

## GEOLOGICAL SCIENCES

### Professor Timothy F. Lawton, department head

**Professors** Giles, Giordano, Lawton, Mack, McMillan; **Assistant Professor** Amato; **Adjunct Professors** Zellmer, Huff, Witcher, Hawley, Harder, Kennedy, Powers  
(505) 646-2708

**DEGREE: Bachelor of Science**  
**MAJOR: Geology**

**MINOR: GEOLOGY**

The Department of Geological Sciences also cooperates with the Department of Physics in offering a B.S. degree in physics with an emphasis in geophysics. Requirements for the latter degree are listed in the Department of Physics section of this catalog.

The requirements for teaching fields in earth sciences are listed in the "Department of Curriculum and Instruction" section.

### MAJOR: Geology

The geology curriculum is broad in scope to prepare the student for employment by environmental and water resource companies; mineral and energy industries; federal, state, and local governments; and engineering and service companies involved with utilizing earth resources. Qualified students are also prepared for graduate study.

#### Nondepartmental Requirements (25 credits)

(May not be taken S/U and a grade of C or better must be earned.)

CHEM 111, General Chemistry I, or CHEM 115, Principles of Chemistry I.....	4
CHEM 112, General Chemistry II, or CHEM 116, Principles of Chemistry II.....	4
C S 157, FORTRAN Programming*, or C E 151, Introduction to Civil Engineering* .....	3
MATH 191-192, Calculus and Analytic Geometry I, II** .....	6
PHYS 211, General Physics I, or PHYS 215, Engineering Physics I.....	3
PHYS 212, General Physics II, or PHYS 216, Engineering Physics II.....	3
PHYS 211L, General Physics Laboratory I, or PHYS 215L, Engineering Physics Laboratory I .....	1
PHYS 212L, General Physics Laboratory II, or PHYS 216L, Engineering Physics Laboratory II .....	1

#### Departmental Requirements (36 credits)

GEOL 111G, Survey of Geology .....	4
GEOL 305G, Fossils and the Evolution of Life.....	3
GEOL 310, Mineralogy.....	3
GEOL 312, Optical Mineralogy.....	3
GEOL 350, Invertebrate Paleontology.....	3
GEOL 360, General Geochemistry.....	3
GEOL 399, Igneous and Metamorphic Petrology .....	3
GEOL 420, Stratigraphy and Sedimentology.....	3
GEOL 449, The Geological Profession .....	1
GEOL 470, Structural Geology.....	3
GEOL 490, Field Geology.....	3
GEOL 495, Geology Field Camp .....	4

#### Elective Requirements (12 credits)

Students must obtain a C or better in any four of the following courses:

C E 357, Soil Mechanics.....	3
GEOL 295, Environmental Geology .....	3
GEOL 353, Geomorphology.....	3
GEOL 424, Soil Chemistry, or GEOL 479, Environmental Soil Chemistry.....	3
GEOL 452, Geohydrology.....	3
GEOL 454, Advanced Stratigraphic Concepts.....	3
GEOL 465, Introduction to Isotope Geology.....	3
GEOL 474, Ground Water Geology .....	3
GEOL 475, Geology of Mineral Resources .....	3
GEOL 478, Petroleum Geology.....	3
GEOL 480, Seminar (with subtitle) .....	3
GPHY 330, Introduction to Geophysics .....	3

GPHY 451, Principles of Geophysics I.....	3
GPHY 452, Principles of Geophysics II.....	3
SOIL 252, Soils.....	3

Other electives, including those selected to satisfy the college and university requirements, must bring the total credits to 128, of which 54 must be upper-division (300 or above).

Students must work closely with their advisers in order to plan programs that allow them to meet all requirements and earn sufficient upper-division credit.

\*Any other equivalent programming course (e.g., C, Pascal, G EN 151, A EN 151) may be substituted for C S 157 or C E 151.

\*\*Students must enroll for a math course every semester (including summer sessions) during which they are registered for any courses, until MATH 192 is completed.

