of gravitational, electromagnetic and nuclear forces. Selections from relativity, quantum theory, atoms and molecules will be included. See PHYC 102L for an optional laboratory. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science. Pre- or corequisite: ASTR 101.

PHYC 102L. Physics Laboratory. (1)
Students involve themselves in experiments and projects showing basic concepts related to the atom, the environment and the universe. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science. Pre- or corequisite: 102. Two hrs. lab.

PHYC 105. Physics and Society. (3)
Designed to introduce non-science majors to basic concepts, laws and skills in classical and quantum physics as a basis to discuss the interrelationships of society and physics. Examples where energy, momentum, special relativity, thermal physics, quantum and nuclear physics have important roles are discussed; these could include meteorology, aviation, weather, fission and fusion reactors, science policy and ethics, alternative energy sources. (Spring)

PHYC 106. Light and Color. (3)
Designed to introduce non-science majors to basic concepts, laws and skills in classical and quantum physics, in the context of a study of light and color. Light as flow of energy, propagating rays, vibrating waves and as photons; interactions with matter; in rainbows, sunsets, iridescence; in technology and art: cameras, telescopes, the human eye, color and color perception; lasers and holography. See PHYC 106L for an optional laboratory. (Fall)

PHYC 106L. Light and Color Laboratory. (1)
Students involve themselves in experiments and demonstrations with optical phenomena: lenses, mirrors, the eye, interference, polarization, lasers, holography. Pre- or corequisite: 106. Two hrs. lab. (Fall)

PHYC 107. Problems for Introduction to Physics. (1)
Instructor-led study session for PHYC 102, including problem solving and demonstrations. Corequisite: 102. Offered on a CR/NC basis only.

PHYC 108. Introduction to Musical Acoustics. (3)
Designed to introduce non-science majors to basic concepts, laws and skills in physics, in the context of a study of sound, acoustics and music. Energy and force involved with the physical nature of sound waves; application to harmonics, tone quality, pitch. Sound production, propagation, detection and perception are demonstrated and illustrated by many different musical instruments, building acoustics and the behavior of the voice and the ear. See PHYC 108L for an optional laboratory. (Spring)

PHYC 108L. Musical Acoustics Laboratory. (1)
Student involvement in experiments and demonstrations with sound waves, measurements of properties of musical instruments and electronic equipment measuring musical and acoustic properties. Pre- or corequisite: 108. Two hrs. lab. (Spring)

Physics (PHYC)

For PHYC 102 through 108L, see the general interest courses described above.

151. General Physics. (3)
Mechanics, sound, heat, fluid, waves. The sequence (151, 151L, 152, 152L) is required of pre-medical, pre-dental, and pre-optometry students. Only 151 and 152 are required of pharmacy students. Meets New Mexico Lower Division General Education Common Core Curriculum Area III: Science (NMCCN 1114). Prerequisite: MATH 150 or MATH 180 or ACT >27 SAT >630. (Summer, Fall, Spring).

151L. General Physics Laboratory. (1)

152. General Physics. (3)

152L. General Physics Laboratory. (1)

157. Problems in General Physics. (1)
Problem solving and demonstrations related to 151. Corequisite: 151. Offered on a CR/NC basis only.

158. Problems in General Physics. (1)
Problem solving and demonstrations related to 152. Corequisite: 152. Offered on a CR/NC basis only.

160. General Physics. (3)

160L. General Physics Laboratory. (1)

161. General Physics. (3)

161L. General Physics Laboratory. (1)
**330. Introduction to Modern Physics.** (3) Special relativity; quantum effects; introductory quantum mechanics; atomic and subatomic physics; instruments of modern physics. Prerequisite: 262. (Spring)

**400. Seminar.** (1 hr. per semester) †† Student presentations, both extemporaneous and prepared, of undergraduate physics problems. Offered on CR/NC basis only.

**405. Electricity and Magnetism I.** (3) Electrostatics, theory of dielectric materials; magnetostatics, theory of magnetic materials; direct and alternating circuit theory; Maxwell’s equations; propagation, reflection and refraction of plane waves; wave guides and cavity resonators. Prerequisites: MATH 311, MATH 316. (Spring)

**406. [**406.]** Electricity and Magnetism II.** (3) Electrostatics, theory of dielectric materials; magnetostatics, theory of magnetic materials; direct and alternating circuit theory; Maxwell’s equations; propagation, reflection and refraction of plane waves; wave guides and cavity resonators. Prerequisites: 405 and MATH 312. (Fall)

**430. Introduction to Solid State Physics.** (3) Free electron gas, energy bands, crystals, semiconductors, metals, elementary excitations, superconductivity. Prerequisite: 491. (Alternate Springs)

**445. Introduction to Cosmic Radiation.** (3) (Also offered as ASTR 445.) Primary cosmic radiation, Stormer theory, production and detection of secondary cosmic radiation, meteorological and environmental effects, temporal variations, heliospheric transport, extensive air showers and origin of cosmic rays. (Offered upon demand)

**450. Introduction to Subatomic Physics.** (3) Introductory topics in elementary-particle physics and nuclear physics, with examples and applications to high-energy physics and astrophysics such as cosmic rays, fixed-target experiments, lepton and hadron colliders, stellar physics, supernovae and cosmology. Prerequisite: 491. (Alternate Springs)

451/551. Problems. (1-3 to a maximum of 6) Δ Offered on a CR/NC basis only.

**452. Research Methods.** (1-3 to a maximum of 6) Δ 456. Honors Problems. (1 to a maximum of 2) Δ (Also offered as ASTR 456.) Independent studies course for students seeking departmental honors. (Fall, Spring)

**453. Advanced Optics I.** (3) (Also offered as ECE 463.) Electromagnetic theory of geometrical optics, Gaussian ray tracing and matrix methods, finite ray tracing, aberrations, interference. (Fall)

**464. Laser Physics I.** (3) (Also offered as ECE 464.) Resonator optics. Rate equations; spontaneous and stimulated emission; gas, semiconductor and solid state lasers, pulsed and mode-locked laser techniques. (Fall)

**466. Methods of Theoretical Physics I.** (3) Complex variables; special functions; ordinary differential equations; integral transforms; numerical methods. (Fall)

**467. Methods of Theoretical Physics II.** (3) Partial differential equations; Green’s function; integral equations; linear algebra; numerical methods. (Spring)

**476L. Experimental Techniques of Optics.** (3) Diffraction, interference, optical detectors, lens aberrations, lasers, spectra, scattering, optical testing. One lecture, 3 hrs. lab. (Fall)
*477L. Experimental Techniques of Optics. (3)
Diffraction, interference, optical detectors, lens aberrations, lasers, spectra, scattering, optical testing. One lecture, 3 hrs. lab. (Spring)

*491. Intermediate Quantum Mechanics I. (3)
Schrödinger Equations; Heisenberg uncertainty principle; postulates; Dirac notation; one-dimensional potentials; harmonic oscillator; angular momentum; H*Atom. Prerequisites: 330 and MATH 321. (Fall)

*492. Intermediate Quantum Mechanics II. (3)
Spin; Pauli principle; perturbation theory; scattering; applications of quantum mechanics. (Spring)
Prerequisite: 491.

*493L. Contemporary Physics Laboratory. (3)
Spectrographic methods; lasers, atomic structure; high Tc superconductivity; natural and artificial radioactivity; cosmic rays. One lecture, 5 hrs. lab. (Spring)

*495. Theory of Special Relativity. (3)
Relativistic kinematics and dynamics, relativistic electromagnetism, application to subatomic physics and astrophysics. (Offered upon demand)

500. Advanced Seminar. (1-3 to a maximum of 12) Δ
Offered on CR/NC basis only.

501. Advanced Seminar. (1-3 to a maximum of 12) Δ

503. Classical Mechanics I. (3)
Review of Lagrangian dynamics; two-body central force; rigid-body motion; small oscillations; Hamilton’s equations; canonical transformations; Hamilton-Jacobi theory. (Fall)

505. Statistical Mechanics and Thermodynamics. (3)
Review of thermodynamics; classical statistical mechanics; ensemble theory; quantum statistical mechanics with examples. (Spring)

511. Electrodynamics. (3)
Review of electro- and magneto-statics; E&M waves and radiation; covariant electrodynamics; scattering; relativity and covariant collisions. (Spring)

521. Graduate Quantum Mechanics I. (3)
Review of 1-dim. potentials; Dirac formalism; postulates; symmetries and conservation laws; harmonic oscillator; angular momentum and spin; central potentials; approximation methods. (Fall)

522. Graduate Quantum Mechanics II. (3)
More on angular momentum; scattering; identical particles; spectra of atoms and molecules; symmetry and conservation laws; approximation methods; special topics. Prerequisite: 521. (Spring)

523. Quantum Field Theory I. (3)
Introduction to relativistic quantum mechanics, and quantum mechanics and quantum field theory with applications drawn from quantum electrodynamics and high-energy physics. Prerequisites: 521, 522. (Alternate Years)

524. Quantum Field Theory II. (3)
A continuation of 523. (Offered upon demand)
Prerequisite: 523.

529. Condensed Matter I. (3)
Band concepts; Bloch functions; phonons and their interactions; superconductivity. (Alternate Falls)

531. Atomic and Molecular Structure. (3)
One-, two-, and many-electron atoms; interactions with E&M radiation; fine and superfine structure; external fields; molecular structure and spectra; collisions; applications of atomic and molecular physics. (Alternate years)

534. Plasma Physics I. (3)
(Also offered as ASTR, CHINE, ECE 534.) Plasma parameters, adiabatic invariants, orbit theory, plasma oscillations, hydromagnetic waves, plasma transport, stability, kinetic theory, nonlinear effects, applications.

Restriction: permission of instructor. (Fall)

535. Plasma Physics II. (3)
(Also offered as CHINE, ECE 535.) Derivation of fluid equations; CGL, MCD; equilibrium in the fluid plasma; energy principle; Rayleigh-Taylor, two-stream, and firehose instabilities; applications to ICF and open- and closed-line magnetic confinement systems; nonlinear instability theory. Restriction: permission of instructor. (Alternate Springs)

536. Advanced Astrophysics I. (3)
(Also offered as ASTR 536.) Astrophysical problems as illustrations of classical and statistical mechanics, as well as E&M: expansion of the universe; dark matter; big-bang nucleosynthesis; interiors of white dwarfs and neutron stars; supernova explosions; formation of galaxies. (Alternate Falls)

537. Advanced Astrophysics II. (3) †
(Also offered as ASTR 537.) Astrophysical problems as illustrations of quantum mechanics: H- and other atoms; molecules; spectral lines in the astrophysical environment; Doppler effect; ionized regions surrounding stars; centers of active galaxies; Lyman alpha forest; non-Keplerian rotation of galaxies. (Alternate Springs)
Prerequisite: 521.

538L. Selected Methods of Theoretical & Computational Physcs. (3-4) †
Selected topics in methods of theoretical and computational physics. (Offered upon demand)

540. Introduction to Nuclear Physics. (3)
Selected topics within nuclear physics. (Offered upon demand)

542. Particle Physics I. (3)
Overview of the standard model, including electroweak interactions, gauge theories, QCD, other selected topics. (Alternate Falls)

543. Particle Physics II. (3)
Continues 542, with emphasis on standard model, electroweak interactions, gauge theories, QCD and experimental aspects of particle physics. (Alternate Springs)
Prerequisite: 542.

551/451. Problems. (1-4 to a maximum of 16) Δ
Offered on CR/NC basis only.

552. Problems. (1-4 to a maximum of 16) Δ

554. Advanced Optics II. (3)
(Also offered as ECE 554.) Diffractions theory, coherence theory, coherent objects, and incoherent imaging, and polarization. Prerequisite: 463. (Spring)

556. Optical Coherence Theory. (3)
Time dependence of coherent and incoherent light beams, intensity fluctuations of chaotic light, fringe intensity, first order correlation function, higher order correlation functions, photo-electron statistics. (Offered upon demand)

559. Internship in Optical Science and Engineering. (3)
(Also offered as ECE 559.) Students do research and/or development work at a participating industry or government laboratory in any area of optical science and engineering. Restriction: permission of department.

564. Laser Physics II. (3) ††
Semiclassical laser theory; mode problems, pulse propagation, self-induced transparency, phase conjugate optics, photon statistics. May include semiconductor lasers, ultrafast phenomena, waveguides. Prerequisite: 464. (Alternate Springs)
566. Quantum Optics. (3 to a maximum of 6) \(\Delta\) ††
Study and manipulation of quantum coherence with electromagnetic fields. Quantum coherent spectroscopy; photon statistics and nonclassical light; open quantum systems; decoherence; special topics. (Alternate Years)

568. Nonlinear Optics. (3)
(Also offered as ECE 588.) General concepts, microscopic approach, nonlinear optical effects and devices. (Alternate Springs)

569. Advanced Topics in Modern Optics. (3 to a maximum of 6) \(\Delta\) ††
Possible topics include dye lasers, solid-state lasers, novel lasers, interaction between intense lasers and matter, advanced nonlinear optics spectroscopy. (Offered upon demand)

570. Theory of Relativity. (3)
Einstein’s theory of general relativity both as a theoretical model for gravitational forces via curved space times and as applied to various realistic astrophysical situations such as neutron stars, black holes and gravitational waves. (Offered upon demand)

573. Classical Mechanics II. (3)
Introduction to methods and topics of current interest in classical mechanics, particularly methods of advanced Hamiltonian mechanics and topics related to nonlinear dynamics and chaos in Hamiltonian and dissipative systems. Prerequisite: 505. (Alternate years)

576. Advanced Statistical Mechanics. (3)
Introduction to topics and methods of current areas of interest in statistical mechanics, particularly the area of cooperative phenomena and the area of nonequilibrium (time-dependent) statistical mechanics. (Alternate years) Prerequisite: 505.

580. Advanced Plasma Physics. (3)
(Also offered as CHNE, ECE 580.) Plasma kinetics equations, Vlasov theories of plasma waves and microinstabilities, Landau damping, nonlinear evolution of instabilities, turbulence, applications, transport in fluid plasmas; Fokker-Planck, Krook collision model, Prerequisites: 534, 535. (Offered upon demand)

581. Advanced Topics in Physics and Astrophysics. (3 to a maximum of 12) \(\Delta\)

599. Master’s Thesis. (1-6)
May be repeated to a maximum of 12 hours, but only 6 hours will count toward the program of studies. Offered on a CR/NC basis only.

650. Research. (1-12 to a maximum of 24) \(\Delta\)
May be repeated with any single faculty member.

699. Dissertation. (3-12)
Offered on a CR/NC basis only.

Astrophysics (ASTR)

For ASTR 101 through 109 see the general interest courses described above.

270. General Astronomy. (3)
Concepts of astronomy with emphasis on the Solar System. Pre- or corequisites: MATH 150 or 162 and any physics course numbered 150 or higher. (Fall)

270L. General Astronomy Laboratory I. (1)
Observations of the moon, planets and stars. Pre- or corequisite: 270. Three hrs. lab. (Fall)

271. General Astronomy. (3)
Stellar astronomy, the galaxy, extra-galactic systems, cosmology. Pre- or corequisites: (MATH 150 or 162) and any physics course numbered 150 or higher. (Spring)

271L. General Astronomy Laboratory. (1)
Observations of the moon, planets and stars. Pre- or corequisite: 271. Three hrs. lab. (Spring)

421. Concepts of Astrophysics. (3)
Gravitation, radiation, relativity, stellar atmospheres, structure, and evolution. Prerequisite: PHYC 330. (Fall)

422. Stars and Stellar Systems. (3 to a maximum of 6) \(\Delta\) ††
Applications of advanced astrophysical concepts to the interstellar medium, star formation, the Milky Way, external galaxies, and cosmology. Prerequisite: 421. (Spring)

423. Radio Astronomy. (3)
Single dish and aperture synthesis radio observations; emission processes at radio wavelengths: synchrotron radiation, thermal bremsstrahlung. Prerequisites: PHYC 330. (Spring)

424. Extragalactic Astronomy and Cosmology. (3) †
Distribution, properties and interactions of galaxies and quasars; large scale clusterings of matter, formation and evolution of the universe; physical cosmology. (Offered upon demand)

425. Galactic Astronomy. (3)
The observed and inferred structure, kinematics and evolution of our galaxy. (Offered upon demand)

426. Optics and Instrumentation. (3) †
Principles of optics and quantum physics applied to modern astronomical instrumentation (over a wide range of electromagnetic wavelengths), data acquisition and processing. (Offered upon demand)

427. Topics in Planetary Astronomy. [Selected Topics in Planetary Astronomy.] (3 to maximum of 12) \(\Delta\) †
Planetary physics; planetary investigation using space vehicles; optical properties of planetary atmospheres. (Offered upon demand)

445. Introduction to Cosmic Radiation. (3)
(Also offered as PHYC 445.) Primary cosmic radiation, Stormer theory, production and detection of secondary cosmic radiation, meteorological and environmental effects, temporal variations, heliospheric transport, extensive air showers and origin of cosmic rays. (Offered upon demand)

455. Problems. (1-3 to a maximum of 6) \(\Delta\)

456. Honors Problems. (1 to a maximum of 2) \(\Delta\)
(Also offered as PHYC 456.) Independent studies course for students seeking departmental honors.

534. Plasma Physics I. (3)
(Also offered as CHNE, PHYC, ECE 534.) Plasma parameters, adiabatic invariants, orbit theory, plasma oscillations, hydromagnetic waves, plasma transport, stability, kinetic theory, nonlinear effects, applications. Restriction: permission of instructor. (Fall)

536. Advanced Astrophysics I. (3)
(Also offered as PHYC 536.) Astrophysical problems as illustrations of classical and statistical mechanics, as well as E&M: expansion of the universe; dark matter; big-bang nucleosynthesis; interiors of white dwarfs and neutron stars; supernova explosions; formation of galaxies. (Alternate Falls)

537. Advanced Astrophysics II. (3) †
(Also offered as PHYC 537.) Astrophysical problems as illustrations of quantum mechanics; hydrogen and other atoms; molecules; spectral lines in the astrophysical environment; Doppler effect; ionized regions surrounding stars; centers of active galaxies; Lyman alpha forest; non-Keplerian rotation of galaxies. Prerequisite: PHYC 521. (Alternate Springs)
Political Science is the study of politics, power and government, including U.S. and foreign governments, as well as relationships among governments, their actions and policies. Political Science is useful for people seeking careers in law, business, government service, urban planning, education or journalism. It is also a vital part of a liberal arts education.

Introduction

A total of 36 hours is required for a major in political science. These hours must be distributed among the following:

1. Twelve hours from the core courses (200, 220, 240, 260, 270 and 280), including at least one course from each of the following groups: (200 or 270), (220 or 240) and (260 or 280); and

2. Twenty-one hours from courses numbered 300 or above; and

3. Three additional hours from any level.

NOTE: Students who have already had courses in political science may not count POLS 110 toward a major. A grade of C or better is required in all political science courses counted toward the major.

Distributed Minor for Political Science Majors

With the consent of the department chairperson, a major may offer an American Studies minor as well as a minor in a single department. For requirements, see American Studies.

A political science major may pursue a distributed minor consisting of courses in related disciplines, provided the minor program of courses is approved by the department chairperson.

Concentrations

All students interested in pursuing a ‘concentration’ should consult the departmental undergraduate advisor as early as possible after declaring a political science major. The student may declare and pursue a ‘concentration’ in either International Politics, Pre-Law or Public Policy, as follows:

International Politics

Twelve hours of political science ‘core’ requirements must include POLS 220 and 240. Of the remaining 24 hours of courses required for the major, at least 12 hours must be taken from the following list:

- POLS 300 Political Topics (‘concentration’ related)
- POLS 320 Topics in Comparative Politics
- POLS 321 Comparative Politics: Developing Countries
- POLS 322 Human Rights and Political Violence
- POLS 340 Topics in International Politics
- POLS 341 International Conflict and Cooperation
- POLS 342 American Foreign Policy
- POLS 345 Inter-American Relations
- POLS 346 International Political Economy
- POLS 351 Western European Politics
- POLS 355 Central American Politics
- POLS 356 Political Development in Latin America
- POLS 357 Russian and Eurasian Government and Politics
- POLS 377 Population Policy and Politics
- POLS 400 Advanced Political Topics
- POLS 440 International Conflict, Arms Control, and Disarmament
- POLS 441 Civil Wars
- POLS 442 International Peacekeeping and Conflict Resolution
- POLS 446 Trade Law and Policy
- POLS 447 Political Economy of Latin America
- POLS 496 Undergraduate Seminar–Honors
- POLS 497 Senior Thesis–Honors
- POLS 499 Independent Study (‘concentration’ related)

In addition, internships (POLS 291/491) with governmental and non-governmental organizations working on international issues are highly recommended. (Contact Undergraduate Internship Advisor.)

NOTE: Additional relevant courses may be added with approval of the department chairperson.
Pre-Law

Twelve hours of the political science ‘core’ requirements must include POLS 200. Of the remaining 24 hours of courses required for the major, POLS 303 (Law in the Political Community) must be taken plus at least 12 hours from the following list:

- POLS 260 Political Ideas
- POLS 280 Introduction to Political Analysis
- POLS 300 Political Topics (‘concentration’ related)
- POLS 301 Government of New Mexico
- POLS 302 Comparative State Politics
- POLS 311 Legislative Process
- POLS 313 Women and the Law
- POLS 314 Women’s Contemporary Legal Issues
- POLS 315 Constitutional Law: Powers
- POLS 316 Constitutional Law: Liberties
- POLS 317 Constitutional Law: Rights
- POLS 400 Advanced Political Topics (‘concentration’ related)
- POLS 446 Trade Law and Policy
- POLS 496 Undergrad Seminar–Honors (‘concentration’ related)
- POLS 497 Senior Thesis–Honors (‘concentration’ related)
- POLS 499 Independent Study (‘concentration’ related)

In addition, internships (POLS 291/491) in a law related activity are highly recommended. (Contact Undergraduate Internship Advisor.)

NOTE: Additional relevant courses may be added with approval of the departmental chairperson.

Public Policy

Twelve hours of the political science ‘core’ requirements must include POLS 200, 270 and 280. Of the remaining 24 hours of courses required for the major, at least 12 hours must be taken from the following list.

- POLS 300 Political Topics (‘concentration’ related)
- POLS 301 Government of New Mexico
- POLS 305 Public Opinion and Electoral Behavior
- POLS 350 Public Finance
- POLS 373 Urban Policies and Problems
- POLS 376 Health Policy and Politics
- POLS 377 Population Policy and Politics
- POLS 400 Advanced Political Topics (‘concentration’ related)
- POLS 446 Trade Law and Policy
- POLS 470 Public Policy Analysis
- POLS 475 Environmental Politics
- POLS 496 Undergrad Seminar–Honors (‘concentration’ related)
- POLS 497 Senior Thesis–Honors (‘concentration’ related)
- POLS 499 Independent Study (‘concentration’ related)

In addition, internships (POLS 291/491) with government agencies are highly recommended. (Contact Undergraduate Internship Advisor.)

