COURSES

GEOLOGY COURSES

GEOL 1 - Physical Geology

3 units

The Earth, its materials, its internal and external processes, and its development through time. Emphasis is placed on a thorough global understanding of Plate Tectonics as a framework and foundation for subsequent geologic topics and concepts. Topics include volcanoes, earthquakes and seismology, the Geologic Time Scale and the formation of the earth, rocks and minerals, hydrology, erosion, beach systems, environmental geology, glaciation, groundwater, etc. Course content includes the historical development of key geologic concepts. This is the foundation course for almost all subsequent geology courses for both geology majors and non-majors. 54 hours lecture. AA/AS GE: II. Transfer: CSU, UC; CSUGE: B1; IGETC: 5A; C-ID# GEOL 100.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 1L - Physical Geology Laboratory

1 units

Laboratory course to supplement the physical geology lecture course. Introduction to the materials and techniques of geology. Includes minerals, rocks, topographic and geologic maps, structural geology, identification and interpretation of landforms, geologic time and relative age dating analysis, etc. 54 hours laboratory. AA/AS GE: II. Transfer: CSU, UC; CSUGE: B3; IGETC: 5C; C-ID# GEOL 100 L.

Prerequisite: GEOL 1 with a minimum grade of C (May be taken concurrently) or GEOL 5 with a minimum grade of C (May be taken concurrently) or GEOL 7 with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 2 - Historical Geology

4 units

An introduction to Earth's history and the life it supports with a laboratory. Subjects include geologic dating, plate tectonics, stratigraphy, fossils, biological evolution, the planet's origin and the processes that have influenced paleogeography during the past 4.6 billion years. 54 hours lecture, 54 hours laboratory. AA/AS GE: II. Transfer: CSU, UC; CSUGE: B1, B3; IGETC: 5A, 5C; C-ID# GEOL 111.

Recommended Course Preparation: GEOL 1 with a minimum grade of C.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 5 - Environmental Geology: Hazards & Disasters

3 units

Understanding and planning for the effects of natural hazards and disasters on the earth, the ecosystem and human populations. Content covers the basic natural hazard processes, where and why they occur, as well as considerations for environmental land-use planning. Environmental hazards studied include earthquakes, volcanoes, river systems (including floods and dams), landslides, coastal erosion, tsunamis, sinkholes, etc. 54 hours lecture. AA/AS GE: II. Transfer: CSU, UC; CSUGE: B1; IGETC: 5A; C-ID# GEOL 130 (if taken with GEOL 7).

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 7 - Environmental Geology: Resources, Use Impact & Pollution

3 units

Understanding how and where Earth's environmental resources are created and located, and then studying how the resources are accessed and utilized. Topics include rock and mineral resources, energy resources (including fossil fuel and non-fossil fuel resources), water (including rivers, reservoirs, groundwater, etc.), waste disposal (including water and air pollution), global climate changes (including the greenhouse effect), etc. 54 hours lecture. AA/AS GE: II. Transfer: CSU, UC; CSUGE: B1; IGETC: 5A; C-ID# GEOL 130 (if taken with GEOL 5).

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 12 - Introduction to Oceanography

3 units

Introduction to the oceans, the history of oceanic science, instrumentation and exploration; marine geology including plate tectonics and shoreline processes; physical and chemical properties of sea water; causes and effects of currents, tides, and waves; introduction to the basic types of marine life, the basic marine habitats and ecosystems; distribution of marine resources and the Law of the Sea. 54 hours lecture. AA/AS GE: II. Transfer: CSU, UC; CSUGE: B1; IGETC: 5A.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 12L - Introduction to Oceanography Laboratory

1 units

Laboratory course to supplement the oceanography lecture course. Introduction to the materials and techniques of oceanic science. Includes sea floor rocks, oceanic geography, bathymetric maps, seismic reflection, seawater physics and chemistry, beach sand, tides, waves, marine life and marine fossils, sea floor spreading rates, etc. 54 hours laboratory. AA/AS GE: II. Transfer: CSU, UC; CSUGE: B3; IGETC: 5C.

Prerequisite: GEOL 12 with a minimum grade of C (May be taken concurrently) .

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 20 - Earth Science for Educators

4 units

An introduction to the essentials of Earth Science with a laboratory. Topics include the geosphere, atmosphere, hydrosphere, and solar system. This course focuses on the interactions between physical and chemical systems of the Earth such as the tectonic cycle, rock cycle, hydrologic cycle, weather and climate. 54 hours lecture, 54 hours laboratory. AA/AS GE: II. Transfer: CSU, UC; CSUGE: B1, B3; IGETC: 5A, 5C; C-ID# GEOL 121.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP