

GEOLOGY (GEOL)

GEOL 100 1.0 UNITS

Natural History Of Southern California

Class Hours: 0.5 Lecture / 1.5 Laboratory

Total Contact Hours: 9 Lecture / 27 Laboratory

This is a field trip and seminar class in biology and geology of selected areas in Southern California. Minerals, geology, landforms, plants, animals, ecology, human use, and recreational value will be studied.

Transfer Credit: CSU

GEOL 101 4.0 UNITS

Physical Geology

Class Hours: 3.0 Lecture / 3.0 Laboratory

Total Contact Hours: 54 Lecture / 54 Laboratory

Recommendation: Courses taught at the level of Intermediate algebra with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process.

Prerequisite: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENGL 100 or ENGL 100S or a course at the level of college reading. This course is an introduction to Earth's composition, structure, and geologic processes. The laboratory component focuses on rock and mineral identification, using topographic maps to interpret landform features, examining the processes that shape Earth's surface, and evaluating the causes of natural disasters and climate change. Some lab exercises may involve field trips. This course is not open to students with credit in GEOL 102 and GEOL 102L.

Transfer Credit: CSU; UC

C-ID: GEOL 101

GEOL 102 3.0 UNITS

Physical Geology Lecture

Class Hours: 3.0 Lecture

Total Contact Hours: 54 Lecture

This course is an introduction to the physical processes that make and shape our dynamic planet Earth. This course is not open to students with credit in GEOL 101.

Transfer Credit: CSU; UC

C-ID: GEOL 100

GEOL 102L 1.0 UNITS

Physical Geology Laboratory

Class Hours: 3.0 Laboratory

Total Contact Hours: 54 Laboratory

Prerequisite: GEOL 102 or equivalent with a grade of "C" or higher or "Pass" or concurrent enrollment.

Prerequisite: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENG 100 or ENGL 100S AND courses taught at the level of Elementary Algebra with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures.

This course is intended to be the laboratory component to the Physical Geology Lecture course, GEOL 102. Activities include rock and mineral identification, using topographic maps to interpret landform features, analyzing mass wasting events, interpreting seismogram records, and determining the relative age of geologic events. Field trips may replace some lab meeting days/times. This course is not open to students with credit or concurrent enrollment in GEOL 101.

Transfer Credit: CSU; UC

C-ID: GEOL 100L

GEOL 103 3.0 UNITS

Environmental Geology Lecture

Class Hours: 3.0 Lecture

Total Contact Hours: 54 Lecture

Recommendation: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process and courses at the level of PreAlgebra with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process.

This is a general studies course that includes the investigation of relevant geologic, hydrologic, oceanographic, and atmospheric processes as they affect and are affected by human activities. The technologic, economic, and political aspects of challenges and solutions resulting from these relationships are studied as well. This course is not open to students with credit in ESCI 101.

Transfer Credit: CSU; UC

C-ID: GEOL 130

GEOL 103L 1.0 UNITS

Environmental Geology Laboratory

Class Hours: 3.0 Laboratory

Total Contact Hours: 54 Laboratory

Prerequisite: GEOL 103 or equivalent with a grade of "C" or higher or "Pass" or concurrent enrollment.

This is a general studies course that offers an opportunity for a more complete understanding of environmental challenges discussed in GEOL 103 -Environmental Geology Lecture. This hands-on course utilizes identification, measurement, and analysis in the lab to promote students' comprehension of the hydrologic, oceanographic, and atmospheric processes affecting and being affected by humans. Not open to students with credit in ESCI 102.