NOTE: Additional relevant courses may be added with approval of the departmental chairperson.

Minor Study Requirements

A total of 24 hours, including at least three of the core courses and four courses numbered 300 or above, is required for a minor in political science. A grade of C or better is required in all courses counted toward the minor.

Departmental Honors

Superior sophomore and junior students are invited to apply for admission to the Undergraduate Honors Program, beginning in the junior year. Students participating in this program are eligible to graduate with departmental honors if recommended by the faculty on the basis of outstanding performance. Those enrolled in the honors program are expected to complete the following sequence of courses for a total of 9 hours: 495, 496 (or, with prior approval, another 400-level course) and 497.

Graduate Program

Graduate Advisor
Timothy B. Krebs

Application Information
Fall admission only.

Priority for admission and financial aid will be given to applications received by February 1. Applications accepted until May 1.

Degrees Offered

M.A. in Political Science
Ph.D. in Political Science

Concentrations: American politics, comparative politics, international relations, methodology, political theory and public policy.

All candidates for admission to the graduate program must take the Graduate Record Examination aptitude test. The Graduate Committee of the department, following policies established by the faculty, makes all decisions on equivalence to the master’s degree.

The M.A. is offered under both Plan I and Plan II under the regulations described earlier in this catalog. General requirements for completion of the Ph.D. are given on earlier pages of this catalog.

Work for the M.A. and the Ph.D. is offered in six areas: American politics, comparative politics, international relations, methodology, political theory and public policy. Students will concentrate in one field of specialization at the M.A. level and two fields of specialization at the Ph.D. level. (Early in the second semester of residence, the graduate student chooses a committee on studies that meets with the student to work out a program of study based on his or her background and interests). Each Ph.D. student must demonstrate proficiency in applied research methods. Advancement to candidacy for the Ph.D. follows upon successful completion of comprehensive examinations and a field research paper.

In addition to the application materials required by the University of New Mexico Office of Graduate Studies, the following items are required for admission to the Department of Political Science: 1) an official report of the student’s Verbal, Quantitative and Analytical Graduate Record Examination scores; 2) a short writing sample illustrating analytical ability and stylistic mastery; and 3) a letter of intent; 4) three letters of recommendation. The GRE scores must be mailed directly to the Political Science Department by Educational Testing Services.

Master’s (M.A.) Degree Requirements – Plan I (Thesis)

Entrance Requirements: In addition to UNM entrance requirements, the general GRE examination, a writing sample, a letter of intent and three letters of recommendation are required.

Exit Requirements: In addition to UNM exit requirements, Master’s (Thesis) students must choose one field of concentration and complete a minimum of 25 credit hours of course work including POLS 580, 581, 582; three pre-seminars (including one in the chosen field of concentration); one
research seminar in the chosen field of concentration; and one written comprehensive examination in the chosen field of concentration. All required course work must be completed with a grade of "B" or better, with the exception of 582, which is offered for Credit/No Credit only.

Also required are a minimum of six credit hours of thesis; an oral and written thesis presentation; and degree completion within five years.

**Master’s (M.A.) Degree Requirements – Plan II (Non-Thesis)**

Entrance Requirements: In addition to UNM entrance requirements, the general GRE examination, a writing sample, a letter of intent and three letters of recommendation are required.

Exit Requirements: In addition to UNM exit requirements, Master’s (Non-Thesis) students must choose one field of concentration and complete a minimum of 32 credit hours of course work including POLS 580, 581, 582; three pro-seminars (including one in the chosen field of concentration); one research seminar in the chosen field of concentration; and one written comprehensive examination in the chosen field of concentration. All required course work must be completed with a grade of "B" or better, with the exception of 582, which is offered for Credit/No Credit only. Degree must be completed within five years.

**Doctoral (Ph.D.) Degree Requirements**

Entrance Requirements: In addition to UNM entrance requirements, the general GRE examination, a writing sample, a letter of intent and three letters of recommendation are required.

Exit Requirements: In addition to UNM exit requirements, Doctoral students must choose two fields of concentration and complete a minimum of 18-24 post-Master’s hours of course work including POLS 580, 581, 582, 681; three pro-seminars (including one in each of the chosen fields of concentration); one research seminar in the primary field of concentration and one additional course in the secondary field of concentration; and two written comprehensive examinations (one in each of the chosen fields of concentration). All required course work must be completed with a grade of "B" or better, with the exception of 681, and 582 which is offered for Credit/No Credit only.

Also required are a written and oral presentation of a field research paper; a minimum of 18 hours of dissertation; a dissertation-proposal presentation; a written and oral defense of the final dissertation; and completion of the degree within five years following field paper requirements and advancement to candidacy.

**Concentration Course Work Requirements**

American Politics: POLS 510, Pro-seminar in American Politics, and POLS 511, Research Seminar in American Politics

Comparative Politics: POLS 520, Pro-seminar in Comparative Politics, and POLS 521, Research Seminar in Comparative Politics

International Relations: POLS 540, Pro-seminar in International Relations, and POLS 541, Research Seminar in International Relations

Methodology: Completion of two additional Methodology courses over and above the Methodology sequence (580-581, 681), and one research seminar employing advanced research methods.

Political Theory: POLS 560, Pro-seminar in Political Theory, and one research seminar with significant theory content.

Public Policy: POLS 570, Pro-seminar in Public Policy, and one research seminar with significant policy content.

**Political Science (POLS)**

**Introductory and General Courses**

110. **The Political World.** (3) An introduction to politics, with emphasis on the ways people can understand their own political systems and those of others. (Students who have already had courses in political science may not count 110 toward a major.) Meets New Mexico Lower Division General Education Common Core Curriculum Area IV: Social/Behavioral Sciences (NMCCN 1113). (Fall, Spring)

111L. **Political World Enhanced Skills Workshop.** [The Political World: Enhanced Skills and Study Group Lab.] (1) An optional laboratory to be taken concurrently with 110. One 1-hour lab per week designed to enhance analytical skills and mastery of content area associated with 110. Corequisite: 110. Offered on CR/NC basis only. (Fall, Spring)

291. **Internship.** (1-3) Δ Provides supervised work experience in the practical application of political science skills. Prerequisites: permission of instructor and department chairperson. POLS major or minor students are limited to no more than 3 credit hours. Additional/excess hours above these limits may be counted as A & S electives. Offered on CR/NC basis only. (Fall, Spring)

299. **Introductory Political Topics.** (3) Δ Special introductory topics of political science which relate contemporary issues to the discipline. Precise topics will be noted in appropriate class schedules prepared for registration. POLS major or minor students are limited to no more than 3 credit hours. Additional/excess hours above these limits may be counted as A & S electives.

*300. Political Topics. (3, no limit) Δ* Special topics of political science which relate contemporary issues to the discipline. Precise topics will be noted in appropriate class schedules prepared for registration.

303. **Law in the Political Community.** (3) (Also offered as AMST 303.) Introduction to the role of law, legal actors and institutions in politics and society. (Fall, Spring)

*400. Advanced Political Topics. (3, no limit) Δ* Special advanced topics of political science which relate contemporary issues to the discipline. Precise topics will be noted in appropriate class schedules prepared for registration.

491. **Internship.** (1-3) Δ Provides supervised work experience in the practical application of political science skills. POLS major students are limited to 6 credit hours, minor students to 3 credit hours in aggregate. Additional/excess hours above these limits may be counted as A & S electives. Restriction: permission of instructor. Offered on CR/NC basis only. (Fall, Spring)

495. **Junior Honors Seminar.** (3) Restriction: permission of instructor. (Fall)

496. **Undergraduate Seminar.** (3, no limit) Δ One section of this course is offered in conjunction with each graduate pro-seminar (510, 520, 525, 540, 560, 570). Open to undergraduate majors with 3.30 GPA and others with permission of instructor. Restriction: permission of instructor.
Core Courses

200. American Politics. (3)
Survey of American politics, including political behavior of the American electorate, the theory of democracy, the structure and function of American political institutions, and contemporary issues. Meets New Mexico Lower Division General Education Common Core Curriculum Area IV: Social/Behavioral Sciences (NMCCN 1123). (Fall, Spring)

220. Comparative Politics. (3)
Designed to give students the ability to understand and evaluate political regimes by focusing on the political history, socioeconomic structure and contemporary political institutions and behavior. Includes consideration of European and developing systems. (Fall, Spring)

240. International Politics. (3)
Analyzes significant factors in world politics, including nationalism, "national interest," ideology, international conflict and collaboration, balance of power, deterrence, international law and international organization. (Fall, Spring)

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

270. Public Policy and Administration. (3)
Introduces public policy and bureaucracy, including decision-making and implementation. (Fall, Spring)

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

American Politics

301. The Government of New Mexico. (3)
Prerequisite: 200.

302. Comparative State Politics. (3)
Analysis of the similarities and variations of American state politics with emphasis on policy outputs. Prerequisite: 200.

305. Public Opinion and Electoral Behavior. (3)
Public opinion, its content and measurement, and its relation to public policy and electoral behavior. Prerequisite: 200 or 280.

306. Political Parties. (3)
The American party system, national, state and local. Prerequisite: 200.

307. The Politics of Ethnic Groups. (3)
The ethnic basis of group politics in the U.S.; its historical, sociological and psychological foundations; the role of white ethnic; traditional and unconventional strategies and tactics; special emphasis on the politics of regional ethnic minorities. Recommended preparation: 200 or 308.

308. Hispanics in U.S. Politics. (3)
The status, role and activities of Hispanic/Latino Americans in the U.S. political system. Recommended preparation: 200 or 307.

309. Black Politics. (3)
(Also offered as AFAM 309.) Focus will be on political actions and thoughts of Black America.

311. The Legislative Process. (3)
The recruitment, formal and informal procedure and power structure of legislative bodies; their place in contemporary American government. Prerequisite: 200.

312. The American Presidency. (3)
The constitutional base of the office, its roles and responsibilities and its relations with other political institutions. Prerequisite: 200.

313. Women and the Law. (3)
(Also offered as WMST 313.) A survey of legal issues affecting women. Examines the historical development and current law of equal opportunity, sexual harassment, pay equity, sports, family, reproductive and sexual violence. Prerequisite: 303.

314. Women's Contemporary Legal Issues. (3)
(Also offered as WMST 314.) This course focuses on legal issues of current concern affecting women, offering more intensive focus than 313. Potential topics include sexual harassment, domestic violence, child support enforcement, and rights of criminally accused. Prerequisite: 303.

Judicial interpretations of institutional authority, federalism and economic liberties. Also considers role of the Supreme Court in American Politics. Prerequisites: 200, 303.

316. Constitutional Law: Liberties. (3)
Judicial interpretations of incorporation of Bill of Rights, civil liberties (religion, speech, assembly, association, press, expression, privacy) and rights of criminally accused. Prerequisite: 200, 303.

317./512. Constitutional Law: Rights. (3)
Judicial interpretations of the constitutional and statutory bases of equal protection under the law. Also considers the implementation of policies designed to implement equal protection in areas such as voting and representation, education, employment, public accommodations and housing, and rights of criminally accused. Prerequisites: 200, 303.

318. Civil Rights Politics and Legislation. (3)
(Also offered as AFAM 318.) An analysis of the dynamics of the major events, issues and actors in the civil rights movement (and legislation) in view of the theories of U.S. politics. Recommended prerequisite: AFAM 103.

319. Political Socialization. (3)
A survey and analysis of orientations of people toward their country, government and politics; the development of these attitudes, values and beliefs from early childhood to maturity; the influence of the school, family, peers, media and other agents of political socialization.

372./512. Urban Politics. (3)
Study of community power, city government structures, elected officials and city managers, political machines, the reform movement, political participation, urban bureaucracy, and racial and ethnic politics in large U.S. cities. Prerequisite: 200.

374. Women in American Politics. (3)
Analysis of the status and roles of women in American politics from historical and contemporary perspectives. Topics include the women's movement in the U.S., elite and grassroots activism and "women's issues" in public policy.
Comparative Politics

150. Introduction to Latin America. (3) 
(Also offered as SOC 150.) An interdisciplinary introduction to the geography, culture, literature, society, politics, history and international relations of the region. A lecture by faculty members from different departments will be followed by a one half hour discussion session each week.

250. Latin America Through Film. (3) 
(Also offered as SOC 250.) Interdisciplinary introduction to Latin American studies through documentary films, lectures, reading and discussion.

*320. Topics in Comparative Politics. (3, no limit) Δ 
Topics will be noted in appropriate class schedules.

*321. Comparative Politics: Developing Countries. (3) 
Prerequisite: 220.

322. Human Rights and Political Violence. (3) 
An exploration of specific cases of human rights violations, the philosophical and legal foundations of human rights, and the ways in which this highly abstract concept, linked to very concrete human tragedies, has affected politics.

Prerequisite: 220.

329. Introduction to African Politics. (3) 
(Also offered as AFAM 329.) An introductory course in the volatile politics in Africa. The various ideologies that underlie political movements and influence African governments will be explored.

*351. Western European Politics. (3) 
Government and politics of selected West European countries.

Prerequisite: 220.

*355. Central American Politics. (3) 
The political dynamics of Central American republics, considered on a country-by-country basis. Recommended preparation: HIST 282.

Prerequisite: 220.

*356. Political Development in Latin America. (3) 
Cross-national study of political development in the Latin American region, including topics such as democracy, authoritarianism, dependency, populism and revolution.

Prerequisite: 220.

*357. Russian and Eurasian Government and Politics. (3) 
A study of the evolution of the Russian political system with emphasis on dynamics and institutional structure.

Prerequisite: 220.

453. Asian Studies Thesis. (3) 
(Also offered as COMP, HIST, PHIL, RELG, 453.) Supervised research in one or more disciplines leading to an undergraduate thesis for the major in Asian Studies.

*455. Political Economy of Latin America. (3) 
Study of major Latin American countries from a Political Economy perspective.

Prerequisite: 355 or 356.

International Politics

*340. Topics in International Politics. (3, no limit) Δ 
Selected problems of international politics.

Prerequisite: 240.

341./512. International Conflict and Cooperation. (3) 
Surveys the political science literature on theories of conflict and cooperation.

Prerequisite: 240.

*342. American Foreign Policy. (3) 
Prerequisite: 240.

*345. Inter-American Relations. (3) 
Survey of contemporary international politics in the Western Hemisphere. Emphasis on conflict resolution of trade and economic assistance problems, territorial disputes, ideological issues and integration.

Prerequisites: 220 or 240.

346./512. International Political Economy. (3) 
Examines contemporary issues in international political economy, including competition and cooperation among advanced industrial nations, relations between rich and poor nations, international trade, global finance and production, and globalization.

Prerequisite: 240.

*440. International Conflict, Arms Control, and Disarmament. (3) 
Systematic examination of political, technological, strategic and economic dimensions of arms control and disarmament in a nuclear missile era.

Prerequisites: 200, 240.

441./512. Civil Wars. (3) 
This course tries to answer four central questions about civil wars: 1) Why do they occur? 2) How are they fought? 3) How do they end? 4) What are their long-term consequences?

Prerequisite: 220 or 240.

442./512. International Peacekeeping and Conflict Resolution. (3) 
Examines the increasingly important role of multilateral peacekeeping operations in the post-Cold War world.

Prerequisite: 240.

446./512. Trade Law and Policy. (3) 
Examines the law, politics and economics of past and current developments in U.S. trade policy, focusing on such issues as why nations trade, the economic effects of trade laws and regulations on U.S. markets and the world, the role of political and legal institutions, and the future of world trade.

Prerequisite: 200, 240.

*478. Seminar in International Studies. (3) 
(Also offered as ECON 478.) Designed to provide seniors from any discipline an opportunity to apply an international perspective to their undergraduate training. Each student will present a term project drawing upon his particular background and relating it to international matters. Open only to seniors.

Political Theory

*361. Ancient and Medieval Political Theory. (3) 
Survey of Political Theory from Greece to medieval times.

Prerequisite: 260.

*362. Modern Political Theory. (3) 
Survey of Political Theory from 1500 to 1900, with a focus on Hobbes, Locke, Rousseau, Hegel, Marx and Nietzsche.

Prerequisite: 260.

Public Policy

*350. Public Finance. (3) 
(Also offered as ECON 350.) Taxation, government borrowing, financial administration and public expenditures.

Prerequisite: ECON 106.

373./512. Urban Policies and Problems. (3) 
Study of the urban policymaking environment and process, and contemporary urban policy problems. Important issues
include school reform, race relations, and the causes and consequences of urban sprawl and metropolitan fragmentation. Prerequisite: 200.

376/512. Health Policy and Politics. (3) Analysis of the politics of health care in the U.S. and the development of public health policies.


*470. Public Policy Analysis. (3) Examines the allocative, distributive and regulatory problems common to all governments and provides techniques necessary to analyze the policies resulting from these problems. Prerequisite: 200.

*475. Environmental Politics. (3) A study of political problems of environmental protection and land use planning.

**Graduate Courses**

510. Pro-Seminar in American Government and Politics. (3) [Offered upon demand]

511. Research Seminar in American Government and Politics. (3) † [Offered upon demand]

512. Topics in Government and Politics. (3, no limit) ∆

520. Pro-Seminar in Comparative Politics. (3) [Offered upon demand]

521. Research Seminar in Comparative Politics. (3) † [Offered upon demand]

525. Pro-Seminar in Latin American Politics. (3) Prior course work in Latin American politics required; reading knowledge of Spanish is highly desirable.

535. Comparative Public Administration. (3) Examination on a comparative basis of national systems of administration in developed and developing countries, focusing on the organization and behavior of public bureaucracies. Prerequisite: 375.

534. Policy Issues in Education. (3) (Also offered as LEAD 534.) This course focuses on current research and debates on critical policy areas relating to PK-12 education. The class examines the role of key decision-makers, ideologies, and implementation constraints in policy conflict resolution.

540. Pro-Seminar in International Relations. (3)

541. Research Seminar in International Relations. (3) † [Offered upon demand]

551–552. Problems. (1-3, 1-3, no limit) ∆ ∆

560. Pro-Seminar in Political Theory. (3) [Offered upon demand]

570. Pro-Seminar in Public Policy. (3) Review of representative theories of public policy, including policy formation, implementation and impact analysis. [Offered upon demand]

580. Introduction to Empirical Research. (3) Provides a systematic examination of the scope and methods of inquiry in the discipline of political science, including the philosophy of science, subfields, intellectual approaches, methodological strategies, research design and ethics of professional conduct. Required of M.A. and Ph.D. students. (Fall)

581. Statistics for Social Research. (3) Provides intensive experience and lab instruction in quantitative techniques employed in political science research, including descriptive statistics, statistical inference, hypothesis testing, measures of central tendency, cross-stabulation, differences between means, bivariate regression, correlation and multivariate analysis. Required of M.A. and Ph.D. students. (Fall)

582. Survey of Political Science as a Discipline and a Profession. (1) Required of all graduate students in political science and recommended to undergraduate majors. Offered on a CR/NC basis only. (Fall)

583. Teaching and the Political Science Profession. (1) An examination of questions relating to pedagogy, course preparation and assessment methods, with particular attention to the challenges of teaching undergraduate political science courses. Offered on a CR/NC basis only.

584. Interdisciplinary Seminar on Problems of Modernization in Latin America. (3) (Also offered as HIST 689, ECON, SOC 584.)

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

681. Advanced Statistical Analysis for Social Science Research. (3) Focuses on a variety of advanced econometric methods. Beginning with a review of matrix algebra and math for the social sciences, the course provides an in-depth examination of multiple regression and more advanced econometric models. Required for Ph.D. students. (Spring) Prerequisite: 581 or equivalent.

699. Dissertation. (3-12) Offered on a CR/NC basis only.

**PSYCHOLOGY**

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Gordon K. Hodge, Associate Chairperson for Undergraduate Education
Steven W. Gangestad, Associate Chairperson for Graduate Education
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Claudia Tesche, Ph.D., University of California (Berkeley)
Ronald A. Yeo, Ph.D., University of Texas at Austin

**Associate Professors**
Krzysztof T. Ciesielski, Ph.D., Polish Science Academy (Nencki Institute)
Vincent Clark, Ph.D., University of California (San Diego)
Timothy E. Goldsmith, Ph.D., New Mexico State University
Gordon K. Hodge, Ph.D., University of California (Los Angeles)
Akaysha C. Tang, Ph.D., Harvard University

**Assistant Professors**
Karin M. Butler, Ph.D., Michigan State University
Bachelor of Arts
To obtain a B.A. in Psychology a student must satisfactorily complete (i.e., a grade of C or better) 36 credit hours in Psychology (35 credit hours if an upper-division lab is taken. See item 6 below) and should minor in an Arts and Sciences department. The 36 credit hours of Psychology should include:
1. PSY 105 (3 credits)
2. PSY 200 (3 credits)
3. Four courses (12 credits) selected from our five 200 level core courses: PSY 220, PSY 240, PSY 260, PSY 265 and PSY 271
4. PSY 302 (3 credits)
5. Four courses at the 300 level or above (12 credits)
6. One psychology elective (3 credits). Students are encouraged but not required to take an upper-division lab as an elective (2 credits).

Bachelor of Science
Same as B.A. with the following two exceptions:
1. The student must complete a minor in, or distributed among, Biology, Chemistry, Computer Science, Mathematics, Statistics, Physics or Anthropology (Biological or Human Evolutionary Ecology Concentration).
2. The student must take an upper-division psychology lab.

For a distributed minor with a B.A. or B.S., the student must take at least one upper-division course in each of two or more areas and a total minimum of 30 hours. Distributed minors must be approved by the Associate Chairperson for Undergraduate Education. See Department Advisor for details.

Minor Study Requirements
Fifteen hours beyond general psychology (PSY 105). One quarter of Psychology hours must be taken while in residence at the University of New Mexico.

Departmental Honors
Superior sophomore students, especially those anticipating graduate study in psychology or interested in research training, are invited to apply for admission to the Undergraduate Honors Program to begin in the Fall semester of the junior year. Students participating in this program are eligible for graduate with departmental honors if recommended by the faculty on the basis of outstanding performance.

The Honors major requires 33 hours beyond 3 hours of general psychology, including 200, 302, 391, 392, 491, 492 and four courses from the five 200-level core courses. The usual requirement of an upper-division lab for B.S. majors is waived for honors majors.

NOTE: Students enrolling in PSY 391, Junior Honors Seminar, must have taken PSY 200 and either PSY 260 or 265 as prerequisites and PSY 302 as a prerequisite or corequisite.

Graduate Program
Graduate Advisor
Patricia Aragon-Mascarenas
e-mail: Advising@unm.edu

Application Deadlines
Fall semester: January 15 for full consideration. After that date comparison of candidates and extension of offers of admission and of financial aid will begin and will continue until May 1 or until all positions have been filled.
Spring semester: None accepted.