### MINOR: Geology

A student cannot earn a B.S. in Geology and also earn a minor in Geology.

GEOL 111G, Survey of Geology, or HON 219G, Earth, Life and Time .....	4
GEOL 305G, Fossils and the Evolution of Life.....	3

Eleven credits from among the following courses (courses with prerequisites are asterisked): GEOL 295, Environmental Geology; GEOL 310, Mineralogy; \*GEOL 312, Optical Mineralogy; GEOL 350, Invertebrate Paleontology; GEOL 353, Geomorphology; GEOL 360 General Geochemistry; \*GEOL 399, Igneous and Metamorphic Petrology; \*GEOL 420, Stratigraphy and Sedimentology; \*GEOL 465, Introduction to Isotope Geology; \*GEOL 470, Structural Geology; \*GEOL 475, Geology of Mineral Resources; \*GEOL 477, Special Problems (variable credit); \*GEOL 478, Petroleum Geology; \*GEOL 480, Seminar (variable credit); and GEOL 490 Field Geology .....

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## GOVERNMENT

### Professor William A. Taggart, department head

**Professors** Flores, Lapid, Taggart; **Associate Professors** Baker, Butler, Garcia, Harvey, Prindeville, Winn; **Assistant Professors** Ackleson; **College Assistant Professors** Seckler  
(505) 646-4935; (505) 646-2052 (fax)

**DEGREE: Bachelor of Arts**  
**MAJOR: Government**  
**SUPPLEMENTARY MAJOR: Law and Society**

**MINORS: Government**  
**Public Administration and Policy**  
**American Government and Politics**  
**International Relations**  
**Comparative Politics, Political Theory**  
**Public Law, Global Political Economy**  
**United States/Mexico Border Studies**

The study of government (political science) blends the strengths of a liberal arts education in public affairs with a preparation for careers in federal, state, and local government, in law, in management and public administration, in public policy analysis and for general opportunities for college graduates.

The government major program calls for a thorough preparation in the study of government as described below with the opportunity for those interested in specific careers to concentrate in one of the subfields: American government and politics, public law, public administration and policy, comparative politics, political theory and international relations.

The department also offers a supplementary major in law and society, which is supportive of law-related careers.

A government minor program involving 18 credits of course work is also offered. A disciplinary field minor or a general minor may be selected. In addition, the department administers interdisciplinary minors in Global Political Economy and U.S.-Mexico Border Studies.

**DEGREE: Bachelor of Arts**  
**MAJOR: Government****Departmental Requirements**

GOVT 100G, American National Government (or HON 249G).....	3
GOVT 110G, Introduction to Political Science (or HON 248G).....	3

One upper-division course in four of the six fields: public administration and policy (20/30 series), American government and politics (40/50 series), international relations (60 series, may include HON 304G), comparative politics (70 series, may include HON 307G), political theory (80 series, may include GOVT 380G), and public law (90 series). Additional credits in government to bring total credits in major to 33, including 20 upper-division. Majors will not be allowed to register in upper-division government courses until lower-level departmental requirements are completed.

Degree candidates must also complete GOVT 300 or 3 credits of course work in social science research methods. A list of approved courses is available in the department office.

Twelve hours of internship credit also are available. However, only three hours count toward the major. Internship guidelines are available in the department office.

Electives: Sufficient to bring total credits to 128, including 54 upper-division.

**SUPPLEMENTARY MAJOR: Law and Society**

The Department of Government also coordinates a supplementary major in law and society that may be taken in addition to a regular major. The program is designed to provide a multidisciplinary preprofessional education for undergraduates who plan to attend law school or who contemplate careers in fields closely related to the legal profession, such as government, social work and law enforcement.

**Departmental Requirements**

The supplementary major consists of 24 credits chosen from the courses listed below. At least 18 credits must be earned in upper-division courses and 6 credits must be earned from listed courses outside the student's primary major. Candidates for the Law and Society degree must declare their supplementary major prior to completing the last 9 credits of the program.

