

Geology (GEOL)

GEOL 1100 Introduction to Physical Geology

4 Credits

This introductory geology laboratory course is intended for students interested in the natural sciences. It introduces the basic concepts and principles of physical geology including the study of volcanism, earthquakes, and mass wastage; the structure, function, and interpretation of topographic and geologic maps; the study of natural landforms; the study of local stream water quality; and the study and identification of minerals and rocks. The course uses a systems approach to concentrate on the interrelationship between the geologic environment and human impacts. It focuses on experiential learning through field trips, outdoor labs, group discussions, class discussions, and oral presentations. Hiking, canoeing, and stream quality analyses is an integral part of this course.

(6 contact hours: 3 lecture, 3 lab)

GEOL 1200 Introductory Historical Geology

4 Credits

This introductory geology laboratory course is intended for students interested in the natural sciences. It introduces the basic concepts of historical geology including the Earth's geological history, the study of rock strata, fossil/rock correlations, rock identifications, and fossil identifications. The course uses a systems approach to study the relationships among biology, geology, hydrology, lithology, and geologic time. It focuses on active learning through field trips, outdoor labs, group discussions, and oral presentations. Hiking rough terrain, streams, and gorges are an important part of this course.

(6 contact hours: 3 lecture, 3 lab)

GEOL 1300 Introduction to Stream System Analyses

3 Credits

This course is an introductory geology lab course intended for students interested in experiencing meaningful real-time field research and developing a stream study. It introduces the basic concepts and principles of stream system analysis including: the study of stream channels and flow; the physical, chemical, and biological interactions within a stream; and the study of human impact on the stream systems. Students will use a systems approach to concentrate on the interrelationships between fluvial environments and human impacts. The course focuses on experiential learning through in-depth field trips, outdoor labs, group discussions, class discussions, and oral presentations. Hiking and equipment handling along with stream quality analyses and extensive time spent outdoors and in streams are integral parts of this course.

(5 contact hours: 1 lecture, 4 lab)