Summer session: None accepted.

Only those applications received and completed by January 15 are guaranteed to receive consideration. Early applications are strongly encouraged.

**Degrees Offered**

**Ph.D. in Psychology with M.S. Enroute**

Concentrations: clinical, cognitive/learning, developmental, evolutionary, behavioral neuroscience, cognitive neuroscience and quantitative/methodology.

A graduate student who elects psychology as a major subject is advised to have had at least 15 semester hours of college credit in psychology, including one course in psychological statistics and either a laboratory course or independent research in psychology.

Although the Department awards the M.S. degree (with thesis) under Plan I according to the regulations set forth in earlier pages of this catalog, all screening of new applicants is done in terms of entry for the Ph.D. program. The department will admit new students to the graduate program only for the fall semester of each year; exceptions to this procedure are rare. Since competition for the few available openings each year is strong, only students with excellent academic records as well as first-rate letters of recommendation are likely to succeed in gaining admission.

Graduate Record Examination (GRE) scores, including the Psychology Subject Test, are required as part of the application procedure.

General requirements for the Ph.D. are set forth in earlier pages of this catalog. Regulations include a minimum of 48 hours of graduate credits (precise requirements depend upon area) with a grade point average of 3.0 (B) or better, exclusive of thesis and dissertation; satisfactory performance on the doctoral comprehensive examination; and a dissertation accepted by the final oral examining committee.

The Department of Psychology considers both teaching and research to be essential aspects of doctoral training and, therefore, requires that all candidates have such experiences during their tenure. These requirements apply regardless of whether remuneration for such activities is received.

**Required Core Courses**

(All Concentrations)

The following core courses are required in addition to any courses required in the student's concentration.

**FALL TERM OF FIRST YEAR**

- PSY 501 Advanced Statistics (3 hrs.)
- PSY 503L Advanced Statistics Lab (1 hr.)
- PSY 505 Research Seminar (1 hr.)
- PSY 551 Graduate Problems (1–3 hrs.)

**SPRING TERM OF FIRST YEAR**

- PSY 502 Design and Analysis of Experiments (3 hrs.)
- PSY 504L Design and Analysis of Experiments Lab (1 hr.)
- PSY 505 Research Seminar (1 hr.)
- PSY 551 Graduate Problems (1–3 hrs.)

Additional required course that is sometimes taken during the first year:

- PSY 511 History and Systems of Psychology (3 hrs.)

*Note:* This course does not have to be taken during a student's first year, but it does have to be taken prior to a student's comprehensive exams.

**Clinical Concentration**

**First year course work for clinical students.** Clinical students also begin their core sequence in clinical psychology during the first year. They are required to complete each course with a grade of "B-" or better. The current course sequence is:

**FALL TERM**

- PSY 532 Seminar in Psychopathology (3 hrs.)
- PSY 600L Clinical Interviewing (1 hr.)
- PSY 631L Practicum in Psychotherapy with Adults I (Must be taken every Fall semester)

**SPRING TERM**

- PSY 600L Case Formulation (1 hr.)
- PSY 633 Systems of Psychotherapy (3 hrs.)
- PSY 650 Diversity Issues in Clinical Psychology (3 hrs.)
- PSY 650 Ethics & the Profession of Psychology (3 hrs.)
- PSY 632L Practicum in Psychotherapy with Adults II (Must be taken every Spring semester)

**Second year course work for clinical students.** During the second year, students in the clinical concentration complete their core course work. The current sequence is:

**FALL TERM**

- PSY 600L Pre-Clinical Practicum (1 hr.)
- PSY 533 Psychological Evaluation: Cognitive and Neuropsychology Functions (3 hrs.)
- PSY 535 Psychological Evaluation: Personality Functions (3 hrs.)
- PSY 631L Practicum in Psychotherapy with Adults I (Must be taken every Fall semester)

**SPRING TERM**

- PSY 534L Practicum in Psychological Evaluation (3 hrs.)
- PSY 633 Systems of Psychotherapy (3 hrs.)
- PSY 632L Practicum in Psychotherapy with Adults II (Must be taken every Spring semester)

While students in all concentrations are encouraged to take courses in concentrations other than their own, nonclinical students ordinarily are not permitted to enroll in clinical practice (600L). Nonclinical students who wish to enroll in this clinical course must discuss this with the Director of Clinical Training and the course instructor.

There will be additional requirements for meeting training requirements of the American Psychological Association (APA). Please see the Director of Clinical Training for additional information.

**Health Psychology Concentration**

Beyond the departmental required courses Health Psychology students will be required to complete nine credit hours (three courses) and two electives listed below. Up to two electives can be taken from the Public Health electives.

**Required courses:**

- PSY 512 Advanced Health Psychology
- PSY 513 Emotion and Health
- PSY 514 Health Psychology Interventions

**Electives from psychology:**

- PSY 530 Alcoholism
- PSY 532 Seminar in Psychopathology
- PSY 547 Drugs and Behavior

**Electives from Public Health:**

- PH 501 Principles of Public Health
- PH 504 Rural Health
- PH 505 Cultural, Social and Behavioral Theory and Health
- PH 507 Health Care Systems
- PH 562 Women’s Health Issues
Cognitive/Learning Concentration

Fifteen credit hours in cognitive. This will include two cognitive area core courses:
PSY 561 Cognitive Processes I
PSY 562 Cognitive Processes II
Three electives.

Cognitive Neuroimaging Concentration

Beyond the departmental required courses all cognitive neurosciences students will be required to complete five courses in concentration. Three of these five required courses will be the following:
PSY 540 Biological Bases of Behavior
PSY 650 Special Topics in Functional Neuroimaging I
PSY 650 Special Topics in Functional Neuroimaging II
PSY 641 Seminar in Cognitive Neuroimaging (once a year)

The remaining two courses must be chosen from the following:
PSY 650 Special Topics in Biological Bases of Cognition
PSY 650 Special Topics in Developmental Neuroscience
PSY 650 Special Topics in Clinical Neuroimaging
PSY 650 Special Topics in Psych Program Methods
BIOM 533 Neurophysiology and Neuroanatomy

Developmental Concentration

Beyond the departmental required courses, all Developmental students are required to satisfy the following requirements: Completion of three courses which a student may elect from the following list:
PSY 650 Seminar Development
PSY 523 Social Development
PSY 528 Seminar in Cognitive Development

Completion of one 3 hour course in Social or Personality area.

Evolutionary Concentration

Beyond the departmental core requirements, all Evolutionary Psychology students will be required to complete five courses. These courses should include:
PSY 650 Special Topics: Evolutionary Psychology

Four other courses on evolutionary analysis of behavior.

At least one course must be offered in the Department of Psychology. Appropriate courses include Behavior Genetics (PSY 650), Evolution and Cognition (PSY 650) and Evolutionary Social Psychology (PSY 650).

At least two of these courses should be taken in the Department of Biology or the Department of Anthropology. Appropriate courses include Advanced Behavioral Ecology (BIOL 521), Topics in Behavioral Ecology (BIOL 502), Advanced Human Evolutionary Ecology (ANTH 562), Advanced Topics in Human Evolutionary Ecology (ANTH 560), and Seminar: Human Reproductive Ecology and Biology (ANTH 561). Any other course must be approved by the Committee of Studies.

Behavioral Neuroscience Concentration

Beyond the departmental required courses, all behavioral neuroscience students will be required to complete five courses. Two of these five required courses will be the following:
PSY 540 Biological Bases of Behavior
PSY 641 Seminar in Physiological Psychology (once a year)

The remaining three courses must consist of one course from each of the following three areas:

Neuropsychology
PSY 650 Advanced Neuropsychological Assessment
PSY 650 Biological Bases of Memory
PSY 650 Neuropsychology of Individual Differences
PSY 650 Human Neuropsychology
PSY 650 Neural Basis of Cognitive Development

Neurobiology
PSY 542 Seminar in Recovery of Function and Epilepsy
BIOM 531 Nervous System Organization, Plasticity and Development
BIOM 532 Neurochemistry
BIOM 533 Neurophysiology and Neuroanatomy

Psychopharmacology
PSY 547 Drugs and Behavior
PSY 650 Neural Basis of Addiction

Quantitative/Methodology Concentration

Beyond the departmental core requirements, all Quantitative Methodology students will be required to complete PSY 601 (Multiple Measures) and four other courses. At least two of these four courses must be selected from the following list of quantitative courses offered in our Department:
PSY 506 Seminar in Mathematical Psychology
PSY 650 Quasi-Experimental Design
PSY 650 Program Evaluation Research
PSY 650 Structural Equation Modeling
PSY 650 Computer Simulation
PSY 650 Computer Experimental Control

At least one, but not more than two, of these courses must be selected from courses in quantitative methods offered by other University of New Mexico departments. The Quantitative Committee will maintain a list of extra-departmental courses that may be used to satisfy this requirement; any other course a student wishes to count toward this extra-departmental requirement must be approved by the Quantitative Committee.

Additional Doctoral Requirements

In addition to course work in the concentration, all doctoral students must complete 9 hours (generally three graduate courses) of approved course work in an additional area outside of the concentration.

The Breadth Requirement

To ensure a breadth of training all students are required to complete a 12 hour (generally four graduate courses) breadth requirement. History and Systems (511) will count toward the breadth requirement, and all students are strongly encouraged to take Multiple Measures (601) as one of the three remaining courses to satisfy the requirement. The other courses can be taken inside or outside the Department, but they must be outside the concentration, and they must be scholarly in nature.

The Collateral Requirement

To satisfy the departmental requirement of a foreign language or comparable alternative requirement, students may use the computer labs (503L and 504L) associated with the Statistics (501) and Experimental Design (502) courses, respectively.

Psychology (PSY)
105. General Psychology. (3)
Overview of the major content areas in psychology. Topics to be covered include learning, cognition, perception, motivation, biological systems, social and abnormal psychology,
200. Statistical Principles. (3)  
Presentation of the basic principles of the description and interpretation of data. Provides an acquaintance with statistical principles appropriate to a liberal arts education, as well as a basis for further work in data analysis. Students planning graduate study in any field are advised to take 300 and 302 as well.

Prerequisite: 105. (Summer, Fall, Spring)

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

Prerequisite: 105. (Fall, Spring)

231. Psychology of Human Sexuality. (3)  
(Also offered as WMST 231.) Exploration of the physiological, cultural, social and individual factors that influence sexual behavior, sex roles and sex identity.

Prerequisite: 105.

240. Brain and Behavior. (3)  
A general survey of the biological foundations of behavior. Emphasis is on the central nervous system.

Prerequisites: 105 and (BIOL 123/124L or 201). (Fall, Spring)

250. Special Topics in Psychology. (1-3)  
Study of any psychological topic not otherwise included in the curriculum upon expression of mutual interest by students and faculty. May be repeated for credit because the subject matter varies.

260. Psychology of Learning and Memory. (3)  
Survey of the variety of laboratory learning situations, with an emphasis on the application of principles to practical situations. Topics range from simple processes, such as conditioning, to complex processes, such as transfer, memory and concept formation.

Prerequisite: 105. (Fall, Spring)

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

Prerequisite: 105. (Fall, Spring)

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

Prerequisite: 105. (Fall, Spring)

300. Intermediate Statistics. (3)  
Complex analysis of variance designs (factorial, mixed-model, Latin square, unequal-n) and nonparametric tests.

Prerequisite: 200. Corequisite: 301L.

301L. Quantitative Psychology Lab. (1 to a maximum of 2)  
Computational techniques for statistical methods covered in 300. Emphasis placed on the use of a computerized statistical package, e.g., SPSS®.

Corequisite: 300.

302. Psychological Research Techniques. (3)  
Application of the concepts covered in 200. Includes discussion of basic principles of research design and scientific methodology as applied to psychology.

Prerequisite: 200.

322L. Developmental Psychology Lab. (2)  
Research projects related to topics in 324, 328, 329.

Prerequisite: 220. Pre- or corequisite: 324, 328 or 329.

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232/532. Social Development. (3)  
An advanced course that presents theory and research focusing on social dynamic processes and relationship formation within cultural settings throughout development.

Prerequisites: 105, 200.

234. Infant Development. (3)  
An advanced course that presents theory and research on the physical, cognitive, social, emotional, perceptual and motor development in the first two years of life.

Prerequisites: 220.

328. Cognitive Development. (3)  
An advanced course that presents theory and research on the development of cognition, from memory and representation to spatial reasoning and concept formation.

Prerequisites: 220.

329. Adolescent Psychology. (3)  
Empirical study of adolescent development from different theoretical perspectives. Organization of individual social patterns through cultural and historical transitions and interplay between risk and protective factors in healthy development as well as deviant behaviors.

Prerequisite: 200 and 220.

331. Psychology of Personality. (3)  
Survey of theory, research and applications of both classical and contemporary approaches to the study of personality.

Prerequisite: 200 and 220.

332. Abnormal Behavior. (3)  
Review of the historical, scientific and ethical issues in the field of psychopathology. Categorization of deviant behavior, theories of abnormal behavior, systems of therapy and relevant research are covered.

Prerequisite: 105.

335L. Clinical Psychology Lab. (2)  
This laboratory course is designed to offer students exposure to the wide variety of research that is typically conducted in the field of clinical psychology. It will teach students how to read and critique the relevant literature in an area and how to design solid studies to answer specific research questions.

Prerequisites: 200 and 332.

341L. Behavioral Neuroscience Lab. (2)  
A laboratory course designed to introduce students to basic techniques in neuroanatomy, functional imaging and neurosurgery.

Prerequisite: 240.

342. Evolution, Brain and Behavior. (3)  
A survey of contemporary research and theory derived from an evolutionary perspective on behavior.

Prerequisite: 240.

343. Developmental Neuroscience. (3)  
Conceptual, empirical and methodological issues involved in studying the processes of pre- and post-natal brain growth. Experimental, neurobiological and genetic factors in normal and abnormal development will be considered.

Prerequisite: 240.

344. Human Neuropsychology. (3)  
The analysis of brain-behavior relationships regarding affect and higher cognitive functions (language, memory, spatial reasoning) in humans.

Prerequisites: 240.

347. Drugs and Behavior. (3)  
Study of the pharmacological action and physiological and psychological effects of drugs of abuse including stimulants, depressants, narcotics and hallucinogens.

Prerequisite: 240.
360. [360./560.] Human Learning and Memory. (3) How humans acquire and use knowledge. Theoretical and applied issues discussed around the topics of memory structures, attention, forgetting, mnemonics, imagery and individual differences in memory. Prerequisite: 260 or 265.

362L. Human Learning and Memory Laboratory. (2) Laboratory projects related to topics in 360. Prerequisite: 200. Co- or prerequisite: 360.

364./564. Psychology of Perception. (3) Study of the methods organisms use to gain information about objects. The sensory processes are discussed as a basis for description of more complex perceptual phenomena. Prerequisite: 260 or 265.

365. Applied Experimental Psychology. (3) Application of theory, methods and data from experimental psychology to topics such as training, education, assessment, design of human-machine interfaces, the legal profession, consumerism and environmental systems. Prerequisite: 265.

**367. Psychology of Language. (3) (Also offered as LING 367 and 567.)** Theoretical and methodological issues in psycholinguistics, including comprehension, speech perception and production, language acquisition, bilingualism, brain and language, reading. Prerequisite: 265 or LING 292.

374. Cross-cultural Psychology. (3) Impact of culture on human behavior, learning, personality and other selected topics is examined. Course emphasizes critical analysis, discussion and writing about cross-cultural research and theory. Prerequisite: 220 or 271.

375. Psychology of Women. (3) (Also offered as WMST 375.) Survey of research and theory on gender-role stereotypes and gender differences in such contexts as interpersonal relations, the family, the work force, mass media, mental and physical health. Prerequisite: 105.

375L. Social Psychology Laboratory. (2) Laboratory projects relevant to topics in 377 and 378 with discussion of research issues unique to social psychology. Prerequisite: 200. Pre- or corequisite: 377 or 378. Four hrs. lab.

378./578. Social Interaction. (3) In-depth examination of interpersonal and group processes such as conformity, cooperation, competition, prejudice, conflict resolution and the sharing of limited resources. Includes discussion of formal (algebraic, computer-simulation) models. Prerequisite: 271.

391. Junior Honors Seminar. (3) Discussion of the history and systems of psychology, philosophy of science and research methodology, particularly as related to current topics in psychology. Prerequisites: 260 or 265. Pre- or corequisite: 302. (Fall)

392. Junior Honors Seminar. (3) Continuation of 391. (Spring)

*400. History of Psychology. (3) An introduction to the major developments and individuals in the history of psychology. Prerequisite: any 300-level psychology course.

421./521. Advanced Developmental Psychology. (3) Investigation of the theoretical bases and critical issues in the area of developmental psychology. Prerequisite: 324 or 329.

422./522. Child Language. (3) Morford, John-Steiner (Also offered as LING 460.) Theories, methodologies and findings in child language, from birth to late childhood. Emphasizes implications of child language data for linguistic and psycholinguistic theories. Topics: biological foundations; pre-linguistic communication; phonological, syntactic, semantic and pragmatic development; bilingualism. Prerequisites: 324, 328 or 329.

430./530. Alcoholism. (3) Causes, course, prevention and treatment of problem drinking. Prerequisite: 332.

434. Behavior Therapies. (3) A survey of clinical behavior therapies, including techniques based upon learning theory, self-control, cognitive and social psychological principles. Emphasis is upon treatment outcomes and the practical application of methods to clients’ life problems. Prerequisite: 332.

436./536. Family Psychology. (3) Focuses on the major theoretical approaches to family dysfunction and examines family influences on the development and maintenance of deviance, including juvenile delinquency, substance abuse, anorexia nervosa, depression and schizophrenia. Prerequisite: 332.

439./539. Child Psychopathology. (3) Theories and practices related to an understanding of children and adolescents who deviate from normal development either intellectually, educationally, emotionally, physically or in some combination. Relevant family variables are considered. Prerequisites: 324, 329, 332.


450./560. Special Topics in Psychology. (1-3, no limit) Study of any psychological topic not otherwise included in the curriculum upon expressed mutual interest by students and faculty. (Offered upon demand)

*467. The Science of Intelligent Systems. (3) (Also offered as CS 438.) Concepts of intelligence from psychology and computer science. Areas considered include production systems, expert systems, computer-assisted instruction, models for semantics and human cognitive processes from pattern recognition to output systems. Includes a project. Prerequisite: 265.

*469L. Experimental Psycholinguistics. (3) (Also offered as LING 469L and 569L.) Laboratory course in psycholinguistics; review of classic issues and research. Provides an opportunity to learn basic research methods in experimental psycholinguistics and gain skills necessary to conduct independent research. Prerequisite: 367 and (302 or STAT 145)

491. Senior Honors Seminar. (3) Experimental methods and laboratory techniques. Senior thesis based on independent research. Prerequisite: 392. Three hrs. lab. (Fall)

492. Senior Honors Seminar. (3) Continuation of 491. Three hrs. lab. (Spring)

499. Undergraduate Problems. (1-3 to a maximum of 6) Restriction: permission of instructor.

501. Advanced Statistics. (3) Frequency and probability distributions; sampling distributions and point estimation; central tendency, variability and z
501. History and Systems of Psychology. (3)
Discussion of recent research in various areas of mathematical psychology, including behavioral decision theory and mathematical learning theory.

511. History and Systems of Psychology. (3)
Survey of historic and contemporary systematic issues and conceptual viewpoints in psychology.

512. Advanced Health Psychology. (3)
This course will examine research and theory on important issues in health psychology including stress, health behaviors, and managing chronic disease. Learning tools include analyzing, synthesizing, and integrating these readings and discussing them in class.

513. Emotion and Health. (3)
This course will examine research and theory on the application of psychology interventions to health problems including coping with illness and health behavior change. The interventions will include stress management, mediation, and cognitive behavioral therapies.

514. Health Psychology. (3)
This course will involve examine research and theory on issues in the study of emotion and health. Areas covered include the psychology of emotion, emotion and mental health, emotion and physical health, and emotional intelligence.

**521./421. Advanced Developmental Psychology. (3)
Investigation of the theoretical bases and critical issues in the area of developmental psychology.

522./422. Child Language. (3)
(Also offered as LING 560.) Theories, methodologies and findings in child language, from birth to childhood. Emphasizes implications of child language data for linguistic and psycholinguistic theories. Topics: biological foundations; pre-linguistic communication; phonological, syntactic, semantic and pragmatic development; bilingualism.

523./323. Social Development. (3)
A seminar that integrates theory and research focused on social dynamic processes and relationship-formation within cultural settings throughout development.

526. Seminar on Cognitive Development. (3)
A seminar covering theory and research on the development of cognition, organized around Piaget’s constructivist model of cognitive development and subsequent challenges, both theoretical and empirical, to that model.

530./430. Alcoholism. (3)
Causes, course, prevention and treatment of problem drinking.

531. Professional Issues in Clinical Psychology. (3)
An exploration of the professional contexts that have led to the development of modern clinical psychology and a review of the ways professional issues are relevant to practice and research in psychology.

532. Seminar in Psychopathology. (3)
A research bases course that provides a comprehensive study of abnormal behavior. It stresses diagnosis and assessment of psychopathology and examines various theories of etiology. Recommended treatments are mentioned briefly.

533. Psychological Evaluation: Cognitive and Neuropsychology Functions. (3)
Provides an introduction to intelligence testing, contemporary factors influencing intellectual performance, and clinical interpretation of cognitive tests. The neuropsychological implications of cognitive deficits are reviewed, along with different approaches to neuropsychological assessment.

534L. Practicum in Psychological Evaluation. (3)
Practicum experience in the administration and interpretation of cognitive and personality tests.

535. Psychological Evaluation: Personality Functions. (3)
This course examines: 1) psychometric principles involved in the development and evaluation of psychological tests; 2) major means of personality inventory construction; and 3) the general logic of major personality assessment procedures, including MMPI and Rorschach.

**536./436. Family Psychology. (3)
Focuses on the major theoretical approaches to family dysfunction and examines family influences on the development and maintenance of deviance, including juvenile delinquency, substance abuse, anorexia nervosa, depression and schizophrenia.

**539./439. Child Psychopathology. (3)
Theories and practices related to an understanding of children and adolescents who deviate from normal development either intellectually, educationally, emotionally, physically or in some combination. Relevant family variables are considered.

540. Biological Bases of Behavior. (3)
Provides an introduction to basic aspects of neuroscience; e.g., historical perspectives, neurocytology, neurophysiology, neurochemistry, neuropharmacology, neuroanatomy. In depth critical discussion of fundamental and current topics.

542. Seminar in Recovery of Function and Epilepsy. (3)
Focuses on the literature and current experiments on epilepsy and functional recovery, the two major problems following traumatic brain injury or stroke. Mechanisms of these processes and clinical advancements will be discussed.

