

Geology

Geology is the scientific study of the origin, history, and structure of the earth. Students take courses to prepare for a major in geology and to fulfill general education requirements. There are many employment opportunities with a bachelor's degree in geology; students find career options within private corporations (such as petroleum, mining, engineering, hydrology, and environmental consulting companies), government agencies (such as the U.S. Geological Survey, the California Department of Conservation, and regional planning offices), and education.

Academic and Career Pathway: Math and Sciences

Contact Information

Chair: Erika Peters (Physical Sciences)

Dean: Michael Fino
<https://www.miracosta.edu/academics/degree-and-certificate-programs/math-and-sciences/geology/index.html>

Department: Physical Sciences
Office: Building OC3600,
 760.757.2121 x6924

Full-Time Faculty

Roberto Falero
 Eric Snortum
 John Turbeville

Courses

GEOL 101: Physical Geology

Units: 3

Prerequisites: None

Enrollment Limitation: Not open to students with prior credit in GEOL 101H.

Acceptable for Credit: CSU, UC

Lecture 3 hours.

Course Typically Offered: Fall, Spring

Physical geology introduces the processes at work changing the earth today. Within the context of global tectonics, it explores the origins of rocks and minerals and the dynamics of processes, such as igneous activity, seismicity, and crustal deformation, driven by the release of Earth's internal heat. It also examines how air, water, and ice move in response to gravity and energy from the sun, sculpting Earth's surface by eroding, transporting, and depositing weathered rock materials. UC CREDIT LIMITATION: Credit for GEOL 101 or GEOL 101H. C-ID GEOL-100.

GEOL 101H: Physical Geology (Honors)

Units: 3

Prerequisites: None

Enrollment Limitation: Not open to students with prior credit in GEOL 101.

Acceptable for Credit: CSU, UC

Lecture 3 hours.

Course Typically Offered: Fall

This course introduces the processes at work changing the earth today. Within the context of global tectonics, it explores the origins of rocks and minerals and the dynamics of processes, such as igneous activity, seismicity, and crustal deformation, driven by the release of Earth's internal heat. It also examines how air, water, and ice move in response to gravity and energy from the sun, sculpting Earth's surface by eroding, transporting, and depositing weathered rock materials. This honors course offers highly motivated students the opportunity to complete, document, and discuss independent scientific research. UC CREDIT LIMITATION: Credit for GEOL 101 or GEOL 101H. C-ID GEOL-100.

GEOL 101L: Physical Geology Laboratory

Units: 1

Prerequisites: GEOL 101 or GEOL 101H.

Enrollment Limitation: Concurrent enrollment in GEOL 101 or GEOL 101H if prerequisite not met. Not open to students with prior credit in GEOL 101LH.

Acceptable for Credit: CSU, UC

Laboratory 3 hours.

Course Typically Offered: Fall, Spring

This course, which is intended to accompany GEOL 101 or GEOL 101H, provides hands-on experience in identifying mineral samples, rock samples, and fossils, interpreting geologic and topographic data from various maps, and analyzing geologic exposures. Field trips to study local geology are required. UC CREDIT LIMITATION: Credit for GEOL 101L or GEOL 101LH. C-ID GEOL-100L.

GEOL 292: Internship Studies

Units: 0.5-3

Prerequisites: None

Corequisite: Complete 75 hrs paid or 60 hrs non-paid work per unit.

Enrollment Limitation: Instructor, dept chair, and Career Center approval. May not enroll in any combination of cooperative work experience and/or internship studies concurrently.

Acceptable for Credit: CSU

Course Typically Offered: To be arranged

This course provides students the opportunity to apply the theories and techniques of their discipline in an internship position in a professional setting under the instruction of a faculty-mentor and site supervisor. It introduces students to aspects of the roles and responsibilities of professionals employed in the field of study. Topics include goal-setting, employability skills development, and examination of the world of work as it relates to the student's career plans. Students must develop new learning objectives and/or intern at a new site upon each repetition. Students may not earn more than 16 units in any combination of cooperative work experience (general or occupational) and/or internship studies during community college attendance.