Transfer Credit: CSU

<p>GEOL 104 Environmental Geology Class Hours: 3.0 Lecture / 3.0 Laboratory Total Contact Hours: 54 Lecture / 54 Laboratory</p> <p>Recommendation: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process and courses at the level of PreAlgebra with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process.</p> <p>This is a general studies lecture and laboratory course that includes the investigation of relevant geologic, hydrologic, oceanographic, and atmospheric processes as they affect and are affected by human activities. The technologic, economic, and political aspects of challenges and solutions resulting from these relationships are studied as well. The laboratory portion of this course utilizes identification, measurement, and analysis to promote students' comprehension of main themes in environmental geology. This course is not open to students with credit or who are currently enrolled in ESCI 101 or GEOL 103 or GEOL 103L. Transfer Credit: CSU; UC C-ID: GEOL 130</p>	<p>4.0 UNITS</p>	<p>GEOL 201 Earth History Class Hours: 3.0 Lecture / 3.0 Laboratory Total Contact Hours: 54 Lecture / 54 Laboratory</p> <p>This course examines the evolution of Earth through the study of mass extinctions, climate change, ancient organisms, and geology. Transfer Credit: CSU; UC C-ID: GEOL 111</p>	<p>4.0 UNITS</p>
<p>GEOL 105L Introduction to Geoscience Field Methods Class Hours: 3.0 Laboratory Total Contact Hours: 54 Laboratory</p> <p>Prerequisite: GEOL 101 or a combination of GEOL 102 and GEOL 102L or equivalent with a grade of "C" or higher or "Pass." This is a field-based laboratory course for geosciences and environmental sciences. The geology, topography, structure, and ecology of the southwestern US will be discussed in class and then observed and investigated in the field. Samples and data collected from study areas may be further analyzed in a lab setting. Students will learn how to perform field techniques, such as orienteering, rock and structure identification, geologic mapping, and sample collecting. These skills are valuable for geology, geography, environmental studies, and geoscience majors. This course includes field trips. Transfer: CSU</p>	<p>1.0 UNITS</p>	<p>GEOL 204 Geology of the Western National Parks and Monuments Class Hours: 3.0 Lecture Total Contact Hours: 54 Lecture</p> <p>Recommendation: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENG 100 or ENGL 100S AND courses taught at the level of Elementary Algebra with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures. A study of the geologic processes that have helped created the natural beauty of our western National Parks and Monuments. Transfer Credit: CSU</p>	<p>3.0 UNITS</p>
<p>GEOL 106 Geology of the Solar System: Planets and Moons Class Hours: 3.0 Lecture Total Contact Hours: 54 Lecture</p> <p>This course is an exploration of the planets of our solar system and their moons, involving a comparative study of surfaces and atmospheres, and focusing on the geophysical processes at work, including differentiation, impact cratering, tectonics, volcanism, and geomorphic evolution. Transfer Credit: CSU; UC</p>	<p>3.0 UNITS</p>	<p>GEOL 207 Paleontology, Life of the Past Class Hours: 3.0 Lecture / 3.0 Laboratory Total Contact Hours: 54 Lecture / 54 Laboratory</p> <p>Recommendation: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENG 100 or ENGL 100S AND courses taught at the level of Elementary Algebra with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures. This course is an introduction to the study of fossils. Fossil preservation, distribution and paleoecology are considered. Particular emphasis is placed on the fossil record as evidence of organic evolution on planet earth. Laboratory will include specimen identification. Two field trips are required. Transfer Credit: CSU; UC</p>	<p>4.0 UNITS</p>
<p>GEOL 120 Geology Field Studies in Owens Valley and the Sierra Nevada Mountains Class Hours: 0.5 Lecture / 1.5 Laboratory Total Contact Hours: 9 Lecture / 27 Laboratory</p> <p>This is a field trip and seminar class on the geology of Owens Valley and the Sierra Nevada Mountains. The course will focus on the physical evolution of one of the most dramatic American landscapes and will include discussions about its rocks, landforms, surface processes, structures, and ecology. The course requires four one-day field trips or a three-night camping trip. Transfer: CSU; UC</p>	<p>1.0 UNITS</p>	<p>GEOL 208 The Age of the Dinosaurs Class Hours: 3.0 Lecture Total Contact Hours: 54 Lecture</p> <p>Recommendation: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENG 100 or ENGL 100S. This is an integrated course designed to give broad, general knowledge in the areas of nonavian dinosaur origins, evolution, lifestyles, habitat, and extinction. It will also provide an in-depth coverage of the origin of avian dinosaurs and other life forms of the Age of Dinosaurs. Two field trips are required activities. Transfer Credit: CSU; UC</p>	<p>3.0 UNITS</p>

GEOL 209 3.0 UNITS**Natural Disasters**

Class Hours: 2.5 Lecture / 1.5 Laboratory

Total Contact Hours: 45 Lecture / 27 Laboratory

Prerequisite: Courses taught at the level of Introduction to College Composition with a grade of "C" or higher or "Pass" or equivalent or appropriate placement based on the college's multiple measures process with eligibility for ENG 100 or ENGL 100S. This course is an introduction to the study of natural disasters, including how the origins are explained by atmospheric disturbances and plate tectonics, and how new knowledge can be applied to the betterment of human welfare. The equivalent of three (3) one-day field trips is required and constitutes the laboratory portion of this course.

Transfer Credit: CSU; UC

GEOL 298 1.0 UNITS**Directed Studies**

A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours). This course may be taken a maximum of 2 times. For selected disciplines, UC transfer credit may be possible after admission to a UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.

Transfer Credit: CSU

GEOL 299 2.0 UNITS**Directed Studies**

A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (2 units for 108 hours). This course may be taken a maximum of 2 times. For selected disciplines, UC transfer credit may be possible after admission to a UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.

Transfer Credit: CSU