547. Drugs and Behavior. (3)
Study of the pharmacological action and physiological and psychological effects of drugs of abuse including stimulants, depressants, narcotics and hallucinogens. Course may be used towards major.

551. Graduate Problems. (1-3, no limit)

561. Cognitive Processes I. (3)
Surveys the major topics and issues in lower order cognitive processes. Includes coverage of fundamental theoretical and empirical work in sensory detection, attention, perception, and motor control.
562. Cognitive Processes II. (3) Surveys the major topics and issues in memory and higher order cognitive processes. Includes coverage of fundamental theoretical and empirical work in memory, concept learning, problem solving and language. (Every other Fall)

563. Seminar in Human Memory. (3) In-depth coverage of recent studies concerned with the theoretical and applied issues around the topics of memory structures and processes, forgetting, mnemonics, imagery, prospective vs. retrospective remembering and individual differences in memory.

**564./364. Psychology of Perception. (3) Study of the methods organisms use to gain information about objects. The sensory processes are discussed as a basis for description of more complex perceptual phenomena.

565. Seminar in Thought and Language. (3) (Also offered as LING, EDPY 565.)

566. Psychology of Bilingualism. (3) (Also offered as LING 566.) Examination of psycholinguistic research relating to adult and childhood bilingualism. Topics include: bilingual memory and lexical representation, language separation and interaction in production, code switching and mixing, neurolinguistics, childhood bilingualism. Prerequisite: LING, PSY 367.

569. Seminar in Psycholinguistics. (3, no limit) ∆ (Also offered as LING 568.)

578./378. Social Interaction. (3) In-depth examination of interpersonal and group processes such as conformity, cooperation, competition, prejudice, conflict resolution and the sharing of limited resources. Includes discussion of formal (algebraic, computer-simulation) models.

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

600L. Practicum. (1-3 to a maximum of 3) ∆ Restriction: PSY major. Offered on a CR/NC basis only.

630L. Seminar in Psychoanalytic Psychotherapy. (3) Offered on a CR/NC basis only.

631L. Practicum in Psychotherapy with Adults I. (1-3, no limit) ∆ Offered on a CR/NC basis only.

632L. Practicum in Psychotherapy with Adults II. (1-3, no limit) ∆ Offered on a CR/NC basis only.

633. Systems of Psychotherapy. (3) This course surveys major alternative systems of psychotherapy. Also included is consideration of criteria for differential selection of therapy approach, familiarization with treatment outcome research and basics of program evaluation.

635. Child Assessment Practicum. (1-3 to a maximum of 3) ∆ Supervised experience conducting psychological evaluations of children and adolescents in clinical settings. Both test administration and report writing will be emphasized. Prerequisites: 533 or 535. Restriction: PSY major.

641. Seminar in Physiological Psychology. (2, no limit) ∆ Critical examination of recent empirical and theoretical articles on behavioral/cognitive neuroscience topics selected by students.

650./450. Special Topics in Psychology. (1-3, no limit) ∆ Study of any psychological topic not otherwise included in the curriculum upon expression of mutual interest by students and faculty. (Offered upon demand)

691. Clinical Internship. (1-6) Available only to students who have successfully completed their dissertations. This is a one-year, full-time external clinical internship in which students provide treatment, assessment, and other relevant professional services under intensive and direct professional supervision.

699. Dissertation. (3-12 hrs. per semester) Offered on a CR/NC basis only.

RELIGIOUS STUDIES

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Jay Rubenstein, History
John Taber, Philosophy
Richard L. Wood, Sociology

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Ruth Bombaugh, Education
Andrew Burgess, Philosophy
Katharine Burleson, Cardiology
John Bussanich, Philosophy
Laurence Cole, Obstetrics/Gynecology
Leslie Cunningham-Sabo, Pediatrics & Health Promotion
Edward De Santis, University Honors Program
Nick Flor, Business
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Jim Gilroy, UNM-Taos, Science
Timothy C. Graham, History
Linda Hall, History
M.J. Hewlett, University of Arizona: Molecular & Cellular Biology
Deirdre Hill, Epidemiology
Elizabeth Hutchinson, History
Richard Kitchen, Education Specialties
Greg Martin, English
Sheri Metzger, University Honors College
Robin Miller, Geriatric Education
William R. Miller, Psychology
Hugh Mitchell, Molecular Biology
Jennifer Moore, Law
David Mullen, Psychiatry
Suzanne Oakdale, Anthropology
Yehudaz Patt, Oncology
Susan Pearson-Davis, Theater & Dance
Noel Fugach, History
Patricia Risso, History
Janice Schultz, Communication and Journalism
Sally Severino, Psychiatry
Thomas Szigethy, History
Warren S. Smith, Foreign Languages
Ferenc Szasz, History
Mona Terrus, College of Nursing
Gautam Vora, ASM Finance
Olaf Werder, Communication & Journalism
Bruce Williams, Internal Medicine
Reema Zeineldin, Chemical & Nuclear Engineering
(post-doc)

Instructors
Michael Candelaria
Lisa Gerber
Joachim Oberst
Daniel Wolne

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Introducition

The Religious Studies Program is an interdisciplinary unit within the College of Arts & Sciences, with participation from faculty and students from across the entire University, including the various colleges, professional schools, branch campuses, and the evening/weekend program. Our undergraduate program provides both an introduction to the scholarly study of religion and broad training in the liberal arts. We study religion in its own right and as a lens through which to view the human condition, contemporary human societies, intellectual and social history, spirituality, and ethics. Students major or minor in religious studies in order to pursue careers as educators or scholars of religion, to work toward becoming clerical or lay ministers in a variety of traditions, to prepare for professional school, to pursue graduate education in allied humanities or social science disciplines and/or to explore their own deepest interests.

Major Study Requirements

The major requires 33 hours in Religious Studies, of which at least 18 must be at the upper division level. Required are 230, 232, 263, 264; and 447 or another seminar at the 400 level. In addition to the four lower division required courses, the student must also take at least one other course in each of the four distributional areas: Asian Religions, Western Religions, Sacred Texts and Religion in America.

In order to provide flexibility of scheduling, the “Asian religions” distributional requirements (263 and another Asian religions course) and the “Western religions” distributional requirements (264 and another Western religions course) may also be met by appropriate pairs of general courses that together cover Asian and Western religions respectively. Thus, for example, the “Asian religions” requirements may also be met by taking two courses, one in Hinduism and one in Buddhism; and the “Western religions” requirements may also be met by taking two courses, each covering one of the three major Western traditions, Judaism, Christianity or Islam.

Classes in Religious Studies are divided among the four distributional areas (classes offered under topics course numbers 247, 347 and 447 are assigned to one of these areas as appropriate). The courses for each area are:

1. **Asian Religions**: 107, 407, 408, 263, 331, 438, 439, 440, 442, 448, 449, 453, 457, 481.
3. **Sacred Texts**: 103, 104, 109, 230, 231, 232, 463, 407, 408, 440, or 449 may be used if not applied to Asian religions requirement.

Dual Major Requirements

Students may combine a major in Religious Studies with another major. For students with such dual majors, the total number of hours required for the Religious Studies major is reduced from 33 to 30, while the other requirements for the major remain the same.

Minor Study Requirements

The minor requires 18 hours in Religious Studies, of which at least 9 must be in courses with a RELG prefix.

Additional Information

With the permission of the Director of the Religious Studies Program, a student may include among courses for a major or minor a limited number of courses in such languages as Classical Chinese, Classical or Biblical Greek, Latin, Biblical Hebrew, Arabic and Sanskrit, when these courses include a study of religious texts and are integrated with a program of advanced studies of sacred texts.

Religious Studies undergraduate courses count with Group I (Humanities) in the Arts and Sciences group requirements. Concentrations in Religious Studies are also offered through the engineering and management colleges.

Honors in Religious Studies

Students wishing to work for Honors in Religious Studies should contact the Director of the Religious Studies Program during their junior year. Honors students sign up for two consecutive semesters of RELG 497, in which they prepare an Honors thesis under the direction of a committee.

Graduate Program

A master’s degree program in Religious Studies remains in the planning stages, but no timetable for implementation has been set. Contact the Religious Studies Program for more information.

Religious Studies (RELG)

101. Introduction to Religious Studies. (3) Comparative study of religious beliefs, practices and institutions.

103. Introduction to Bible. (3) Survey of Bible in historical context.

104. New Testament Greek. (1-6 to a maximum of 6) (Also offered as GREK 104.) Introduction to New Testament Greek.

105. Religion and the Arts. (3) Introduction to the relationship between religion and culture as reflected in the arts.

107. Living World Religions. (3) Introduction to major living world religions, such as Buddhism, Christianity, Hinduism, Islam and Judaism.


230. Hebrew Scriptures. (3) Pentateuch and the historical books of the Old Testament. (Fall)

231. Hebrew Prophets. (3) Prophetic books and later Hebrew scriptural writings.


247. Studies in Religions. (3) Elementary topics in the study of world religions. Course may be repeated up to three times provided the topics vary.

263. Eastern Religions. (3) A study of major Asian traditions, such as Taoism, Hinduism and Buddhism. (Fall)

264. Western Religions. (3) A study of major Western traditions, such as Christianity, Islam and Judaism. (Spring)

303. Introduction to Black Liberation and Religion. (3) (Also offered as AFAM 303.) Students will be introduced to the Black experience, which necessitates the redefinition of God and Jesus Christ in the lives of Black people as the struggle for transcendental and political freedom.
306/506. Reformation Era, 1500–1600. (3) (Also offered as HIST 306.) Religious revolution and concurrent development in European politics, society and culture.

308. The Jewish Experience in American Literature and Culture. (3) (Also offered as ENGL 308.) A comprehensive survey of the cultural and historic relationship between Jews and American culture and character as a whole.

323. [323./523.] History of the Jewish People to 1492. (3) (Also offered as HIST 323.) Survey of Jewish history in Ancient and Medieval times, stressing major religious, intellectual, political and social developments. Traces the transformation of the Hebrews into the Jews and Israeliite religion into Judaism, highlights the Rabbinic era and the diaspora experience in the Islamic and Christian worlds. (Fall)

324/524. Modern History of the Jewish People. (3) (Also offered as HIST 324.) Survey in ethnic history stressing political, religious and social developments from the expulsion from Spain (1492) to the present. Concentrates on European Jewry but will include consideration of American Jewish community, modern anti-semitism and rise of the state of Israel. (Spring 2004 and alternate years)

326. [326./526.] History of Christianity to 1517. (3) (Also offered as HIST 326.) The history of Christianity from its beginnings in Palestine to the eve of the Protestant Reformation. Primary focus will be on the rich variety of forms—doctrinal, liturgical and institutional—that Christianity assumed through the Medieval centuries. Also of concern will be its contributions and significance as a civilizing force. (Fall)

327. [327./527.] History of Christianity, 1517 to Present. (3) (Also offered as HIST 327.) The development of Christianity from the Protestant Reformation into the modern world, including biography, doctrine, liturgy, institutions and religious practice, together with the interaction of Christianity with society at large. (Spring)

331/531. Ch’an and Zen Buddhist Philosophy. (3) (Also offered as PHIL 331.) An examination of key writings by Chinese Ch’an teachers (e.g., HuiNING and Tung Shan), medieval Japanese Zen teachers (e.g., Eisai and Dogen) and modern Japanese thinkers (e.g., Suzuki and Nishitani). Prerequisite: PHIL 101 or 108 or 201 or 202 or 336.

333/533. Ritual Symbols and Behavior. (3) (Also offered as ANTH 333.) Comparative analysis of ritual processes, symbol systems and world views in the context of social structure.

347. Topics in Religious Studies. (3, no limit) Δ Studies in major religious figures or movements. Topic varies.

350. Religion and Literature. (3) An introduction exploring relationships between the literary and religious traditions. (Fall)

356/550. Christian Classics. (3) (Also offered as PHIL 356.) A study of major writings in the Christian tradition, written by such persons as Origen, Augustine, Aquinas, Luther, Calvin and Teresa of Avila. Prerequisite: one course in Religious Studies.

361. Modern Christian Thought. (3) (Also offered as PHIL 361.) Background of the intellectual issues facing Roman Catholic and Protestant traditions today. Prerequisite: one course in Religious Studies.

365/565. Philosophy of Religion. (3) (Also offered as PHIL 365.) Philosophic analysis of some major concepts and problems in religion. Prerequisite: one course in Religious Studies.

387. Latin American Liberation Theology. (3) Religious currents in Latin American thought, concentrating on the contemporary period, with special attention to the movement called liberation theology. Prerequisite: one course in Religious Studies.

388. Topics in Brazilian Thought. (3) (Also offered as PHIL 388.) A philosophical analysis of selected topics from Brazilian intellectual history and contemporary Brazilian thought in the areas of art, economics, literature, philosophy, politics, religion, theatre and society. Prerequisite: one course in Religious Studies.

389. Latin American Thought I. (3) (Also offered as HIST, PHIL, SOC 389.) Pre-Columbian thought through Independence ideologies. Prerequisite: one course in Religious Studies.

390. Latin American Thought II. (3) (Also offered as HIST, PHIL, SOC 390.) Positivism through contemporary thought. Prerequisite: one course in Religious Studies.

392. Black Liberation and Religion. (3) Okunor (Also offered as AFAM 392.) Introduction to some traditional western religious schools of thought as a basis for intensive examination of the works of prominent Black liberation theologians.

404/504. Augustine. (3) (Also offered as PHIL 404.) Prerequisite: one course in Philosophy or Religious Studies.

407. Sanskrit I. (3) (Also offered as LING, MLNG 407.) An introduction to the Sanskrit language in conjunction with readings from classical Sanskrit literature in translation.

408. Sanskrit II. (3) (Also offered as LING, MLNG 408.) The continuation of Sanskrit I: the completion of the study of Sanskrit grammar and an introduction to the reading of Sanskrit texts.

413/513. Kierkegaard. (3) (Also offered as PHIL 413.)

422. Sociology of Religion. (3) (Also offered as SOC 422.) Study of belief, commitment, and practice within religious and spiritual traditions and institutions, with a focus on contemporary United States, Latin America, and the Middle East. Prerequisite: 263 or 264, SOC 101. (Spring)

426/626. History of the Holocaust. (3) Pugach (Also offered as HIST 426.) An examination of the motives, methods and execution of the destruction of the Jews by Nazi Germany and the responses of Jews, Western Powers, the Churches and Righteous Gentiles in the context of Jewish and world history.

430. American Religious Communication. (3) (Also offered as CJ 430.) This course examines the roles of religious communication during the Puritan period, the first and second awakenings and the period of media evangelism. The course examines various types of communicators, messages, audiences and channels of persuasion.

438/538. Buddhist Philosophy—India. (3) (Also offered as PHIL 438.) A survey of Hinayana and Mahayana philosophical thought as it developed in South Asia, together with its religious, historical and social context.

439. [439/539.] Buddhist Philosophy—China. (3) (Also offered as PHIL 439.) Development of Buddhist thought in China and East Asia from the Tang dynasty to the present.

440/540. Buddhist Sutras Seminar. (3) Δ (Also offered as PHIL 440.) Two-week intensive summer course at Jemez Both Manda Zen Center. Study of both theory and practice with visiting professors from various universities. Opportunity for directed meditation for interested
participants. Course may be repeated up to three times provided the topics vary.

441./641. History of Religion in America. (3) Szasz
(Also offered as HIST 441.) This class will cover the rise and development of the nation’s religious groups, from first contact to the present day. The focus will be on the social impact of the groups and how they influenced the development of American life.

*442. Religions of China. (3)
Shen-tao, "Way of the Spirits" (popular folk religious beliefs and practices); the religious dimension of the Confucian tradition; religious Taoism; Buddhist religion in China; Islam in China; Catholicism and Protestantism in China.

*447. Seminar in Religious Studies. (1-3, no limit) △
Major religious figures or movements. Topic varies.

*448. Seminar in Hindu Tradition. (1-3)
The origins and development of the traditional religion of India.

449. [449./549.] The Bhagavad Gita and Yoga. (3)
(Also offered as PHIL 449.) A study of this very important text of Hindu thought and the philosophies of Samkhya and Yoga, which serve as its background.

*450. Spanish Mysticism. (3)
(Also offered as SPAN 450.) A study of Teresa of Avila and John of the Cross in the contexts of the Renaissance, mystical theology and the history and culture of Spain.

*452. Medieval English Mystics. (3)
(Also offered as COMP 452.) A study of the literary and religious aspects of the English contributions to Christian mystical theology in the works of the anonymous author of The Cloud of Unknowing and similar works.

453. Asian Studies Thesis. (3)
(Also offered as COMP, HIST, PHIL, POLS, 453.) Supervised research in one or more disciplines leading to an undergraduate thesis for the major in Asian Studies.

*457. Seminar in Islamic Tradition. (3) △
Topics in classical and contemporary Islamic thought and life. Course may be repeated up to three times provided the topics vary.

*463. Seminar in Biblical Studies. (1-3) △
Topics in the literary and historical analysis of Biblical texts. Course may be repeated up to three times provided the topics vary.

465. C. S. Lewis. (3)
Treats of the literary and theological writings of this 20th-century thinker.

*475. Dante in Translation. (3)
(Also offered as ITAL 475.) Principally the Vita Nuova and the Divine Comedy.

481./661. Islam. (3)
(Also offered as HIST 481.) Topics include the development of: Islamic law and theology; philosophy and mysticism; ritual and art. The political, social and economic ramifications of Islam will be emphasized.

*482. New Mexico Hispanic Religious Arts. (3)
Religion-related material culture fashioned by New Mexico Hispanics (painting, sculpture, architecture) in the context of ethnohistory.

*483. New Mexico Hispanic Ritual. (3)
Religious rituals and customs enacted by New Mexico Hispanics (songs, plays, ceremonies) in the context of ethnohistory.

*490. Black Liberation and Religion. (3)
(Also offered as AFAM 490.) Introduction to some traditional western religious schools of thought as a basis for intensive examination of the works of prominent Black liberation theologians.

*491. African-American Religious Traditions. (3)
(Also offered as AFAM 491.) This course will examine the bipolarity of religion in African-American history, showing how Black religion in the U.S. has served as an institution both for acculturation and also for self and cultural assertion.

497. Independent Studies. (1-3 to a maximum of 9) †
Restriction: permission of program chairperson.

500. Methods in Religious Studies. (3)
This seminar or its equivalent is required for the master’s concentration in Religious Studies.

501. Theories of Religion. (3)
Major theories about the nature and function of religion.

504./404. Augustine. (3)
(Also offered as PHIL 504.)
Prerequisite: one course in Philosophy or Religious Studies.

506./306. Reformation Era, 1500–1600. (3)
(Also offered as HIST 506.) Religious revolution and concurrent development in European politics, society and culture.

507. Teaching World Religions. (3)
Preparation for teaching courses about living world religions. Includes teaching experience in 107.

513./413. Kierkegaard. (3)
(Also offered as PHIL 513.)

524./324. Modern History of the Jewish People. (3)
(Also offered as HIST 524.) Survey in ethnic history stressing political, religious and social developments from the expulsion from Spain (1492) to the present. Concentrates on European Jewry but will include consideration of American Jewish community, modern anti-semitism and rise of the state of Israel. (Spring 2004 and alternate years)

531./331. Ch’an and Zen Buddhist Philosophy. (3)
(Also offered as PHIL 531.) An examination of key writings by Chinese Ch’an teachers (e.g., Huineng and Tung Shan), medieval Japanese Zen teachers (e.g., Eisai and Dogen) and modern Japanese thinkers (e.g., Suzuki and Nishitani).
Prerequisite: PHIL 101 or 108 or 201 or 202 or 336.

532. Sociology of Religion. (3)
(Also offered as SOC 532.) Course content of 422 plus attention to the nature of religious behavior, structure of religious organizations, and socioreligious change in contemporary societies through the works of Weber, Freud, Marx, Bellah, Geertz, Wuthnow and others.

533./333. Ritual Symbols and Behavior. (3)
(Also offered as ANTH 533.) Comparative analysis of ritual processes, symbol systems and world views in the context of social structure.

538./438. Buddhist Philosophy—India. (3)
(Also offered as PHIL 538.) A survey of Hinayana and Mahayana philosophical thought as it developed in South Asia, together with its religious, historical and social context.

540./440. Buddhist Sutras Seminar. (3) △
(Also offered as PHIL 540.) Two-week intensive summer course at Jemez Bodhi Manda Zen Center. Study of both theory and practice with visiting professors from various universities. Opportunity for directed meditation for interested participants. Course may be repeated up to three times provided the topics vary.
547. Advanced Seminar in Religious Studies. (1-3, no limit) Δ

551. M.A. Problems. (1-6 to a maximum of 12) Δ
  Tutorial arrangement with a member of the graduate faculty.

560./360. Christian Classics. (3)
  (Also offered as PHIL 560.) A study of major writings in the Christian tradition, written by such persons as Origen, Augustine, Aquinas, Luther, Calvin and Teresa of Avila.
  Prerequisite: one course in Religious Studies.

561./361. Modern Christian Thought. (3)
  (Also offered as PHIL 561.) Background of the intellectual issues facing Roman Catholic and Protestant traditions today.
  Prerequisite: one course in Religious Studies.

565./365. Philosophy of Religion. (3)
  (Also offered as PHIL 565.) Philosophic analysis of some major concepts and problems in religion.
  Prerequisite: one course in Religious Studies.

599. Master’s Thesis. (1-6 to a maximum of 12)
  Offered on a CR/NC basis only.

626./426. History of the Holocaust. (3) Pugach
  (Also offered as HIST 626.) An examination of the motives, methods and execution of the destruction of the Jews by Nazi Germany and the responses of Jews, Western Powers, the Churches and Righteous Gentiles in the context of Jewish and world history.

641./441. History of Religion in America. (3) Szasz
  (Also offered as HIST 641.) This class will cover the rise and development of the nation’s religious groups, from first contact to the present day. The focus will be on the social impact of the groups and how they influenced the development of American life.

661./481. Islam. (3)
  (Also offered as HIST 661.) Topics include the development of: Islamic law and theology; philosophy and mysticism; ritual and art. The political, social and economic ramifications of Islam will be emphasized.

RUSSIAN STUDIES

See International Studies.

SCIENCE, TECHNOLOGY AND SOCIETY MINOR PROGRAM

Ronald Reichel, Richard Mead, Co-Directors
University Honors Program
University Honors Center
Room 19D, University College
MSC05 3890
Albuquerque, NM 87131-0001
(505) 277-4211

Introduction

Established in 1989, STS Studies is an interdisciplinary minor under the College of Arts and Sciences which endeavors to create an awareness of the historical, social, philosophical and ethical dimensions of our scientific and technological enterprises. The program draws on faculty in disciplines from across the University of New Mexico campus to engage in fruitful dialogue with interested students concerning the crucial issues that face humanity and its planetary environment. This goal is achieved within the framework of a structured program. The program is administered by the STS Coordinator in collaboration with an advisory board made up of faculty from numerous disciplines that offer courses directly applicable to the STS Minor.