**Core Courses (select three of the five options)**

1. C J 205, Criminal Law I .....	3
2. GOVT 395, Law and Society.....	3
3. GOVT 491, Constitutional Law .....	3
4. GOVT 494, Judicial Process .....	3
5. One of the following three courses: C J 306, Criminal Procedural Law, GOVT 492, Civil Liberties; JOUR 493/HON 377, Mass Communications Law (same as GOVT 493, COMM 493) .....	3

**Communication Skills (select one)**

COMM 351, Persuasion Theory and Practice .....	3
COMM 353, Advanced Public Speaking .....	3
ENGL 311G, Advanced Composition.....	3
PHIL 348, Writing Philosophy.....	3

**Critical Thinking Skills (select one)**

GOVT 484, Contemporary Political Theory.....	3
PHIL 211G, Informal Logic.....	3
PHIL 312, Formal Logic .....	3
PHIL 313, Inductive logic and Probability.....	3

**Jurisprudence (select one)**

C J 307, Law of Evidence .....	3
C J 424, Forensic Law .....	3

GOVT 485, American Political Thought.....	3
PHIL 376, Philosophy of Law.....	3
PSY 330, Psychology and the Law .....	3
SOC 391, Crime and Society.....	3
SOC 485, Sociology of Law.....	3

**Legal Policy Issues (select two)**

BLAW 316, Legal Environment of Business.....	3
BLAW 385G/HON 385G, Consumers and the Law .....	3
C J 250, Courts and the Criminal Justice System .....	3
C J 332, Correctional Law .....	3

C J/GOVT/HIST/JOUR/SOC 399, New Mexico Law.....	3
GOVT 421, The Regulatory Process.....	3
GOVT 445, The Supreme Court.....	3
GOVT 490, Special Topics in Public Law .....	3
GOVT 495, Law and Sex.....	3
GOVT 496, International Law .....	3
HIST 407, Recent United States, 1960-Present.....	3
HLS 489, Ethics and Jurisprudence for Health Personnel.....	3
HON 335G, Legal Issues in Modern Society .....	3
HON 350G, Law, Culture, and Conflict.....	3
HON 352G, Crime, Justice, and Society.....	3
HRTM 304, Hospitality Law.....	3
PLAN 301, Legal Aspects of Planning.....	3
SOC 392, Juvenile Delinquency.....	3
SOC 475, Advanced Social Stratification .....	3

**Minors**

The Department of Government offers a general Government minor, specialized subfield minors in Public Administration and Policy, American Government and Politics, International Relations, Comparative Politics, Political Theory and Public Law, and two minors shared with the Department of Economics: Global Political Economy and U.S./Mexico Border Studies. A student can not earn both a B.A. in Government and a minor in Government. Students may not count S/U grades unless all grades in a particular course are S/U. All courses must be passed with grades of C or better.

**MINOR: Government**

GOVT 100G, American National Government (or HON 249G) .....	3
GOVT 110G, Introduction to Political Science (or HON 248) .....	3
Twelve additional credits, of which at least 9 are upper division, including 3 upper division courses from different subfields. The subfield series include courses in the 20/30 series (public administration and policy), 40/50 series (American government and politics), 60 series and HON 304G (international relations), 70 series and HON 307G (comparative politics), 80 series, including GOVT 380G (political theory), and 90 series (public law) .....	12

**SUBFIELD MINORS: Public Administration and Policy,  
American Government and Politics,  
International Relations, Comparative Politics  
Political Theory, Public Law**

Students may not double count any upper division courses if they earn both a B.A. in Government and a Government subfield minor. Students may count a maximum of 3 credits in an independent studies course or an internship towards any of the above minors. Students may request permission to substitute courses between subfields, subject to approval of the Department of Government undergraduate committee.

