GEOLOGICAL SCIENCES

Professor Timothy F. Lawton, department head

Professors Giles, Lawton, Mack, McMillan; ***Associate Professor*** Amato; ***Adjunct Professors*** Harder, Hawley, G. Huff, Kennedy, Powers, Witcher ***College Instructor*** M. Huff

(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 167, C 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 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 491, Tectonic Evolution of North America 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 216, Geology of the Colorado Plateau 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., Pascal) or engineering course (e.g. G EN 151, A EN 151) may be substituted for C S 167 or C E 151.

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 other than GEOL 111G or HON 219G are asterisked): GEOL 295, Environmental Geology; GEOL 310, Mineralogy; *GEOL 312, Optical Mineralogy; 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); GEOL 490 Field Geology; and GEOL 491, Tectonic Evolution of North America 11

GOVERNMENT

Professor Yosef Lapid, department head

Professors Flores, Lapid, Taggart; ***Associate Professors*** Baker, Butler, Garcia, Harvey, Prindeville, Winn; ***Assistant Professors*** Ackleson; ***College Associate Professor*** Seckler

(505) 646-4935; (505) 646-2052 (fax)

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

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