Minor Study Requirements

The minor in Science, Technology and Society requires the completion of 20 credit hours: 5 of these hours must be the introductory Departmental Studies 187 and the culminating Departmental Studies 498 courses or, in unique situations, approved substitutions. The remaining courses are to be chosen from three groups of electives, with at least one course from each group. Of the 20 hours, 11 must be upper division. Engineering and Science majors may receive limited credit for major discipline courses.

Required Courses

Departmental Studies 187: Introduction to Science, Technology and Society (3 credits)

This seminar course, taken early in the student's career, is designed to introduce the student to the various issues addressed by the program. Fundamental concepts in terms of the structure and methodology of science/technology will be addressed. Appropriate courses may be substituted for this introductory class with the approval of the STS Coordinator.

Departmental Studies 498: Independent Research or Internship (2–3 credits)

Research Component

The culminating course, taken towards the end of the student's undergraduate career, is designed to help the student synthesize STS issues by combining additional readings with the writing of a substantial paper in the student's area of interest under the direction of a University faculty member.

Internship Component

In lieu of independent research, the student can elect to do an internship with environmental groups, local industry, state agencies, etc. The student will select a faculty member to work with during the internship. A final summary paper dealing with the internship experience is expected.

Groups of Elective Courses

Group I: Historical Development

Courses in this group look at particular developments in the history as well as culture of science and/or technology. By this method, new insights can be gained into how we have arrived at the complexities involved in the modern world view.

Group II: Philosophical Issues

Courses in this group look at the basis of scientific knowledge, e.g., at the empirical, rational and societal elements that shape scientific theories.

Group III: Social Dimensions

Courses in this group look at the interaction of science and technology with contemporary societies and address questions concerning ethical and societal impacts on these enterprises.

SOCILOGY

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Pre-Law Concentration

The concentration in Pre-Law is designed for students interested in law school or other careers in the legal field, and highlights those aspects of law that overlap with crime and criminal justice. The concentration provides students with an introduction to the causes of crime and deviance as well as social and institutional responses to this behavior. Students can choose from courses focusing on the personal and social forces that give rise to crime, as well as courses that examine the role of the legal and criminal justice systems in dealing with criminals and reducing crime rates. To complete this concentration, students must complete 12 hours from the following list (Note: 9 of these hours must be selected from the 300/400 level courses listed below):

SOC 205 Crime, Public Policy and the Criminal Justice System
SOC 211 Social Problems
SOC 213 Deviance
SOC 312 Causes of Crime and Delinquency
SOC 313 Sociology of Control
SOC 412 Sociology of Police and Social Control
SOC 414 Sociology of Corrections
SOC 416 Sociology of Law
SOC 418 Selected Topics in Criminology
SOC 423 Gender and Crime
SOC 424 Race, Class, and Crime
SOC 425 From Youthful Misbehavior to Adult Crime
SOC 426 Drugs, Crime, and Social Control
SOC 491 Directed Study in Criminology

Human Services and Social Policy Concentration

The concentration is designed for students interested in pursuing a graduate degree or a career in human services, social work, social policy, health care, mental health, or education (K-12 and post-secondary). The concentration aims to provide broad thematic coverage of these fields by drawing upon elective courses that address topics critical to understanding the context within which welfare, health, mental health, and educational institutions operate, including social problems, race/ethnic relations, and socio-economic inequality. Students must complete 12 hours from the courses listed below. (Note: 9 of these hours must be selected from the 300/400 level courses listed below.) This concentration is recommended as an alternative to the Social Welfare minor for students majoring in Sociology. Students majoring in fields other than Sociology but who have an interest in social work, social policy, health care, mental health, or education are encouraged to pursue a minor in Social Welfare.

SOC 200 Foundations of Social Welfare
SOC 211 Social Problems
SOC 216 Dynamics of Prejudice
SOC 225 Marriage, Family, and Their Alternatives
SOC 300 Social Welfare: Programs and Policies
SOC 303 Sociology of Political Behavior
SOC 308 Sociology of Gender
SOC 310 Sociology of Aging and the Aged
SOC 321 Sociology of Medical Practice
SOC 322 Social Epidemiology
SOC 345 Youth and Society
SOC 400 The Welfare State
SOC 415 Social Stratification
SOC 420 Race and Cultural Relations
SOC 421 Sociology of Education
SOC 441 Complex Organizations
SOC 445 Occupations and Professions
SOC 488 Field Observation and Experience
SOC 499 Directed study (limited to topics approved for the concentration)

Further details are available on each concentration from the Department of Sociology and undergraduate advisors in the Department.
The Department will accept the grade of C- in required and elective Sociology courses as counting toward graduation but requires that the student achieve a minimum grade point average of 2.00 in the Sociology major or minor and a 2.00 overall grade point average. A cumulative grade point average of 2.25 or better in all courses completed is required for regular admission to the sociology major.

Major in Criminology

The Sociology Department offers a specialized program in criminology, designed to give students a comprehensive introduction to the field. Courses focus on the characteristics and causes of crime and deviance and on the origins, nature and consequences of societal reactions to crime and deviance, giving particular attention to the criminal justice system. Basic instruction is also given in sociological theory and research methods.

The Department will accept the grade of C- in required and elective courses in the Criminology major and minor as counting toward graduation but requires that the student achieve a minimum grade point average of 2.00 in the Criminology major or minor and a 2.90 overall grade point average. A cumulative grade point average of 2.25 or better in all courses completed is required for regular admission to the criminology major.

The program is particularly appropriate for students wishing to pursue one of the following career options:

- graduate work in the social sciences with a special emphasis on criminology or criminal justice
- a career in criminal justice (e.g., law enforcement, corrections, crime prevention), especially in agencies or departments involved in planning and evaluation
- a career in law, social work or counseling

Students must complete 40 hours of course work in criminology—34 hours core and 6 hours of pertinent electives as advised.

Core courses: 101; 205; one of 211 or 213; 280; 312; 313; one of 371 or 471; 381; two of 412, 414, 416, 418, 423, 424, 425, 426; and 481L. Generally, students should follow core courses in sequence, beginning with 100-level requirements, proceeding to 200-level requirements, and so on. Electives: students must choose electives from an approved list available from the Department of Sociology. Students may not count the same course as both a core course and an elective. Some upper-division electives require other courses as prerequisites.

Minor Study Requirements

Minor in Sociology

A sociology minor requires 21 hours (seven courses). The core courses are 101, 280 and either 371 or 471. The 12 elective hours (four courses) are drawn from all sociology courses not specifically required above but must include at least 6 hours (two courses) at the 300 and 400 level. If desired, a student may use 371 for the specific requirement and 471 as an elective. If 481L is chosen as an elective, the total number of elective hours will be 13, and the total in the minor will be 22.

Criminology majors may not minor in sociology without a specially approved degree plan constructed in consultation with the undergraduate advisor.

Minor in Social Welfare

The minor in social welfare is designed to accompany a major in criminology, political science, economics, psychology and disciplines other than sociology. Sociology majors with a strong interest in social welfare and related topics should pursue the Human Services & Social Policy Concentration offered as part of the sociology major.

A social welfare minor requires at least 21 hours. The core courses are 101, 200, 300, and 400. In addition, students must choose at least 9 hours of electives from the following list of courses.

Sociology

211 Social Problems
213 Deviant Behavior
216 The Dynamics of Prejudice
225 Marriage, Family and Their Alternatives
230 Sociology and Personality
303 Sociology of Political Behavior
308 Sociology of Gender
310 Sociology of Aging and the Aged
321 Sociology of Medical Practice
322 Social Epidemiology
326 Sociology of New Mexico
345 Youth and Society
351 The Urban Community
415 Social Stratification
420 Race and Cultural Relations
488 Field Observation and Experience
490 Directed Study (limited to topics approved for social welfare minor)

Anthropology

345 Spanish-speaking peoples of the SW

Economics

331 Economics of Poverty & Discrimination
335 Health Economics
341 Urban & Regional Economics

Political Science

270 Public Policy & Administration
372 Urban Politics
470 Public Policy Analysis

Psychology

220 Developmental Psychology
231 Psychology of Human Sexuality
331 Psychology of Personality
332 Abnormal Behavior

Substitution of a course not on the elective list is possible only with the approval of a sociology undergraduate advisor.

Students minoring in social welfare must adhere to all prerequisite requirements attached to the electives. Finally, courses applied toward a student’s major may not be applied toward a minor in social welfare.

Minor in Criminology

The criminology minor requires a total of 21 hours (seven courses). The core courses are 101; one of 205, 211 or 213; 312; 313; and one of 412, 414, 416, 418, 423, 424, 425 or 426 (one of these is required, but additional courses from the set may be used as electives). The 21 hours must also include 6 hours from a list of designated electives approved by the department.

Departmental Honors

Students may graduate with departmental honors by completing a specified two-course sequence. The first course, Sociology 399 (Advanced Undergraduate Workshop in Sociology) is open to all students and seeks to provide an atmosphere for motivated students to pursue more independent and focused attention to a variety of sociological topics. The second course can be Sociology 490 (Directed Study), Sociology 499 (Senior Honors Thesis) or any graduate course in Sociology (500 level). See the Departmental Undergraduate Advisor for additional details regarding the honors program.
Graduate Program

Graduate Advisor
John Roberts

Review of Applications
Fall Admission: For best consideration all materials must be received by February 1. Application files that are completed between February 1 and April 1 will be considered pending space availability. Spring Admission: These dates are September 30 and November 1.

Degrees Offered
The graduate program in sociology leads to a Master of Arts degree and/or to a Ph.D. degree. Admission to graduate work for the M.A. degree in sociology is independent and separate from admission to graduate work for the Ph.D. in sociology. The M.A. degree in sociology is offered under the regulations described earlier in this catalog.

The M.A. Program
Admission to the sociology M.A. program depends on a strong record of academic performance at the undergraduate level. While the entire application is considered, and no precise GPA cutoff is used, competitive applicants generally have at least a B average (3.0 in a 4.0 system) in previous academic work. GRE scores (general test) are also evaluated as part of the application procedure. Applicants are also asked to submit a letter of intent, three letters of recommendation and two writing samples.

Entering graduate students are expected to have had at least 12 semester hours of advanced undergraduate work in sociology, especially including satisfactory performance in sociological research methods and theory. A graduate student admitted with deficiencies in any of these prerequisites must remove the deficiencies by satisfactorily completing (with a grade of at least B, 3.0) the appropriate undergraduate course work. Credit hours earned in courses taken to remove such deficiencies do not apply to the minimum hours required for a master’s degree.

Plan I: Under this plan, the M.A. degree requires 24 hours of course work, 6 hours of thesis, a written thesis and passing the Final examination for the Thesis. Students need to maintain a cumulative GPA of at least 3.0, and all required courses must be completed with a grade of at least B-. After completing 12 hours of course work, and in consultation with the major advisor, students must file a Program of Studies with the Office of Graduate Studies. Before writing a thesis, students must appoint a thesis committee consisting of a chairperson and at least two additional faculty members. At least two of the committee members must hold regular full-time faculty appointments at The University of New Mexico. Plan I is the normal track for students interested in pursuing a Ph.D. in sociology.

Plan II: Under this plan, the M.A. degree requires 26 hours of course work, 6 hours of thesis, professional paper course work, a professional paper and passing the Final Examination for the Professional Paper. Students need to maintain a cumulative GPA of at least 3.0, and all required courses must be completed with a grade of at least B-. After completing 12 hours of course work, and in consultation with the major advisor, students must file a Program of Studies with the Office of Graduate Studies. Before writing a professional paper, students must appoint a committee consisting of a chairperson and at least two additional faculty members. At least two of the committee members must hold regular full-time faculty appointments at The University of New Mexico.

Core course requirements for all student seeking a master’s degree in sociology consist of (i) 6 hours of graduate sociological theory from two of the following three courses: Sociology 500 Classical Sociological Theory, Sociology 513 Constructing and Analyzing Contemporary Sociological Theory (Contemporary Social Thought I) and Sociology 514 20th Century European Theory (Contemporary Social Thought II); (ii) Sociology 523 Proseminar (students should take this as early in their career as possible); (iii) Sociology 580 Methods of Social Research I, (iv) Sociology 581 Advanced Social Statistics I, and (v) at least 9 hours of substantive courses in the social sciences, as approved by the Department’s Graduate Committee.

In addition to these 22 core hours required of all M.A. students, Plan I students must complete at least 8 more hours of course work, including 6 hours of thesis credit (Sociology 599). Plan II students must complete at least 10 more hours of course work, including 6 hours of professional paper credit (Sociology 596). Note that once in enrolled in Sociology 596 or 599, candidates must stay continuously enrolled in that course each semester, including the semester (Fall, Spring or Summer) in which they complete degree requirements.

The Ph.D. Program
The Ph.D. program is highly selective. All formal requirements for admission to the M.A. program are necessary but not sufficient for admission to the Ph.D. program. Ph.D. students must first obtain a master’s degree at the University of New Mexico or at another institution. Successful completion of the M.A. program does not ensure admission to the Ph.D. program.

General requirements for the Ph.D. are set forth in earlier pages of this catalog. The Ph.D. degree requires 48 hours of course work and 18 hours of dissertation. Students must also pass comprehensive examinations and write and successfully defend a dissertation. Specific requirements for all students seeking a Ph.D. in Sociology include: Sociology 500 Classical Social Theory; Sociology 513 Constructing and Analyzing Contemporary Sociological Theory (Contemporary Social Theory I); Sociology 514 20th Century European Theory (Contemporary Social Theory II); Sociology 523 Proseminar (students should take this course as early in their careers as possible); Sociology 580 Methods of Social Research; Sociology 581 Advanced Social Statistics I; Sociology 582 Advanced Social Statistics II; and another methods or statistics course approved by the Graduate Advisor; 18 units of Sociology 699 Dissertation; passing all required courses with at least a grade of B-; Comprehensive Examinations (written and oral); a Ph.D. dissertation and passing the Final Examination for Doctorate. Prior to taking the comprehensive examinations, a Committee of Studies must be appointed which consists of at least three University of New Mexico faculty members approved for graduate instruction. The chairperson must be a regular faculty member approved by the student’s graduate unit. A doctoral student must apply for and be admitted to doctoral candidacy after completing all course work and passing the comprehensive examination. The Dissertation Committee will consist of at least four members approved for graduate instruction; two members must hold regular, full-time faculty appointments at the University of New Mexico; one member must be from the student’s graduate unit; the dissertation chairperson must be a regular (tenured or tenure-track), full-time member of the University of New Mexico faculty; a required external member must hold a regular full-time appointment outside the student’s unit/department at the University of New Mexico. This member may be from the University of New Mexico or from another accredited institution; one member may be a non-faculty expert in the student’s major research area. Doctoral candidates must be enrolled during the semester in which they complete degree requirements, including the summer session.

Sociology (SOC)

101. Introduction to Sociology. (3) Fiala, Lopez, Tiano Basic concepts, topics and theories of contemporary sociology. Meets New Mexico Lower Division General Education Common Core Curriculum Area IV: Social/Behavioral Sciences (NMCQ 1113). Prerequisite for more advanced courses in sociology. (Summer, Fall, Spring)
150. Introduction to Latin America. (3) (Also offered as POLS 150.) An interdisciplinary introduction to the geography, culture, literature, society, politics, history and international relations of the region. A two-hour lecture by faculty members from different departments will be followed by a one-hour discussion section each week. [Offered upon demand]

200. Foundations of Social Welfare. (3) Coughlin Historical development of social welfare institutions and the welfare state; social indicators and the quality of life. Prerequisite: 101. [Fall, Spring]

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

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

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

216. The Dynamics of Prejudice. (3) Gonzales, Lopez The study of prejudice and discrimination, including their historical and contemporary sources and prospects for their reduction, with applications to American institutions. Prerequisite: 101. [Fall, Spring]


225. Marriage, Family and Their Alternatives. (3) Hood Comparative analysis of contemporary family and household forms such as dual-worker, single-parent and homosexual couple households. Focus on links between large-scale social changes and changing family composition and interaction patterns. Meets New Mexico Lower Division General Education Common Core Curriculum Area IV: Social/Behavioral Sciences (NMCCN 2213). Prerequisite: 101. [Spring]

230. Society and Personality. (3) The social psychology of personalities, relationships, small groups and organizations. Prerequisite: 101. [Offered upon demand]

250. Latin America Through Film. (3) Valdés (Also offered as POLS 250.) Interdisciplinary introduction to Latin American studies through documentary films, lectures, reading and discussion. Prerequisite: 101. [Offered upon demand]

280. Introduction to Research Methods. (3) Hood, Roberts, St. George A survey of the major methods of social research: foundations of social research, research design, sampling and measurement, quantitative and qualitative research methods and data analysis. Prerequisite: 101. [Fall, Spring]

300. Social Welfare: Policies and Programs. (3) Coughlin Examination of the American social welfare system at federal, state and local levels; the social programs of developed and developing societies. Prerequisite: 200. [Fall]

303. Sociology of Political Behavior. (3) Coughlin, Fiala Examination of the social bases of political behavior. Major topics include the character and expansion of the state, the social bases of various forms of political rule and political change in the contemporary world. Prerequisite: 101. [Offered upon demand]

305. Environmental Sociology. (3) Examination of humans and the environment from an ecological perspective. Focus on industrial and economic growth, natural resources development, environmental values and movements, resource management, and comparative perspective on people's relationship to the environment. Prerequisite: 101.

308. Sociology of Gender. (3) Burris, Hood, Lopez (Also offered as WMST 308.) How and why societies create gender categories. How do definitions of "masculinity" and "femininity" vary? What are the costs and benefits of being male or female in contemporary American society? Prerequisite: 101. [Fall, Spring]

310. Sociology of Aging and the Aged. (3) Descriptive and theoretical study of the social situation of older persons in contemporary industrial societies; the impact on societal institutions of an increasing percentage of older citizens. Prerequisite: 101. [Offered upon demand]

312. Causes of Crime and Delinquency. (3) Broidy, Wadsworth, Wood A survey of criminological theories exploring why some people are more likely to engage in crime than others and why crime rates vary over time and space and across social groups. Attendant policy issues will also be discussed. Prerequisites: 205 and 213. [Fall, Spring]

313. Social Control. (3) Broidy, Wadsworth, Wood The study of informal and formal social control strategies for guiding and monitoring individual behavior and social interaction. Discussion of key social control agents and institutions, including the family, schools, peers, media, religion and the criminal justice system. Prerequisites: 205 and 213. [Fall, Spring]

321. Sociology of Medical Practice. (3) An introduction to the delivery of health care in the U.S. and selected other countries is pursued with an emphasis on the interaction of patients, professionals and health care institutions. (Offered upon demand)

322. Social Epidemiology. (3) Examines the influence of social variables on human's health, illness and death. The complex role of lifestyle, socioeconomic status, marriage, occupation, culture and other variables are examined as they are related to survival. Prerequisite: 101. [Offered upon demand]

326. Sociology of New Mexico. (3) Valdés New Mexico as a social system; the infrastructure of communities and ethnic groups, stratification, major social institutions, deviance and inter-group relations. Prerequisite: 101. [Fall]

331. Collective Behavior. (3) Gonzales The study of riots, disturbances, social movements and other forms of contentious collective behavior. Strategies of conflict and conflict resolution are considered. Prerequisite: 101. [Offered upon demand]

335. Sociology of Mass Communication. (3) (Also offered as CJ 335.) Mass communication in society with emphasis in Western industrial societies, impact of mass communication on social movements and on sectors of the...
social structure; social psychology of mass communication. (Offered upon demand)

338. City Life. (3) (Also offered as HIST 418.) A study of the development of urban spaces and urban lives from the 17th century, which considers the impact of political and cultural changes upon physical spaces and their impact upon modern lives. Prerequisite: 101. (Spring)

345. Youth and Society. (3) An assessment of the creation and dynamics of childhood and youth in human societies. Consideration of historical and cross-cultural material; and issues such as deviance and popular culture. Prerequisite: 101. (Offered upon demand)

350. Rural Society in Latin America. (3) Valdés Analysis of agricultural modes of production—including the relationship of crop, tenancy and land ownership patterns and social institutions stemming from them, from Spanish colonial times to the present. Effects of the commercial revolution and agrarian reforms. Prerequisite: 101. (Offered upon demand)

351. The Urban Community. (3) The forms and development of urban community; demographic, spatial, functional and temporal patterns; metropolitan development and city-hinterland relations. Prerequisite: 101. (Offered upon demand)


381. Sociological Data Analysis. (3) Fiala, Roberts, St. George An introduction to the basic statistics (both descriptive and inferential) employed in the analysis of quantitative sociological data. Prerequisites: 280. (Fall, Spring)

389. Latin American Thought I. (3) (Also offered as HIST, RELG, PHIL 389.) Pre-Columbian thought through independent ideologies. (Offered upon demand)

390. Latin American Thought II. (3) (Also offered as HIST, RELG, PHIL 390.) Positivism through contemporary thought. (Offered upon demand)

398. Special Topics in Sociology. (3, no limit) & Prerequisite: 101. (Offered upon demand)

399. Advanced Undergraduate Workshop in Sociology. (3) Hood, Coughlin An undergraduate seminar reviewing selected issues in sociology. This is the first of two courses in the sociology honors program. The course focuses on sharpening analytical skills and developing research papers and proposals. Prerequisite: 200. (Spring)

400. The Welfare State. (3) Coughlin A historical and cross-national comparative study of the welfare state. How it functions and its present problems. Prerequisite: 200. (Spring)

412. Sociology of Police and Social Control. (3) Wood Study of the relationship between society and law enforcement agencies, including the societal context of policing and how law enforcement impacts society. Discussion of law enforcement practices, training and management; the interface of police and communities; historical and contemporary models of policing; and efforts at police reform. Prerequisites: 312, 313. (Fall, Spring)

414. Sociology of Corrections. (3) Study of the perspectives of corrections, its relationship to other criminal justice agencies, various forms sentencing and punishment, corrections administration and issues in the field. Visits may be made to several facilities. Prerequisites: 312, 313. (Fall, Spring)

415. Social Stratification. (3) Burris Structure and dynamics of class, status and power in society; social consequences of stratification. Prerequisite: 312 and 313. (Offered upon demand)

416. Sociology of Law. (3) Broidy Social science perspectives of the law, legal institutions and the impact of law on behavior. Topics include theories of law and legality; comparative legal systems: lawyers, judges and juries; and the use of social science in the courts. Prerequisites: 312 and 313. (Offered upon demand)

418. Selected Topics in Criminology. (3 to a maximum of 6) & Broidy, Wadsworth, Wood This course will explore in detail some aspects of research on the causes or characteristics of crime, such as juvenile delinquency, drug and alcohol-related behavior or child abuse. Prerequisites: 312, 313. (Offered upon demand)

420. Race and Cultural Relations. (3) Gonzales, Lopez Comparative and structural analysis of intergroup relations in the United States and/or other countries and regions. Prerequisite: 101 and 216. (Offered upon demand)

421. Sociology of Education. (3) Fiala, Lopez Structure and functioning of educational institutions in the United States and other societies. Prerequisite: 101. (Offered upon demand)

422. Sociology of Religion. (3) Wood (Also offered as RELG 422.) Study of belief, commitment, and practice within religious and spiritual traditions and institutions, with a focus on contemporary United States, Latin America, and the Middle East. Prerequisite: 101, RELG 263 or 264. (Spring)

423. Gender and Crime. (3) Broidy This course will outline similarities and differences in offending patterns across males and females and discuss various explanations for these differences. Discussions will also focus on the dynamics of female offending, the formal social control of female offenders and the role of women in the correctional system. Prerequisite: 312 and 313.