GOVT 100G, American National Government, or HON 249G, American Politics in a Changing World .....	3
GOVT 110G, Introduction to Political Science, or HON 248, The Citizen and the State: Great Political Issues .....	3
Twelve additional credits, of which at least 9 are upper division, including 3 upper division courses from the same subfield. The subfield series include courses in the 20/30 series (public administration and policy), 40/50 series (American government and politics), 60 series and HON 304G (international relations), 70 series and HON 307G (comparative politics), 80 series, including GOVT 380G (political theory), and 90 series (public law) .....	12

**SHARED MINOR: Global Political Economy**

Core Courses (select one course from each option):

1. ECON 324G, Developing Nations; or ECON/IB 450G, International Economics .....	3
2. GEOG 361G, Economic Geography; GEOG 362, Geography of International Development; SOC 489/GOVT469, Globalization; or SOC 478/GOVT 477, Sociology of Development and the World System .....	3
3. GOVT 360, International Relations; GOVT 461, International Political Economy; or GOVT 486, Political Economy .....	3

Electives: 9 credits from the following, at least 6 of which must be outside student's major(s): ACCT 365, International Accounting; AG E 315G/GEOG 315G, World Agriculture and Food Problems; AGHE 380G, Ecosystem Earth: the Impact of Human Activities; ANTH 301, Cultural

Anthropology; ANTH 306G, Peoples of Latin America; ANTH 433/WS 433, Women, Gender and Culture; COMM 475, International Communication; ECON 251G, Principles of Macroeconomics; ECON 325G, Economic Development of Latin America; ECON 330G, Business Economy of Mexico; ECON 458, Development of Economic Thought; FIN 475/I B 475, International Managerial Finance; GEOG 328G, Geography of Latin America; GEOG 461, U.S.-Mexico Border Development; GOVT 370, Comparative Politics; GOVT 463, Inter-American Relations; GOVT 464, National Security Policy; GOVT 466, American Foreign Policy; GOVT 473, Latin American Politics; GOVT 478, U.S.-Mexico Border Politics; GOVT 479, Mexican Politics; HIST 422, U.S. Foreign Relations since 1914; HL S 465, International Health Problems; HON 305G, Global Environment; HON 320G, Food and Humanity; HON 380G, Comparative Economic Systems; HON 386G, Women in the Economy; HON 390G, Economic Development of Latin America; I B 317/MKTG 317, International Marketing; I B 351, International Business; I B 398, International Business and Economic Environments; I B 458/MKTG 458, Comparative International Management; SOC 361G/ANTH 361G, Social Issues in the Rural Americas; SOC 376G, Social Change; additional core courses; and appropriate Honors, special topics, or subtitled independent studies courses approved by the Department of Government or the Department of Economics and International Business ..... 9

#### SHARED MINOR: United States/Mexico Border Studies

Students must pass 3 courses selected from the core (1 course coming from each of 3 departments), and 3 additional courses selected from either the core, the set of additional courses, or other relevant courses approved by either the Department of Government or the Department of Economics and International Business. At least 9 of the minimum 18 credits must be upper division. Students should check the undergraduate catalog for individual course prerequisites.

Core: ECON 331, The Border Economy; GEOG 461 U.S.-Mexico Border Development; GOVT 422, Border Security Policy; GOVT 478, U.S.-Mexico Border Politics; HIST 458, History of the U.S.-Mexico Border; SOC 479, Sociological Perspectives on the U.S./Mexican Border; SPAN 450, Mexican Cultures; SPAN 459, Spanish Sociolinguistics of the U.S.-Mexico Border; and SPAN 469, Literatura de la Frontera .....9

