

## Geology

### GEOL 100 Physical Geology

#### 4.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: GEOL 101

Physical Geology explores the processes that are shaping Earth today. It examines the formation of rocks and mineral resources, the volcanic and tectonic activity that accompany release of Earth's internal heat, and the sculpting of the planet's surface that occurs as air, water and ice move in response to gravity and energy from the Sun. Lab activities include identification of rocks and minerals, interpretation of topographic and geologic maps, and field studies of regional geologic features. (Fall, Spring) (Letter Grade or Pass/No Pass)

### GEOL 111 Historical Geology

#### 4.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: GEOL 111

Advisories: ENGL 100 - Writing in Career/Tech Fields ; or ENGL 101 - Freshman Composition: Exposition ; or ENGL 110 - Grammar for College and Career

Historical Geology explores how Earth and the life it supports have changed through time. Geologic principles are used to reconstruct the planet's origin and the events that have modified the physical environment, whereas fossils are used to trace the history of life and discover how natural selection and environmental change have shaped living communities. Lab exercises include the identification of rocks and fossils, map interpretation, and field study of regional geologic history. (Spring) (Letter Grade or Pass/No Pass)

### GEOL 114 Oceanography

#### 3.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: none

An introduction to the physical and biological aspects of the marine environment, including processes of heat transfer, tides, currents, waves, life in the marine ecosystem, geological processes of shorelines, deep sea geology, plate tectonics, and marine economic resources. Includes field trips to local Coastal areas. (Letter Grade or Pass/No Pass)

### GEOL 115 Oceanography Lab

#### 1.0 unit

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: N/A

Corequisite: GEOL 114 - Oceanography or completion of GEOL 114

This course introduces the student to laboratory and field methods in oceanography. Topics include physical, chemical and geological processes along with human impacts on the ocean environment. The course includes field trips to locations on the central California coast. (Fall, Spring) (Letter Grade or Pass/No Pass)

### GEOL 131 Geology Of California

#### 3.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: GEOL 200

An overview of the geologic features and history of California emphasizing an understanding of California's past and present plate tectonic setting, unique landscape features, resources and hazards. (Letter Grade or Pass/No Pass)

### GEOL 141 Environmental Geology

#### 3.0 units

Acceptable for credit: Transfer to UC, CSU

C-ID Course Number: GEOL 130

A study of humankind's scientific, social, and ethical interactions with earth systems. Topics include earth processes, geologic hazards, the earth's renewable and non-renewable resources, and the earth's ability accept the products of human waste. This course is not open to students who have received credit for Environmental Studies 102. (Fall, Spring) (Letter Grade or Pass/No Pass)

### GEOL 189 Independent Projects in Geology

#### 1.0 - 3.0 units

Acceptable for credit: Transfer CSU

C-ID Course Number: none

Courses for students capable of independent work who demonstrate the need or desire for additional study beyond the regular curriculum. Enrollment allows students to pursue activities such as directed field experience, research, or development of skills and competencies under faculty advisement and supervision. Independent projects may be earned in most discipline. Students wishing to enroll in Independent Projects should contact the appropriate instructor identified in the class schedule. If the project proposed is acceptable to that instructor, a contract will be developed. All contracts for these classes must be completed and submitted to the Records Office no later than the end of the second week of the semester. Units are awarded depending upon satisfactory performance and the amount of time committed by the student to the course. Allowable units vary according to discipline, and are based on the following formula: 1 unit- 48 hours per semester 2 units - 96 hours per semester 3 units - 144 hours per semester (Letter Grade or Pass/No Pass)

### GEOL 199A Topics in Geology: CA Deserts

#### 2.0 units

Acceptable for credit: D - Credit - Degree Applicable

A 90 hour field trip which will explore geologic features and geologic history of selected portions of California's deserts. The course is divided into two field trips: first to the Mojave Desert and to Death Valley National Monument (prior to and partly during spring recess), and second to the southern California desert near the Salton Sea and Anza-Borrego State Park (in the latter part of May). (Letter Grade or Pass/No Pass)