424. Race, Class and Crime. (3) Lopez, Wadsworth This class will examine the relationships between race, ethnicity, socio-economic status and involvement in criminal behavior, focusing on the influence of structural, cultural and historical influences. We will also explore contemporary criminal justice issues pertaining to race and class. Prerequisite: 312 and 313.

425. From Youthful Misbehavior to Adult Crime. (3) Broidy, Wadsworth Causes and consequences of offending at various stages in the life course, focusing on the ways in which adolescent and adult roles, responsibilities and opportunities shape aggregate and individual level patterns of involvement in juvenile delinquency and adult criminality. Prerequisite: 312 and 313.

426. Drugs, Crime and Social Control. (3) Wadsworth Study of the development of social policies concerning illicit substance use; its impact on social behavior; strategies for prevention and intervention with substance use; investigation, adjudication and supervision of drug offenders; and the relationship between criminal justice, education, public health and government policies. Prerequisites: 312, 313.
290 ARTS AND SCIENCES

428. Sociology of Mexican Americans. (3) Gonzales, Lopez
The historical, comparative and contemporary study of the Mexican American in the U.S. Race and ethnic relations theories and the Chicano Movement.
Prerequisite: 101. (Offered upon demand)

430. Ideology and High Culture. (3) Huaco
Theory of ideology (Marx, Lukacs, Mannheim). Sociology of literature, art, philosophy. (Offered upon demand)

*441. Complex Organizations. (3) Burris
Structure and functional dynamics of formal organizations; the role of bureaucracy in modern social organization.
Prerequisite: 101. (Offered upon demand)

*445. Occupations and Professions. (3) Burris, Hood
Comparative studies of occupational subcultures; patterns of interaction and social norms in relations among colleagues and with clients; recruitment, mobility and the process of professionalization.
Prerequisite: 101. (Offered upon demand)

*450. Urban Society in Latin America. (3) Valdes
Causes, processes and consequences of urbanization from Spanish colonial times to present; changes in class, status, power, population growth and social relations in urban society.
Prerequisite: 350. (Offered upon demand)

*451. Population. (3)
The composition of populations; fertility, mortality, migration; sources and evaluation of demographic data.
Prerequisite: 101. (Offered upon demand)

*461. Social Dynamics of Global Change. (3) Schrank, Tiano
A sociological perspective on economic, political and social trends worldwide. Implications of global change for individuals, organizations and societies. (Offered upon demand)

471. Contemporary Sociological Theory. (3) Burris, Huaco, Tiano
Comparative analysis of major contributions to sociological theory in the 20th century: Functionalism, Phenomenology, French Structuralism, Analytical Marxism.
Prerequisite: 101. (Fall, Spring)

*478. Seminar in International Studies. (3)
(Also offered as ECON, MLNG 478.) Designed to provide seniors from several disciplines an opportunity to apply an international perspective to their undergraduate training. Each student presents a term project drawing upon his or her major disciplinary background and related to international concerns. Open only to seniors. (Offered upon demand)

481L. Research Methods in Sociology. (4) Coughlin, Roberts, St. George
Use of the computer as a tool of social research; utilization of data archives; problems of research design, instrumention and analysis of empirical data.
Prerequisite: 381. Three lectures, 1 hour lab. (Fall, Spring)

*484. The Cuban Revolution, 1959 to Present. (3) Valdes
(Also offered as HIST 475 and 655.) Background to revolution since 1898; emphasis on period since 1959. (Offered upon demand)

488. Field Observation and Experience. (1-4) Coughlin, Rack
A field placement arrangement for students in the criminology, Peace Studies, and social welfare concentrations. Participant observation in local agencies and sociological analysis of this experience.
Prerequisites: core courses in deviance/criminology, Peace Studies, or social welfare and permission of instructor. (Fall, Spring)

490. Directed Study. (1-3 to a maximum of 6) △
Tutorial arrangement with a member of the sociology faculty. Specific arrangements must be made with a member of the sociology faculty responsible for supervising the work.

Arrangements normally made at least one semester in advance.

491. Directed Study in Criminology. (1-3 to a maximum of 6) △
Tutorial arrangement for investigation of selected issues in criminology. Specific arrangements must be made with a member of the sociology faculty responsible for supervising the work.

499. Senior Honors Thesis. (3)
For departmental honors students only. By arrangement with department Honors and Awards Committee and approval of the chairperson.

500. Classical Sociological Theory. (3) Burris, Huaco, Lopez
Advanced study of selected classical theorists.

503. Political Sociology. (3) Coughlin, Fiala, Wood
Review of the field of political sociology. Focus is on the character of the state, state expansion, states and organized conflict and forms of state organization and ideology.

504. Deviance. (3) Broidy
Survey of major research traditions for each theory of deviance and policy implications of deviance research.

505. Complex Organizations. (3) Schrank
Survey of the empirical literature and theory related to complex organizations. Attention to organizational structure, conflict, problem solving, development and ecology.

The demography, social structure and value systems of the developed and developing societies. The particular theme and concerns of the course will vary each time offered.

507. Topics in Sociological Theory. [Sociological Theory: Selected Topics.] (3, no limit) △

508. Latin American Development and Planning. (3) Valdes
(Also offered as CRP, LTAM 578.) Interdisciplinary seminar focusing on area topics in Latin American planning, development and urbanization. It is the core course for the LAS/MCRP dual-degree program.

509. Gender and International Development. (3) Tiano
Focus on women in Africa, Asia and Latin America, exploring their historical and current circumstances in light of the changing global political-economy.

510. Social and Political Movements. (3) Gonzales, Wood
Examination of historical, theoretical and empirical materials on the character and dynamics of social and political movements. Includes consideration of the global context of contemporary social and political movements.

512. Ideology and High Culture. (3) Huaco

513. Constructing and Analyzing Contemporary Sociological Theory. (3) Fiala, Huaco
Survey of contemporary theory, with a focus on constructing theory. Includes analysis of functional, interactionist, institutional and world-systems theory.

514. 20th Century European Theory. (3) Huaco
(Also offered as PHIL 514.) Analytical Marxism, Nietzsche, Spengler, Sociobiology, Foucault, Sartre, Lukacs, The Frankfurt School.

Symbols, page 611.
516. Social Control Institutions. (3) Wood
Structure, function and philosophy of formal social institutions charged with the definition, control and treatment of norm-violating behavior.

517. Criminology and Delinquency. (3) Wadsworth
Critical examination of the nature, definition, alleged causes and some treatment strategies for illegal behavior by adults and juveniles.

520. Racial and Ethnic Relations. (3) Gonzales, Lopez
Historical and comparative analysis of race and ethnic relations in the U.S., with comparative reference to Western Europe, Latin America, Asia. Origins and maintenance of slavery; minority community development; causes and consequences of prejudice.

521. Sociology of Education. (3) Lopez
Examination of the character and dynamics of education in human societies. Focus is on the organization and expansion of modern educational systems and the effects of education on individuals and society.

522. Sociology of the Family. (3) Hood
Analysis of the modern family and its characteristics in a social and historical setting. Examination of theory used in family study, with emphasis on current research.

523. Proseminar. (1) Wood, Roberts
Introduces incoming graduate students to each of the department's regular faculty members and their work.

524. Social Stratification. (3) Burris
Critical comparative analysis of major theoretical models of social stratification.

525. Proseminar on Latin American Politics. (3)
(Also offered as LTAM 525.) Previous work in the field is highly desirable and reading knowledge of Spanish is required.

528. Sociology of Mexican Americans. (3) Gonzales
The historical, comparative and contemporary study of the Mexican American in the U.S. Race and ethnic relations theories and the Chicano Movement. (Offered upon demand)

530. Occupations and Professions. (3) Burris, Hood
Comparative analysis of the process of professionalization among occupations. On the basis of a common theoretical framework, students do individual research on such processes in selected occupational fields.

531. Sociology Teaching Practicum. (2) Wood, Roberts
Provides a survey of pedagogical methods and classroom teaching experience for prospective sociology instructors. Offered on a CR/NC basis only.

532. Sociology of Religion. (3) Wood
(Also offered as RELG 532.) Course content of 422 plus attention to the nature of religious behavior, structure of religious organizations, and socioreligious change in contemporary societies through the works of Weber, Freud, Marx, Bellah, Geertz, Wuthnow and others.

551–552. Problems. (2-3, 2-3, no limit) ∆
Tutorial arrangement with a member of the graduate faculty.

570. Sociological Research: Special Topics. (3, no limit) ∆

Analytical examination of traditional methodological issues including measurement, experimental design, sampling, theory construction, role of statistics and nature of probability.

581. Advanced Social Statistics I. (3) Roberts
Examines theory (assumptions, properties of estimators) and application of multiple regression. Introduces matrix notation and generalized least squares. Prerequisite: 481L.

582. Advanced Social Statistics II. (3) Roberts
Additional methods for quantitative social research: regression diagnostics, logit and Poisson regression, principal components, correspondence analysis. Prerequisite: 581.

583. Special Topics in Advanced Social Statistics. (3) ∆ Roberts
A close examination of the properties and application of a single quantitative method (or a few related methods). Possible topics include structural equation models, log linear models, dynamic models, scaling. May be repeated for credit as subject matter varies, no limits. Prerequisites: 582.

584. Interdisciplinary Seminar on Problems of Modernization in Latin America. (3) Valdez
(Also offered as HIST 689, ECON, POLS 584.)

595. Special Topics in Sociology. (3, no limit) ∆

596. Professional Paper. (1-6, no limit) ∆
Student works under faculty supervision toward completion of the professional paper requirement for a Plan II master's degree. Paper must be of professional quality and in a format suitable for publication. Offered on a CR/NC basis only.

599. Master's Thesis. (1-6)
Offered on a CR/NC basis only.

699. Dissertation. (3-12)
Offered on a CR/NC basis only.

SPANISH AND PORTUGUESE

J. Clancy Clements, Chairperson
Department of Spanish and Portuguese
MSC03 2100
1 University of New Mexico
Albuquerque, NM 87131-0001
(505) 277-5907, 277-5908, FAX (505) 277-3885

Professors
Anthony J. Cárdenas-Rotunno, Ph.D., University of Wisconsin—Spanish
J. Clancy Clements, Ph.D., University of Washington (Seattle)—Romance Linguistics
Enrique R. Lamadrid, Ph.D., University of Southern California—Spanish
Tey Diana Rebolledo, Ph.D., University of Arizona—Spanish

Associate Professors
Kimberle López, Ph.D., University of California (Berkeley)—Spanish
Miguel López, Ph.D., University of California (Berkeley)—Spanish
Judy Maloof, Ph.D., University of California (San Diego)—Spanish
Kathryn McKnight, Ph.D., Stanford University—Spanish
Margo Milleret, Ph.D., University of Texas at Austin—Portuguese
Susan D. Rivera, Ph.D., The University of New Mexico—Spanish

Assistant Professors
Alejandra Balestra, Ph.D., University of Houston—Spanish Linguistics
Leila Lehnen, Ph.D., Vanderbilt University, Spanish and Portuguese

Symbols, page 611.
Maria Dolores Gonzales, Ph.D., University of New Mexico—Spanish
Erlendo Santiago-Díaz, Ph.D., Brown University—Hispanic Studies
Catherine Travis, Ph.D., La Trobe University—Linguistics

Director Language Learning Center
Neddy Vigil, Ph.D., The University of New Mexico—Spanish

Professors Emeriti
John J. Bergen, Ph.D., University of California (Los Angeles)—Spanish
Garland D. Bills, Ph.D., University of Texas—Spanish
Ruben Cobos, Ph.D., The University of New Mexico—Spanish
Palayo Fernández, Ph.D., Salamanca University—Spanish
Rosa Fernández, Ph.D., The University of New Mexico—Spanish
Dick Gerdes, Ph.D., University of Kansas—Spanish
Angel González, M.A., Universidad de Oviedo—Spanish
Elena González-Berry, Ph.D., The University of New Mexico—Spanish
Tamara Holzapfel, Ph.D., University of Iowa—Spanish
Raymond MacCurdy, Ph.D., University of North Carolina—Romance Languages
Alfred Rodríguez, Ph.D., Brown University—Spanish
Jon M. Tolman, Ph.D., The University of New Mexico—Portuguese

Introduction
The mission of the Department of Spanish and Portuguese is to promote quality teaching and research that integrate the languages, literatures, linguistics and cultures of the Spanish- and Portuguese-speaking worlds. We share our expertise with the university community, the city of Albuquerque and the state of New Mexico. We are especially committed to revitalizing the Spanish language in New Mexico and to studying the interactions between cultures in the Southwest.

Faculty and students work together in the classroom, in the community, and in study abroad to develop understanding, sensitive communication and critical thinking about our diverse and interconnected world. The Department prepares its students with the skills, knowledge, and values necessary to lead productive and fulfilling lives as citizens and life-long learners.

Group Requirements
Literature courses in translation are not accepted for fulfillment of foreign language group requirements.

Language Learning Center
Work in the Language Learning Center is assigned in connection with the lower-division language courses and does not carry extra credit.

Spanish Language Instruction Program
Language instruction courses develop grammar, vocabulary, the four language skills—listening, speaking, reading and writing—and culture.

Sabine Ulibarri Spanish as a Heritage Language (SHL) Program
Spanish courses 111, 112, 211, 212 are reserved for students who grew up in a Spanish-speaking environment. The objective of these classes is to build upon the language base which the students already possess. All four language skills—listening, speaking, reading and writing—are stressed, but time is not spent drilling aspects with which students are already familiar. All students who speak or understand some Spanish as a result of having heard it at home or from grandparents are urged to enroll in these classes. A placement evaluation is required before entering these classes. (See Department for times and dates.)

Spanish as a Second Language (SSL) Program
This program is designed for students of Spanish whose native home language is not Spanish.

Required Placement Evaluation
All University of New Mexico all students who choose Spanish to fulfill their language requirement are required to take the Spanish Placement Evaluation for placement in the appropriate level. This evaluation is administered in the Language Learning Center located in 124 Ortega Hall.

To Challenge a Course
If you place into a higher-level Spanish course, you not only advance faster, but also have the option to challenge the lower-level Spanish course(s) for graduation credit (challenging means you earn credit—grade of B or better—at a higher level and, upon paying regular tuition for lower level courses, may receive credit for them). You can also test out of a Spanish class and earn credit by taking the Spanish CLEP test (check the Web site http://www.unm.edu/~testctr/clep.htm for information on CLEP testing).

Undergraduate Programs
Spanish Undergraduate Advisor
Anthony J. Cardenas, (505) 277-5526, ajcard@unm.edu

Portuguese Advisor
Margo Milleret, (505) 277-8613, milleret@unm.edu

Major Study Requirements
Spanish
Thirty hours in Spanish courses numbered 300 or above. Required courses: a) 301; b) 302; c) 307; d) 352; e) one of the following: 350, 351, 353; f) one of the following: 411 or 412; g) one of the following: 431 or 432; and h) at least 9 additional hours above 300, 3 of which must be at the 400 level. Spanish 301 may be repeated for credit as topic changes; however, only 3 hours of 301 are applicable toward the major. A student may follow a general course of studies or a group of courses in the following areas: Spanish Peninsular Literature, Spanish American Literature, Southwest Hispanic Studies or Linguistics. In addition, work in another foreign language at the 202 or 276 level (or equivalent) must be completed. Students planning to major in Spanish should consult with the Department undergraduate advisor. All grades must be C or better. Majors also prepare a portfolio, see department for details.

Portuguese
Thirty hours in Portuguese courses numbered 200 or above. Required courses: 275–276, 311–312, 415–416, plus 6 additional hours at the 400 level. Work in another foreign language at the 202–276 level (or equivalent) must also be completed. Students planning to major in Portuguese should consult with the Department undergraduate advisor.
Second Major Study Requirements

Spanish: Students may present Spanish as a second major with 24 hours distributed as follows: no more than 6 hours numbered 301 (repetition allowed as topic changes) with the remaining classes numbered above 301 as follows: 302 Developing Spanish Writing Skills, 307 Introduction to Hispanic Literature, with the remaining classes numbered above 307, 6 hours of which must be at the 400 level. Second majors also prepare a portfolio; see Department for details.

Portuguese: Twenty-four hours in Portuguese. Any courses numbered 200 or above can be counted toward the second major.

Minor Study Requirements

Spanish: Eighteen hours in courses numbered 300 or above in Spanish distributed as follows: 301 Topics in Hispanic Culture and Language (no more than 9 hours), 302 Developing Spanish Writing Skills, 307 Introduction to Hispanic Literature, with the remaining classes numbered above 307.

Portuguese: Eighteen hours in courses numbered 200 or above in Portuguese.

Graduate Program

Graduate Advisor
Miguel Lopez, (505) 277-5633, miglopez@unm.edu

Application Deadlines
Fall semester: January 15 (with financial aid)
Spring semester: November 15 (without financial aid)
Summer session: May 10 (without financial aid)

Deadline for Ph.D. Application: January 15

NOTE: Early application is recommended.

Degrees Offered

M.A. in Spanish or Portuguese

Spanish: Prerequisite for entrance into the M.A. Spanish program is an undergraduate degree with a Spanish major, or the equivalent. The M.A. in Spanish at The University of New Mexico has three areas of concentration: Hispanic Literature, Hispanic Linguistics, and Hispanic Southwest Studies. All students in the Spanish M.A. program will choose one of the above areas of concentration.

Portuguese: Prerequisite for entrance into the M.A. Portuguese program is an undergraduate degree with a Portuguese major or the equivalent. The M.A. in Spanish or Portuguese is offered under Plan I (thesis) and Plan II (course work). Plan I requires a minimum of 27 hours of course work, comprehensive examination and a thesis. Plan II requires 33 hours of course work and comprehensive examinations. Under Plan I, a thesis proposal must be submitted to the student’s thesis committee no later than the beginning of the fourth semester of study when the student will register for 6 hours of thesis credit. Minimum semester hour requirements for TAs under both plans are 9, 9, 9, 6.

1. Requirements for the Concentration in Hispanic Literature
   - 18 hours of Hispanic Literature evenly divided between Spanish American and Peninsular Spanish courses. SPAN 601 (Literary Theory) may be included.
   - 3 hours of Hispanic Linguistics (teaching methodology class, e.g., SPAN 541 may not be included).
   - 3 hours of Portuguese or Hispanic Southwest Studies.
   - SPAN 502 Research and Critical Methods.
   - SPAN 541 Recent Research on the Teaching of Spanish (required of TAs).
   - 3-6 hours (depending on whether teaching methodology class, e.g., SPAN 541, is taken) of electives or thesis.
   - All course work must be at the 500-level or above with the exception of SPAN 423 (Cervantes’ Quijote) and SPAN 438 (Mexican Literature). Relevant electives outside of the Department may be taken only if pre-approved by the departmental Graduate Committee.

2. Requirements for the Concentration in Hispanic Linguistics
   - 21 hours in Hispanic Linguistics (teaching methodology class, e.g., SPAN 541, may not be included).
   - 3 hours of Hispanic Literature.
   - 3 hours of Portuguese or Hispanic Southwest Studies.
   - 6 hours of electives or of thesis. Elective course work outside the Department of Spanish and Portuguese must be pre-approved by the departmental Graduate Committee.
   - All Spanish course work counted toward M.A. credit requirements must be in courses approved by the Department at the 500-level or above with the exception of SPAN 423 (Cervantes’ Quijote), and SPAN 438 (Mexican Literature). Relevant electives outside the Department may be taken only if pre-approved by the departmental Graduate Committee.

3. Requirements for the Concentration in Hispanic Southwest Studies
   - 6 hours of Hispanic Linguistics (must include at least one course on Southwest Spanish; teaching methodology class, e.g., SPAN 541, does not satisfy Hispanic Linguistics requirement).
   - 12 hours of Hispanic Southwest Studies taken in the Department of Spanish and Portuguese.
   - SPAN 502 Research and Critical Methods.
   - 6 Hours of Hispanic/Portuguese literature from outside the Southwest.
   - SPAN 541 Recent Research on the Teaching of Spanish (required of TAs).
   - 3-6 hours of relevant electives (depending on whether teaching methodology class, e.g., SPAN 541, is taken) in the Department or outside (e.g., History, Linguistics, Social Sciences) or thesis as approved by the departmental Graduate Committee.
   - All course work must be at the 500-level with the exception of SPAN 423 (Cervantes’ Quijote), and SPAN 438 (Mexican Literature).

Requirements for the M.A. in Portuguese
   - 15 hours in Portuguese at 400-level or above.
   - 12 hours of Hispanic/Southwest/Portuguese Literature AND/OR Hispanic/Southwest/Portuguese Linguistics.
   - 6 hours of electives or thesis.
   - All Portuguese course work must be at the PORT 400-level or above. Spanish course work must be at the 500-level or above with the exception of SPAN 423 (Cervantes’ Quijote) and SPAN 438 (Mexican Literature).

Spanish or Portuguese Language Requirement

- Research at the graduate and professional levels is enhanced by the mastery of several languages. Students are advised to consider their professional research goals in selecting a language to fulfill the department’s requirement.
- All M.A. Spanish or Portuguese candidates must demonstrate proficiency equivalent to one year of university-level study in one language apart from English and the student’s language of major study. This proficiency is normally demonstrated by completing in consultation with the department graduate advisor a second-semester or above numbered language course with a grade of B or better. This requirement can be met through course work done as part of the B.A.
Ph.D. in Spanish and Portuguese

The Department offers a Ph.D. in Spanish and Portuguese, with a concentration in one of the following fields: Literature or Linguistics.

Degree Description

The Ph.D. in Spanish and Portuguese at the University of New Mexico requires a minimum of 63 hours of graduate courses (not including dissertation hours), which may include up to 30 hours of M.A. course work. The degree consists of a major concentration and one or more minor concentrations; a double major may be taken in lieu of minors, with 48 hours of post-M.A. course work required (total hours required, including M.A.=78). All course work in Spanish must be at the 500- or 600- level, with the exception of Mexican Literature (SPAN 438), and Cervantes’ Quijote (SPAN 423).