Additional Courses: ANTH 305G, Contemporary Native Americans; ANTH 306G, Peoples of Latin America; ANTH 312, The Ancient Maya; ANTH 313, Ancient Mexico; ANTH 316, Archaeology of the American Southwest; ANTH 361G or SOC 361G, Social Issues of the Rural Americas; ART 310, Native American Art; ART 320, Art and Architecture in Pre-Columbian Meso-America; ECON 324G, Developing Nations; ECON 325G, Economic Development of Latin America; ECON 330G, The Business Economy of Mexico; ECON 450G, International Economics; ENGL 338G, Latino Literature; ENGL 339G, Chicano Literature; ENGL 361, Southwest Folklore; ENGL 394G, Southwestern Literature; GOVT 360, International Relations; GOVT 446, New Mexico Government and Politics; GOVT 463, Inter-American Relations; GOVT 473, Latin American Politics; GOVT 479, Mexican Politics; HIST 261, New Mexico History; HIST 367, Mexican-Americans in the United States; HIST 416, History of Latinos in the United States; HIST 451, Colonial Mexico; HIST 452, National Mexico; HIST 457, The Mexican Revolution; I B 351, International Business; SOC 270, Sociology of the Chicano Community I; SOC 342, Sociology of Rural New Mexico; SOC 360G, Introduction to Population Studies; SOC 470, Sociology of Latinos/as in the United States; SOC 478/GOVT 477, Sociology of Development and the World System; SOC 489/GOVT 469, Globalization; SPAN 350, Introducción a Estudios Chicanos; SPAN 353, Spanglish and Bilingualism in the United States; SPAN 364G, Culture and Civilization of Mexico; SPAN 385, Introduction to Chicano Literature; SPAN 467, Chicano Literature; additional Core courses; and appropriate Honors, special topics, seminars, service learning, and independent studies courses approved by Department of Government or Department of Economics and International Business .....9

## HISTORY

Associate Professor Kenneth J. Hammond, department head

Professor Eamon; *Associate Professors* Bronstein, Brooks, Hammond, Hunner, Malamud; *Assistant Professors* Garcia-Bryce, Horodowich, O'Hara, Orzoff, Roberts, Weisiger; *College Assistant Professors* Lester, Tollefson; *Adjunct Instructor* Fielder  
(505) 646-4601

DEGREE: Bachelor of Arts  
MAJOR: History

MINOR: History

A knowledge of history prepares students for careers in teaching, law, public service, management, journalism, religious education, communications, travel counseling, and library, museum, and archival staff work.

DEGREE: Bachelor of Arts  
MAJOR: History

The undergraduate history major consists of at least 42 credits in the major field (excluding HIST 449) 15 of which must be numbered 300 or above, and an additional 6 of which must be numbered 400 or above. Electives must be carefully selected by the student and approved by a Department of History adviser so that the student's program is well tailored to individual goals.

Among the upper-division history courses that majors take, one or more (apart from HIST 398) must require a research-based paper or papers. In fulfilling their research paper requirement, majors must write one research-based paper or papers which together total at least 20 pages.

#### Departmental Requirements

HIST 101G, Roots of Modern Europe.....	3
HIST 102G, Modern Europe.....	3
HIST 201G, Introduction to Early American History .....	3
HIST 202G, Introduction to Recent American History .....	3
HIST 211G, East Asia to 1600 .....	3
HIST 212G, East Asia since 1600.....	3
HIST 311, Colonial Latin America .....	3
HIST 312, Modern Latin America.....	3
HIST 398, Historians and History* .....	3

(ENGL 211G is prerequisite for HIST 398.)

Five additional history courses, 6 credits of which must be courses numbered 400 or above (not more than three courses in a single major field).....15  
Electives: Sufficient to bring total credits to 128, including 54 upper-division.  
\*Must be taken during junior year.

History majors who are planning on pursuing certification as public school teachers should take the following courses in preparation. Upon completion of the undergraduate degree in history, application should be made to the Teacher Education Program in the College of Education to pursue secondary licensure.

EDUC 315, Multicultural Education
EDLT 368, Integrating Technology with Teaching
SPED 320, Teaching Exceptional Learners
EDUC 281/381, Field Experience
EDUC 530, Exploration in Education (taken during senior year)
C EP 521, Human Growth and Development (taken during senior year)

MINOR: History

A student may not earn both a bachelor's degree in the Department of History and a minor in History.

HIST 101G, Roots of Modern Europe and Hist 102G, Modern Europe; or HIST 201G, Introduction to Early American History and HIST 202G; Introduction to Recent American History; or HIST 211G, East Asia to 1600 and HIST 212G, East Asia Since 1600.....	6
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Twelve additional History credits, of which at least 9 must be upper division.....12