1. MAJOR CONCENTRATION: The two major areas in Spanish are Hispanic Literature and Hispanic Linguistics. The major requires a minimum of 24 hours. The major in Hispanic Literature will consist of a concentration in a genre (narrative, poetry, theater) and a period (Medieval, Renaissance/Golden Age/Colonial, 18th and 19th Centuries, 20th Century). The major in Hispanic Linguistics will include a concentration in Descriptive, Historical, or Applied Hispanic Linguistics.

2. NON-TRANSCRIBED Ph.D. MINOR CONCENTRATION: All candidates, except those pursuing double majors, must complete a minor area consisting of a minimum of 12 hours. The minor may be taken in the Department or outside, in consultation with the Committee on Studies. Suggested minor areas are Portuguese, Hispanic Southwest Studies, Literary History, History, Hispanic Women Studies, Latin American Studies, or a subfield in the major areas.

3. REQUIRED COURSES: Either SPAN 542 (History of the Spanish Language) or PORT 561 (History of the Portuguese Language) and PORT 461 (Portuguese Graduate Studies) are required of all students with a concentration in linguistics; SPAN 601 (Literary Theory) and 6 hours of Portuguese 400 level or above are required of all students with a concentration in language.

Spanish or Portuguese Ph.D. Language Requirement

Research at the graduate and professional levels is enhanced by the mastery of several languages. Students are advised to consider their professional research goals in selecting a language to fulfill the department’s requirement.

All Ph.D. candidates must demonstrate proficiency equivalent to two years of university-level study in a language apart from English and the student’s language of major study. This proficiency is normally demonstrated by completing in consultation with the department graduate advisor a fourth-semester or above numbered language course with a grade of B or better. Alternately, the student may complete the requirement by demonstrating proficiency equivalent to one year of university-level study in two foreign languages, by completing second semester or above numbered language courses in both languages with a grade of B or better. This requirement can be met through course work done as part of the B.A. and/or M.A.

Detailed information for all these graduate degrees may be obtained from the Department Web pages at http://www.unm.edu/~spanish/.

Portuguese (PORT)

200. Introduction to Brazilian Culture. (3)
An interdisciplinary introduction to the humanities in Brazil. Focuses on aspects of history, literature, music, thought, art, architecture and popular culture that make Brazil unique in the western hemisphere. (Taught in English.)

Intermediate Portuguese for students who have completed one year of beginning language study or its equivalent. Review of grammar and expansion of conversational and composition skills.

275. Intensive Beginning Portuguese. (6)
An intensive one-semester multimedia course using authentic Brazilian models of speech and behavior that provide students with the opportunity to develop communicative skills in Portuguese.

276. Intensive Intermediate Portuguese. (6)
An intensive one-semester multimedia course that takes students on a journey through Brazil using realistic language situations to teach students cultural information and provide challenging opportunities to develop a full range of Portuguese language skills.

311./511. Culture and Composition. (3)
Students develop their vocabulary and improve their writing skills through the study of readings, films and music from the Portuguese-speaking world and through practice writing compositions. Prerequisite: 276.

312./512. Culture and Conversation. (3)
Students improve skills in oral communication, including pronunciation and intonation, through the study and performance of dramatic scenes, and the filming and editing of those scenes. Prerequisite: 276.

325. Brazilian Popular Culture. (3)
Through the lens of Brazilian daily activities and ritual expressions, this course provides the student with an introduction to Brazilian history, culture and society.

414./514. Topics in Luso-Brazilian Literature and Culture. (3, no limit)
An advanced language course emphasizing interdisciplinary themes in Luso-Brazilian literature and culture. Prerequisite: 311 or equivalent experience.

415./515. Popular Brazilian Music I. (3)
Survey of Brazilian popular music from its origins at the end of the 19th century to 1950 concentrating on forms from the cultural centers in the south of Brazil as well as regional music.

416./516. Brazilian Cinema. (3)
Survey of Brazilian cinema concentrating on the Cinema Novo movements of the 1950s and 1960s. Cinema is presented as an expression of national identity and is understood in relationship to literature and other cultural expressions.

417./517. Popular Brazilian Music II. (3)
Survey of Brazilian popular music from 1950 to 2000 concentrating on contemporary sounds from the cities of Rio de Janeiro and Sao Paulo as well as new music from Brazil’s other regions.

421./521. Brazilian Theater. (3)
A study of 19th- and 20th-century drama by Brazil’s best known playwrights. Includes the study of plays and their performances, key moments and individuals in theater history and foreign influences.

457./557. Brazilian Literature Survey I. (3)
Examines the historical and cultural movements that characterize the years 1500–1900 and the major works of Brazilian writers of those periods. Prerequisite: 311 or equivalent experience.

458./558. Brazilian Literature Survey II. (3)
Examines 20th century Brazilian literature within the context of historical and cultural movements in Brazil and Europe.
Addresses the debate about the meaning of the modern and the post-modern movements. Prerequisite: 311 or equivalent experience.

*461. Topics in Brazilian Literature. (3, no limit) ∆ Individual authors, genres and periods of Brazilian Literature.

497. Undergraduate Problems. (1-6 to a maximum of 6) ∆ Restriction: permission of instructor.

511./311. Culture and Composition. (3) Students develop their vocabulary and improve their writing skills through the study of readings, films and music from the Portuguese-speaking world and through practice writing compositions. Prerequisite: 276.

512./312. Culture and Conversation. (3) Students improve skills in oral communication, including pronunciation and intonation, through the study and performance of dramatic scenes, and the filming and editing of those scenes. Prerequisite: 276.

514./414. Topics in Luso-Brazilian Literature and Culture. (3, no limit) ∆ An advanced language course emphasizing interdisciplinary themes in Luso-Brazilian literature and culture. Prerequisite: 311 or equivalent experience.

515./415. Popular Brazilian Music I. (3) Survey of Brazilian popular music from its origins at the end of the 19th century to 1950 concentrating on forms from the cultural centers in the south of Brazil as well as regional music.

516./416. Brazilian Cinema. (3) Survey of Brazilian cinema concentrating on the Cinema Novo movements of the 1950s and 1960s. Cinema is presented as an expression of national identity and is understood in relationship to literature and other cultural expressions.

517./417. Popular Brazilian Music II. (3) Survey of Brazilian popular music from 1950 to 2000 concentrating on contemporary sounds from the cities of Rio de Janeiro and Sao Paulo as well as new music from Brazil's other regions.

521./421. Brazilian Theater. (3) A survey of 19th- and 20th-century drama by Brazil's best known playwrights. Includes the study of plays and their performances, key moments and individuals in theater history and foreign influences.

551. Graduate Problems. (1-6, to a maximum of 6) ∆ Restriction: permission of instructor.

557./457. Brazilian Literature Survey I. (3) Examines the historical and cultural movements that characterize the years 1500–1900 and the major works of Brazilian writers of those periods. Prerequisite: 311 or equivalent experience.

558./458. Brazilian Literature Survey II. (3) Examines 20th century Brazilian literature within the context of historical and cultural movements in Brazil and Europe. Addresses the debate about the meaning of the modern and the post-modern movements. Prerequisite: 311 or equivalent experience.

561. History of the Portuguese Language. (3) The phonological, grammatical, and lexical development from Latin to Portuguese.

570. Seminar in Luso-Brazilian Literature and Culture. (3, no limit) ∆ Examines works of literature and/or culture and the scholarship written about them from a national or comparative framework.

599. Master's Thesis. (1-6) Offered on a CR/NC basis only.

601. Literary Theory. (3) (Also offered as SPAN 601.) This course will offer either an overview of critical theory or an in-depth treatment of a critical school or individual theorist.

699. Dissertation. (3-12) Offered on a CR/NC basis only.

Spanish (SPAN)

I. Language

101. Elementary Spanish I. [Elementary Spanish.] (3) Beginning Spanish for students with no previous exposure to Spanish. Development of all four language skills, with emphasis on listening and speaking.

102. Elementary Spanish II. [Elementary Spanish.] (3) Beginning Spanish for students who have completed 101 or equivalent. Continued development of four skills with emphasis on listening and speaking.

103–104. Elementary Spanish Conversation I–Elementary Spanish Conversation II. [Elementary Spanish Conversation.] (1, 1) Supplementary courses to Spanish 101–102 for students interested in additional practice in speaking. Offered on CR/NC basis only. Pre- or corequisite: 101 or 102 or 111 or 112 or 275.

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

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

120. Workshop in Conversational Spanish. (1-3 to a maximum of 3) 1 Δ Conversational Spanish on the freshman and sophomore levels. For off-campus students only, through the Division of Continuing Education. May not be used to satisfy language requirements.

200. Intermediate Spanish Abroad. (3) Intensive language study with emphasis on culture in an immersion situation. Tied to the University of New Mexico programs in Spain and Spanish America.

201. Intermediate Spanish I. [Intermediate Spanish.] (3) Intermediate Spanish for students who have completed 102 or equivalent. Review of grammar and further development of all four skills.

202. Intermediate Spanish II. [Intermediate Spanish.] (3) Intermediate Spanish for students who have completed 201 or equivalent. Continued development of all four skills with emphasis on reading.

203. Spanish Conversation. (3) For students who have completed or are currently enrolled in Spanish 201, 202 or 276. Small classes designed to increase skills in speaking Spanish. Not for native speakers. Pre- or corequisite: 201 or 202 or 211 or 212 or 276.

207. Conversational Spanish. (3) 1

211. Intermediate SHL I. [Intermediate SHL Spanish.] (3) Intermediate Spanish for heritage language students who have completed 102 or equivalent. Review of grammar and continued development of the four skills with an emphasis on literacy and speaking.
212. Intermediate SHL II. [Intermediate SHL Spanish.](3) Intermediate Spanish for heritage language students who have completed 201 or equivalent. Further development of all four skills, with an emphasis on reading authentic materials, on practical writing needs and communicating with other native speakers.

275. Accelerated Beginning Spanish. (6) Intensive one-semester course designed for language enthusiasts who want a review or can devote the time required to cover two semesters in one. Equivalent to 101 and 102.

276. Accelerated Intermediate Spanish. (6) Intensive one-semester course designed for language enthusiasts who want a review or can devote the time required to cover two semesters in one. Equivalent to 201 and 202. Prerequisites: 102 or 112 or 275.

278. Spanish for Professionals. (3) Specially designed course for professionals in the fields of medicine, law, business, office management. Attention given to specialized professional vocabularies.

301. Topics in Hispanic Culture and Language. (3) Taught in Spanish (required for major study). Consult current major requirements for number of times course may be repeated for credit. Emphasis on oral and written expression based on a theme or language related topics (literature, culture, civilization, translation, commercial, etc.) Prerequisite: 202 or 212 or 276.

302. Developing Spanish Writing Skills. (3) Taught in Spanish (required for major study). Emphasis on developing Spanish written expression. Prerequisite: 202 or 212 or 276.


353. Spanish as a World Language. (3) Introduction to varieties of Spanish used in Europe, North and West Africa, Latin America, Asia, the Pacific and by isolated groups, including Judeo-Spanish. Includes comparison with African languages, indigenous languages of North and South America, languages of Spain, and English. Includes Creoles and permanent cross-linguistic influences on Spanish. Prerequisite: 351 or LING 292.

354. Accelerated Beginning Spanish. (6) Intensive one-semester course designed for language enthusiasts who want a review or can devote the time required to cover two semesters in one. Equivalent to 101 and 102.

355. Accelerated Intermediate Spanish. (6) Intensive one-semester course designed for language enthusiasts who want a review or can devote the time required to cover two semesters in one. Equivalent to 201 and 202. Prerequisites: 102 or 112 or 275.

356. Spanish for Professionals. (3) Specially designed course for professionals in the fields of medicine, law, business, office management. Attention given to specialized professional vocabularies.

357. Topics in Hispanic Culture and Language. (3) Taught in Spanish (required for major study). Consult current major requirements for number of times course may be repeated for credit. Emphasis on oral and written expression based on a theme or language related topics (literature, culture, civilization, translation, commercial, etc.) Prerequisite: 202 or 212 or 276.

358. Developing Spanish Writing Skills. (3) Taught in Spanish (required for major study). Emphasis on developing Spanish written expression. Prerequisite: 202 or 212 or 276.

395. Spanish Reading for Graduate Students I. (3) Accelerated course for graduate reading requirements. Emphasizes fundamentals of grammar. Will not satisfy A&S language requirement. Undergraduates must have permission of instructor.

396. Spanish Reading for Graduate Students II. (3) Accelerated course for graduate reading requirements. Emphasizes readings in sciences and humanities. Will not satisfy A&S language requirement. Undergraduates must have permission of instructor.

Footnote: 1 Offered only through Continuing Education.

II. Linguistics, Philology and Methodology

350. Spanish Phonetics. (3) A study of the Spanish sound system and an identification of the phonetic systems of non-native speakers. Prerequisite: 301 and Pre- or corequisite: 302.


353. Spanish as a World Language. (3) Introduction to varieties of Spanish used in Europe, North and West Africa, Latin America, Asia, the Pacific and by isolated groups, including Judeo-Spanish. Includes comparison with African languages, indigenous languages of North and South America, languages of Spain, and English. Includes Creoles and permanent cross-linguistic influences on Spanish. Prerequisite: 351 or LING 292.

371. Spanish of the Southwest. (3) Attention to formal aspects of the Spanish of the Southwest as well as to historical and social factors affecting its status. Prerequisite: 350 or 351.

442. Spanish Phonology. (3) Word structure, the gender system and the verb system from the viewpoint of modern linguistic theory. Prerequisite: 351 or LING 292.

449. Topics in Hispanic Linguistics. (3, no limit) Deals with different areas, approaches and issues.

540. Latin American Dialectology. (3) Exploration of selected features (phonological, morphological, syntactic and lexical) of regional, social and stylistic variation in New World Spanish. Prerequisite: 351 or LING 292.

541. Recent Research on the Teaching of Spanish. (3) Study of the latest research in first and second language acquisition. Focus is placed on the practical application of its results to the teaching of Spanish. Required of all Spanish Teaching Assistants.

542. History of the Spanish Language. (3) The phonological, grammatical and lexical development from Latin to Spanish. Prerequisite: 351 or LING 292.

543. Spanish Syntax. (3) Description and explanation of Spanish morphological, syntactic and discourse phenomena from the functionalist point of view, taking account of both the functional motivations and cognitive representations of such phenomena. Prerequisite: 351 or LING 292.

545. Spanish Phonology. (3) The main tenets of contemporary phonological theory as applied to Spanish, including the evolution of phonological analysis, as well as current research trends. Prerequisite: 351 or LING 292.

546. Seminar in Hispanic Sociolinguistics. (3, no limit) Linguistic variation in relation to internal, social, regional and situational factors. Topics include variation theory, language contact, language and gender, and language planning. The practical application of sociolinguistic approaches will be introduced. Prerequisite: 351 or LING 292.

547. Seminar in Southwest Spanish. (3) Research seminar covering all aspects of Chicano Spanish: linguistic structure, regional and social variation, bilingualism, maintenance and shift, English influence, etc. Prerequisite: 351 or LING 292.

548. Old Spanish. (3) The phonological, grammatical, and lexical properties of Mozarabic, Old Castilian and Judeo-Spanish, as well as the historical events explaining their origins and subsequent fate. Prerequisite: 351 or LING 292.

549. Seminar in the Language of Spain or Spanish America. (3, no limit) An advanced course providing students with the opportunity to develop expertise in linguistic analysis. A broad range of branches are covered, including sociolinguistics, discourse analysis, phonetics, mophosyntax, semantics and psycho-linguistics. Prerequisite: 351 or LING 292.

550. Language Contact. (3) The study of linguistic contacts between speakers of Spanish and African languages, indigenous languages of North and South America, languages of Spain, and English. Includes Creoles and permanent cross-linguistic influences on Spanish. Prerequisite: 351 or LING 292.
III. Literature

502. Proseminar: Research and Critical Methodology. (3)
Introduction to fundamentals of literary analysis: defining a research question; gaining access to resources; selecting approaches to texts; citing bibliographic data according to current MLA guidelines.

501. Literary Theory. (3)
(Also offered as PORT 601.) This course will offer either an overview of critical theory or an in-depth treatment of a critical school or individual theorist.

A. Peninsular Literature

324. Spanish Literature in Translation. (3)
Major Spanish (Peninsular) works in translation. Topics will vary. Does not count for Spanish major or minor.

**411. Survey of Spanish Peninsular Literature I. [Survey of Spanish Literature I] (3)
A survey of Spanish literature from the 11th to the 17th century.
Prerequisite: 302 and 307.

**412. Survey of Spanish Peninsular Literature II. [Survey of Spanish Literature II] (3)
A survey of Spanish literature from the 18th, 19th and 20th centuries.
Prerequisite: 302 and 307.

*423. Cervantes: The Quijote. (3)
Detailed analysis of the Quijote and treatment of its place in world literature.
Prerequisite: 302 and 307.

**429. Topics in Spanish Peninsular Culture and Literature. [Topics in Spanish Culture and Literature.] (3, no limit)
Topics will deal with individual authors, genres or periods.
Prerequisite: 302 and 307.

**450. Spanish Mysticism. (3)
(Also offered as RELG 450.) A study of Teresa of Avila and John of the Cross in the contexts of the Renaissance, mystical theology, and the history and culture of Spain.

515. Spanish Medieval Paleography. (3)
Methodology required to produce an edition—everything from locating an editable text to actually producing the edition. Main emphasis is on deciphering gothic script (13th–17th centuries) and resolving textual problems.

519. Medieval Literature. (3)
A survey of major Spanish masterpieces from the Jarchas to the Celestina.

520. Seminar in the Spanish Peninsular Picaresque Novel. [Seminar in the Spanish Picaresque Novel.] (3)
The study of Lazarillo de Tormes, Guzmán de Alfarache, El buscón and other 17th-century picaresque novels.

522. Seminar in Spanish Peninsular Poetry. [Seminar in Spanish Poetry.] (3, no limit)
Courses ranging from post-Romanticism (Bequer, Castro), the “Generation of ’88” (Machado, Unamuno), Jiménez’s “pure poetry,” the fusion of tradition and avant-garde aesthetics in the “Generation of ’27,” to the post-war poets and more recent tendencies.

B. Spanish American Literature

**430. Spanish American Short Story. (3)
Spanish American short story from 19th century to contemporary period. Intensive development and discussion of theoretical bibliography.
Prerequisite: 302 and 307.

**431. Spanish American Literature Survey I. (3)
A historical survey of the literary canon in Spanish America from Colonial times through 19th-century Romanticism.
Prerequisite: 302 and 307.

**432. Spanish American Literature Survey II. (3)
Continuation of 431. A survey of the literary canon in Spanish American from Modernismo through contemporary times.
Prerequisite: 302 and 307.

**433. Modern Spanish American Poetry. (3)
A survey course covering Spanish American poetry from Modernism to the present.
Prerequisite: 302 and 307.

**435. Modern Spanish American Fiction. (3)
Study of narrative tendencies in Spanish American fiction between 1915 and 1940, including regionalismo, indigenismo, critica social, urbanismo, existencialismo and meta-escritura.
Prerequisite: 302 and 307.

*438. Mexican Literature. (3)
Study of readings in Mexican literature emphasizing Mexico’s contribution to Hispanic American literature from pre-Colombian to contemporary times. Examination of diverse genres in Mexico’s literature.
Prerequisite: 302 and 307.

**439. Topics in Spanish American Culture and Literature. (3)
Topics will deal with individual authors, genres or periods. May be repeated for credit, no limit.
Prerequisite: 302 and 307.

504. Seminar in Ibero-American Studies. (3, no limit)
(Also offered as LTAM 504.)

532. Seminar in Twentieth-Century Spanish American Fiction. (3, no limit) ∆


531. Latin American Vanguard Poetry. (3) Latin American (Brazilian and Spanish American) vanguard poetry, from the experimental period of the 1920s to the 1960s.

533. Spanish American Poetry Since 1950. (3) Intensive study of contemporary Latin American poets such as Octavio Paz, Pablo Neruda, Nicanor Parra, Ernesto Cardenal, Rosario Castellanos and Nicolás Guillén.

539. Seminar in Spanish American Literature. (3, no limit) ∆ Topical seminars geared to doctoral students, emphasizing the literature of one country or region (e.g., Argentine novel), one genre (e.g., romantic poetry), the literary essay, essential or complete works of one author or trend (e.g., the dictator novel).

IV. Southwest Hispanic Studies


375. Southwestern Hispanic Folklore. (3) Folkways of Spanish-speaking people of American Southwest: language, customs, beliefs, music, folk sayings. Prerequisite: 301 and Pre- or corequisite: 302.

377. Southwestern Hispanic Folk Ballads and Songs. (3) Narrative and lyric musical traditions from the Romancero Nuevomexicano to the contemporary corrido and nueva canción. Prerequisite: 301 and Pre- or corequisite: 302.

**479. Topics in Southwest Folklore/Literature. (3) Study of oral and literary genres and periods, including Chicano theater, Hispanic New Mexican literature, Chicano writers, poetry, folk music, orality in folk and Chicano narrative. Prerequisite: 301 and 307.

578. Topics in Southwest Hispanic Literature. (3) ∆ Study of literary genres and periods, including Chicano theater, narrative, poetry, women’s writing, etc. May be repeated for credit, no limit.

579. Topics in Southwest Culture & Folklore. (3) ∆ Study of oral genres and folkways of Spanish-speaking people of the American Southwest and appropriate theoretical approaches. May be repeated for credit, no limit.

679. Seminar in SW Folklore/Literature. (3) ∆ Advanced study of folk and literary traditions with emphasis on critical approaches and theory. May be repeated for credit, no limit.

V. General

497. Undergraduate Problems. (1-6 to a maximum of 6) ∆ Restriction: permission of instructor.

498. Reading and Research for Honors. (3) Offered on CR/NC basis only. Open to juniors and seniors approved by Honors Committee. Restriction: permission of instructor.

499. Honors Essay. (3) Offered on CR/NC basis only. Open only to seniors enrolled for departmental honors. Restriction: permission of instructor.

551. Graduate Problems. (1-6 to a maximum of 6) [1-6] ∆ Restriction: permission of instructor.

599. Master’s Thesis. (1-6) Offered on a CR/NC basis only.

699. Dissertation. (3-12) Offered on CR/NC basis only.

SPEECH AND HEARING SCIENCES

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Clinic Director
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Clinic Instructors
Susan Anderson, Ph.D., CCC-SLP, The University of New Mexico
Katharine Blaker, M.S., CCC-SLP, The University of New Mexico
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Emeritus Faculty
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Richard B. Hood, Ph.D., Stanford University
Lloyd Lamb, Ph.D., Purdue University
Bruce Porch, Ph.D., Stanford University

Honorary Consultants
Gare Fabila de Zaldí, Ph.D., Universidad Nacional Autonoma de Mexico
Raul de Zaldí Galina, M.B.A., Technological Institute of Monterrey
Introduction

The Bachelor’s Degree in Speech and Hearing Sciences is a pre-professional degree program. Practicing professionals in the fields of Audiology and Speech-Language Pathology must earn certification and/or licensure, which usually require a graduate degree in the field of specialization. Courses are open to students in other major fields.

Audiologists are professionals with master’s or doctoral degrees specializing in prevention, identification, and assessment of hearing impairment. They also provide habilitation and rehabilitation of persons with hearing loss and fit hearing aids.

Speech-language pathologists are professionals with master’s or doctoral degrees who assess and treat communication disorders such as stuttering, delayed language development, aphasia, voice disorders, and articulation problems.

Audiologists and speech-language pathologists work in schools, hospitals, rehabilitation centers, nursing homes, research laboratories, government agencies, universities, and private practices.

The program offers a foundation for understanding normal and disordered communication across cultures. It meets the recommendations of the American Speech-Language-Hearing Association and fulfills entrance requirements for a graduate program in speech-language pathology or audiology.

Advisement

Undergraduate Advisors:
Cathy Binger, Ph.D.
Amy T. Neel, Ph.D.
Phyllis Palmer, Ph.D.

All 400 and 500 level courses are restricted. Students are encouraged to contact the Department of Speech and Hearing Sciences for advisement prior to registration (505-277-4453).

Major Study Requirements

2. Twenty-one hours in required support courses*:
   Three credit hours in basic human communication processes. Required: LING 292.
   Three credit hours in biological sciences. Recommended: BIOL 123.
   Three credit hours in physical sciences. Recommended: PHYC 108.
   Three credit hours in college level mathematics. Required: MATH 121 (College Algebra) or more advanced (e.g., MATH 123, 150, 162, 180).
   Three credit hours in college level statistics. Required: PSY 200.
   Six credit hours in behavioral and/or social sciences (normal/abnormal human behavior, development across the life span, social interaction and issues of culturally diverse populations). Recommended: PSY 105, 220, SOC 101, ANTH 110, 130, 160.
   * Prerequisites or corequisites may exist. Check with department listing in this catalog. These courses may also be used to meet Core Curriculum requirements.
3. A grade of at least C must be earned in all required SHS courses and required support courses. The pass/fail (CR/NC) option may not be used. Note that the UNM Master of Science degree in Speech-Language Pathology requires that grades earned in SHS courses completed at the undergraduate level must be B- or better.
4. Recommended minors include American Studies (Southwest Culture Studies), Anthropology, Art, Communication and Journalism, Computer Science, Criminology, Family Studies, Human Services, Latin American Studies, Linguistics, Management, Physics, Psychology, Sociology, Spanish and Teaching English to Speakers of Other Languages (TESOL).

Minor Study Requirements

Twenty-four hours as follows: LING 292; SHS 302, 303, 310, 321, 330, 425, 430.

Non-Degree Students

Non-degree Advisor:
Kate Blaker, M.S.

Call (505) 277-4453 for advisement before enrolling in any courses.

Non-degree students seeking admission to the graduate program in Speech-Language Pathology may enroll in the following courses prior to a decision regarding admission: All SHS 300 and 400 level courses that do not have a 500 level equivalent and 12 credit hours selected from the following: 506, 507, 510, 525, 528, 530, 531, 541, 542, 550, 551 (with permission of instructor) and 559. Graduate courses that have a corresponding undergraduate course will include assignments in addition to the workload of the undergraduate course. A minimum of 9 hours of Speech and Hearing Sciences course work, at any level, is required prior to application to the graduate program. For courses taken on a non-degree basis, students must earn a grade of “B” or higher to fulfill graduate course requirements (including undergraduate deficiencies/prerequisites) upon admission to the graduate program.

Students who have completed an undergraduate degree in Speech and Hearing Sciences may enroll as non-degree students in no more than 12 credit hours of SHS 500 level academic courses, excluding courses in clinical practice and/or internship.

Graduate Program

Graduate Advisor
Barbara Rodriguez, Ph.D.

Any changes made after initial advisement must receive prior approval from the advisor. Failure to obtain this approval can extend the program by one year.

Application Deadlines
Fall semester: February 15

Only applications received by this deadline are assured of consideration.

Degree Offered

M.S. in Speech-Language Pathology

The Department of Speech and Hearing Sciences awards Master of Science degrees in speech-language pathology under both Plan I (thesis) and Plan II (non-thesis) according to regulations set forth in earlier pages of this catalog. The Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association (ASHA) accredits the program. All students must fulfill the academic and practicum requirements for the Certificate of Clinical Competence set forth by ASHA and specified by the department. Persons with a bachelor’s
degree in a field other than Speech and Hearing Sciences are encouraged to apply. Advisement materials specifying admission requirements and related material are available upon request from the department and on the department Web site at http://www.unm.edu/~sphrscsi. All applicants should obtain and review these materials prior to initiating the admission process.

Students entering the graduate program must have earned at least a C in the required support courses in biological, physical, behavioral, and social sciences and mathematics and statistics listed under SHS Major Study Requirements. These courses may be the same courses used to meet other college or University requirements. They may not include remedial course work. Students who have not completed these requirements will be required to do so within the first three semesters after acceptance into the graduate program in order to continue their enrollment.

All students entering the graduate program are responsible for completion of the following prerequisite courses or their equivalent within the first 3 semesters of graduate enrollment, with a grade of at least B-: SHS 303, 510 (310), 541 (321), 330, 425, 528 (428), 530 (430), 431, 458 and 559 (459). Courses or their equivalents that were taken more than six years before entering the graduate program, or courses for which a grade lower than B- was received, cannot be used to fulfill this requirement. The graduate advisor, in consultation with the Curriculum and Advisement Committee, will determine whether a course may be considered equivalent and will decide how the requirement must be fulfilled: by taking or re-taking the course, by testing out, or by auditing.

The speech-language pathology program includes the required support courses (see paragraph 2 above) and SHS 300 and 400 level courses listed above as well as the following academic courses: SHS 500 (at least four enrollments to include no more than two summer sessions), 506, 507, 517, 525, 531, 533, 534, 535, 550, 558 and two 500 level electives that may be selected from department course offerings or from course offerings from a variety of departments subject to approval by the SHS department. SHS 506 must be taken in the first year of enrollment in 500-level classes. A minimum grade of B is required for all 500 level course work.

Speech and Hearing Sciences (SHS)

*302. Introduction to Communicative Disorders. (3)
(Also offered as SPCD 302.) The nature of speech, language and hearing disorders in children and adults; overview of speech and hearing anatomy and physiology; multicultural issues; emphasizes the impact of communicative disorders on individuals and families.

*303. English Phonetics. (3)
(Also offered as CI, LING 303.) An introduction to the physiological mechanisms underlying speech production, the linguistic classification and transcription of speech sounds, the acoustic properties of speech sounds, the relationship between phonetics and phonology and applications to speech pathology.

310/510. Anatomy and Physiology of Human Communication. (3)
Introduction to basic anatomy and physiology for speech, language, hearing and swallowing. Covers five systems: respiratory, pharyngeal, articulatory, auditory and neurological.

321/541. Introduction to Audiology. (3)
Basic hearing science, pathological conditions of the auditory system, audiometric testing. Prerequisite: 310.

330. Introduction to Communication Sciences. (3)
Introduction to speech and hearing science. Covers basic science of sound, acoustic theory of speech production, acoustic and physiologic phonetics, sound transmission through the auditory system, acoustic and physiologic consequences of speech and hearing disorders.

420/542. Hearing Science. (3)
Anatomy and physiology of the auditory system. Basic knowledge of frequency, intensity, time and direction perception in normal hearing are discussed. Prerequisites: 321, 330.

*425. Aural Rehabilitation. (3)
Appraisal and management of individuals with impaired hearing. Prerequisite: 321.

428/528. Phonological Disorders in Children. (3)
Assessment and treatment of articulation and phonological disorders. Prerequisite: 303.

430/530. Language Development. (3)
Developmental sequence of language acquisition and changes in communication behavior across the life span from birth to adulthood. Covers specific areas of phonology, morphology, semantics, syntax, pragmatics, literacy and metalinguistics.

*431. Language Disorders in Children. (3)
A survey of language disorders in children and intervention. Topics include descriptions of clinical populations, intervention principles and methods, and linguistic, medical, developmental and cultural issues in intervention. Prerequisite: 430.

451. Undergraduate Problems. (1-3 to a maximum of 6) Δ
Restriction: permission of instructor.

*458. Preclinical Training. (2)
Course content includes behavioral objectives, program design, data collection, client/family counseling, ethnographic interviewing with multicultural families, behavioral management and professional issues including certification and licensure requirements, ethical conduct and federal laws protecting the handicapped. Prerequisite: 428. Pre- or corequisite: 431.

459/559. Multicultural Considerations in Communication. (2)
Students will obtain knowledge and understanding of how the cultural and linguistic diversity of clients affect communication. Appropriate assessment procedures and intervention strategies will be discussed. Prerequisites: 428, 430.

490. Topics in Speech, Language, and Hearing Sciences. (1-3 to a maximum of 6)
Special topics motivated by expertise of instructor and interest of students.

500. Clinical Practice. (3 to a maximum of 18) Δ
Practicum assignment and seminar covering a variety of topics in clinical practice including diagnostics and evaluation, practice in school and hospital settings, and supervised practice in off-campus sites. Prerequisites: 458. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, permission of clinic director.

506. Reading and Writing in Research. (3)
Based on a scientist-practitioner model, this course is an introduction to research design with an emphasis on conceptual foundations and critical evaluation. Prerequisite: PSY 200.

507. Adult Neurogenic Communicative Disorders. (3)
Comprehensive survey of predominant adult neurogenic communication disorders. Content includes theoretical issues, etiology, differential diagnosis, symptomatology, prognosis and recovery. Prerequisite: 550.
510./310. Anatomy and Physiology of Human Communication. (3)
Introduction to basic anatomy and physiology for speech, language, hearing and swallowing. Covers five systems: respiratory, phonatory, articulatory, auditory and neurological.

517. Dysphagia. (3)
Acquire knowledge relevant to the identification, evaluation, treatment of infant and adult swallowing disorders. Prerequisite: 310 and 550. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program.

525. Voice Disorders. (3)
Based on knowledge of normal voice production, various voice disorders are surveyed and approaches to evaluation and treatment are discussed. Prerequisite: 310. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, permission of instructor for non-degree students.

528./428. Phonological Disorders in Children. (3)
Assessment and treatment of articulation and phonological disorders. Prerequisite: 303.

530./430. Language Development. (3)
Developmental sequence of language acquisition and changes in communication behavior across the life span from birth to adulthood. Covers specific areas of phonology, morphology, semantics, syntax, pragmatics, literacy and metalinguistics.

531. Motor Speech Disorders and Stuttering. (3)
Overview of symptomatology of child and adult neurogenic speech disorders and fluency disorders with a focus on assessment and treatment. Prerequisite: 550. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only.

532. Augmentative Communication. (3)
Overview and/or hands-on-experience with nonelectronic and electronic aids and devices used for augmentative communication. Focus may be on particular disabilities, assessment, therapeutic and/or research issues. Prerequisites: 428, 431. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, permission of instructor for non-degree students.

533. Assessing Language in Children. (3)
Principles and procedures of assessment for language disorders in children. Prerequisite: 431. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only.

534. Intervention: Child Language Disorders. (3)
Principles and intervention procedures for child language disorders from early childhood through adolescence. Methods for examining treatment efficacy in clinical and research contexts. Prerequisite: 431. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, permission of instructor for non-degree students.

535. Medical Speech-Language Pathology. (3)
Topics relevant to practice in a medical setting are reviewed including evaluation and treatment of children with birth defects (cleft palate) and other special populations; professional and administrative concerns. Prerequisite: 550. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only.

538. Stuttering. (3)
A critical examination of past and present approaches to stuttering assessment and management with an emphasis on treatment outcome evaluation. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, permission of instructor for non-degree students.

539. Topics. (1-3 to a maximum of 6) ∆
Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, permission of instructor. [Offered upon demand]

541./321. Introduction to Audiology. (3)
Basic hearing science, pathological conditions of the auditory system, audiometric testing. Prerequisite: 310. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only.

542./420. Hearing Science. (3)
Anatomy and physiology of the auditory system. Basic knowledge of frequency, intensity, time and direction perception in normal hearing are discussed. Prerequisites: 321, 330. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only.

550. Neural Basis of Communication. (3)
Structure and function of the central and peripheral nervous systems as they relate to normal and disordered communication. Prerequisite: 310.

551. [551–552.] Problems. (1-3 to a maximum of 6) ∆
Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only.

558. Clinical Internship. (6-9 to a maximum of 18) ∆
Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only, permission of clinic director. [Fall, Spring, Summer]

559./459. Multicultural Considerations in Communication. (2)
Students will obtain knowledge and understanding of how the cultural and linguistic diversity of clients affect communication. Appropriate assessment procedures and intervention strategies will be discussed. Prerequisites: 428, 430. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only.

599. Master’s Thesis. (1-6)
Offered on a CR/NC basis only. Restriction: enrolled in M.S. Speech and Hearing Sciences degree program, graduate students only.

WOMEN STUDIES

Gail Houston, Director
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Affiliated Faculty

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Susan Ressler, Professor Emerita, Visual and Performing Arts, Purdue University
Virginia Seiser, University Libraries

Professors
Lynn Beene, English
Judith Chazen-Bennahum, Theater and Dance
Laura Crossey, Earth and Planetary Sciences
Helen Damico, English
Karen Foss, Communication & Journalism
Linda Hall, History
Jacqueline Hood, Anderson Schools of Management
Gail Houston, English
Vera P. John-Steiner, Language, Literacy, and Sociocultural Studies
Introduction

Women Studies is an interdisciplinary program that provides equal education for both women and men by making the study of the history and culture of women, as well as the social structures of gender, the central focus of concentrated scholarship and learning. The program supports the development and application of current theories in feminist thinking throughout the University and works towards an atmosphere in which women and their achievements receive serious attention and public recognition. Women Studies offers an undergraduate major, second major and an undergraduate minor and incorporates insights from history, literature, social and life sciences, law, education, the humanities and fine arts. Curricular changes are in progress. Please check with the program for latest updates.

Major Study Requirements

Thirty-six hours as follows:

1. Eighteen hours of required courses:
   - WS 200 Women: Social and Historical Perspectives (3)
   - WS 224 Introduction to Contemporary Feminist Theory (3)
   - WS 298 Writing/Research Lab (1)
   - WS 492 Senior Seminar (3)
   - WS 498 Field Study (2)
   - History course (3 hrs) from one of the following:
     History 320, 321, 322, 344, 345, 427, 428, 462, 471, 472.
     Other courses may be used upon petition to the Director.

2. Nine hours in one focus area (Feminist & Gender Theory, Social Science, Literature/Film/Arts focus area, Regional/Global, Sexualities). Other courses may be used upon petition to the Director. History courses taken to fulfill core requirements may not be used to fulfill requirements for the focus areas.

3. Nine hours in at least 2 additional focus areas. (Feminist & Gender Theory, Social Science, Literature/Film/Arts Focus Area, Regional/Global, Sexualities). Other courses may be used upon petition to the Director. History courses taken to fulfill core requirements may not be used to fulfill requirements for the focus areas.

Second Major Study Requirements

Students may present Women Studies as a second major with 27 hours as follows:

(Eighteen hours of required courses), 200, 224 or 322, 226, 492, 498, and one history course from the following: HIST 330, 344, 345, 462, HIST/WMST 320, 321, 322, 428, 471, 472. Six hours in 1 focus area and 3 additional hours from one other focus area. Other courses may be used upon petition to the Director. History courses taken to fulfill core
requirements may not be used to fulfill requirements for the focus areas.

Minor Study Requirements

The Women Studies minor consists of 21 hours as follows:

Nine hours from 200, 224 or 322, 492; 3 hours from 226, 496, HIST 330, 344, 345, HIST/WMST 320, 321, 322, 428, 462, 471, 472; Six hours from 1 focus area and 3 additional hours from one other focus area. Other courses may be used upon petition to the Director. History courses taken to fulfill core requirements may not be used to fulfill requirements for the focus areas.

Women Studies (WMST)

181. Seminar for Returning Women Students. (3) Designed for women who are entering or returning to school after an interruption; identifies problems associated with re-entry; reviews academic skills; provides an opportunity to begin to define educational needs and issues.

200. Women: Social & Historical Perspectives. [Women in Contemporary Society.] (3) Women’s status in society: Women’s socialization by sex, class, race and culture; the economics of discrimination, and role of education and family. Historical and social perspectives. (Fall, Spring)

224. Introduction to Feminist Theory. (3) Introduces second and third wave feminism, and some history of first wave feminism. Analyzes theories from their origins in early feminism to their advanced principles and proponents today.

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

233. Native American Women. (3) An interdisciplinary course that focuses on the historical, cultural, economic and political issues that affect the changing roles of Native American Women.

234. Black Women Writers. (3) An exploration of works written exclusively by black women as well as a multidisciplinary approach to black women’s experiences through their own writings, art, media.

250. Black Women. (3) (Also offered as AFAM 250.) A comprehensive survey of the role Black Women has played in the society of the United States. Emphasis will be placed on achievements and contributions.

279. Interdisciplinary Topics. (1-3) △ Can be repeated for credit three times by students earning a major or minor in Women Studies.

288. Feminist Research and Writing Lab. (1) Develops writing skills used in feminist scholarship, and applies feminist research methodologies in a lab setting.

308. Sociology of Gender. (3) (Also offered as SOC 308.) How and why societies create gender categories. How do definitions of “masculinity” and “femininity” vary? What are the costs and benefits of being male or female in contemporary American society? Prerequisite: SOC 101. (Fall, Spring)

313. Women and the Law. (3) (Also offered as POLS 313.) A survey of legal issues affecting women. Examines the historical development and current law of equal opportunity, sexual harassment, pay equity, sports, family, reproduction and sexual violence. Prerequisite: POLS 303.

314. Women’s Contemporary Legal Issues. (3) (Also offered as POLS 314.) This course focuses on legal issues of current concern affecting women, offering more intensive focus than 313. Potential topics include sexual harassment, domestic violence, child support enforcement, lesbian legal issues, pay equity. Prerequisite: POLS 303.

320./520. History of Women from Ancient Times to the Enlightenment. (3) Slaughter (Also offered as HIST 320.) Study of sex roles in primitive societies, classical views of women, the Judeo-Christian treatment of women, medieval social roles and the changes that came with the Renaissance and Reformation. Attention will be paid to the role of women in the family and to their economic function as well as to the less common activities of saint, witch and revolutionary.

321. Women in the Modern World. (3) Hutchinson, Scharff, Schibeci, Slaughter (Also offered as HIST 321.) Study of western women from pre-industrial to contemporary society which will focus on Victorianism, familial roles, changes in work patterns, feminist movements and female participation in fascist and revolutionary politics.

322. Race, Class and Feminism. (3) This course will open discussion on the significance of race and class as an integral component in the development of feminist movements.

324. Contemporary Feminist Theory. (3) An investigation of selected feminist theories from the past three decades. Learning the skills of analysis and applying these skills to theory will be stressed.

326. Gender and Communication. (3) (Also offered as CJ 326.) Study of the relationship between gender and communication with specific attention to how gender affects language, verbal and nonverbal communication practices and how women’s movements have attempted to transform gendered communication practices.

330. History of the Women’s Rights Movement. (3) Slaughter (Also offered as HIST 332.) A detailed study of the movements for women’s rights in the U.S., Europe and Latin America in the 19th and 20th centuries. The topic’s approach will emphasize the movement’s relation to and impact on broader historical questions.

331. Third World Women. (3) A survey of women in various Third World regions in turn: Asia, Africa, North and Latin America, the Middle East. Titles of individual sections may vary as regions vary.

332. Introduction to Chicana Studies. (3) (Also offered as CHMS 332.) An introduction to the interdisciplinary field of Chicana Studies. Includes historical and contemporary research on labor, political involvement, cultural studies and feminism.

334./534. Language and Gender. (3) (Also offered as LING 334.) This course provides an introduction to linguistic analyses of language used by and about women and men, exploring how language is used in constructing ourselves and others as men and women, gay, straight or transgendered.

335. Lesbian Culture and Politics. (3) Descriptive and theoretical focus on lesbian women in society and within the women’s movement; consideration of issues relevant to Lesbian identity.

339. Women and Cultural Violence. (3) An examination of cultural violence toward women (rape, domestic violence, sexual harassment, emotional and verbal abuse, media images, etc.) through political, economic, psychological, social and cultural perspectives.
357. Media-Arts and Women. (3) Will present overview of women in art and media; will survey history; will serve as a workshop for developing skills; will interpret how the media influences status of women.

361. Behavioral Ecology and Biology of Sex Roles. (3) Lancaster Uses the perspective of evolutionary biology to examine the diversity of sex roles played by men and women in the historical and cross-cultural record. Restriction: upper division standing. (HEE) [Fall 1999 and alternate years]

375. Psychology of Women. (3) (Also offered as PSY 375.) Survey of research and theory on gender-role stereotypes and gender differences in such contexts as interpersonal relations, the family, the work force, mass media, mental and physical health. Prerequisite: PSY 105.

472. [419.] Women in Modern Latin America. (3) (Also offered as HIST 472.) Course will focus on women in Latin America, 1821–present, through various historical developments. Will explore political themes, such as suffrage, revolution and military regimes and social dimensions of class, race, ethnicity, work and family.


412. Introduction to Feminist Research Methodology. (3) Study of feminist research methodologies, covering interdisciplinary feminist approaches to research and applications of feminist scholarship.
DANC 464. Dance History III. (3)
ENGL 315. Interdisciplinary Approaches to Literature. (3)
(When topic is gender/women.)
ECON 239. Economics of Race and Gender. (3)
GRMN 336. German Literature and Culture in Translation. (3)
HIST 320./520. History of Women from Ancient Times to the Enlightenment. (3)
HIST 321./521. Women in the Modern World. (3)
HIST 322./522. History of the Women’s Rights Movement. (3)
HIST 427./627. History of Sexuality. (3)
HIST 428./628. Women, War, and Revolution. (3)
HIST 471./651. Women in Early Latin America. (3)
HIST 462./608. Women in the U.S. West. (3)
LING 295. Language-Current Issues. (3)
MGMT 457. Diversity in Organizations. (3)
POLS 374. Women in American Politics. (3)
PSY 231. Psychology of Human Sexuality. (3)
PSY 375. Psychology of Women. (3)
SOC 225. Marriage, Family and Their Alternatives. (3)
SOC 308. Sociology of Gender. (3)