

GEOLOGY (GEOL)

GEOL-101 Physical Geology

4 Credits

Lecture: 3 hours per week, **Lab:** 2 hours per week

Offering: Fall, Spring, and Summer, All Years

This course is the study of the origin and development of the earth. It includes the detailed study of the development of the Earth's crust, its minerals, rocks, volcanoes, glaciers, mountains, and continents. This course provides an understanding of the natural and physical processes of the planet Earth and an appreciation for the impact geology has on everyday life.

Corequisites: GEOL-101L

GEOL-102 Historical Geology

4 Credits

Lecture: 3 hours per week, **Lab:** 2 hours per week

Offering: Fall Only, All Years

This course is an introduction to the principles and interpretation of geologic history. It emphasizes the evolution of the Earth's lithosphere (crust), atmosphere, and biosphere through geologic time. This course includes consideration of the historical aspects of plate tectonics, the geologic development of North America, and important events in biological evolution and the resulting assembly of fossils. GEOL-102 provides an appreciation for the vast extent of geologic time, the natural processes affecting change on the Earth, and the identification of common fossil types.

Corequisites: GEOL-102L

GEOL-125 Regional Geology of the Pacific Northwest

3 Credits

Lecture: 3 hours per week

Offering: Fall Only, All Years

This course is the study of the regional geology, including geologic history, of the Pacific Northwest - to include the states of Washington, Idaho, Montana, Wyoming, Utah, and Oregon. It provides an overview of the major geologic provinces of the region and their genesis through geologic time. Geologic controls on major topographic features are emphasized, as are current scientific and social issues directly related to the geology of various well-known localities in the region. Field trips, virtual and actual, to extraordinary locales illustrate landscape development in the region in response to geologic processes.

GEOL-255 Systematic Mineralogy

4 Credits

Lecture: 3 hours per week, **Lab:** 3 hours per week

Offering: Spring Only, Even Years

This is a study of the classification and determination of minerals by physical, chemical, and crystallographic and optical properties. It emphasizes occurrences, identification, and uses of the silicate minerals and the non-silicate ore and rock-forming minerals. The weekly three-hour laboratory includes hands-on testing and identification of mineral samples including utilizing their optical properties in oil mounts and thin section, and field trips to significant mineral locations. Students learn to recognize and identify important ore and industrial minerals, while gaining an appreciation for the application of mineral resources to everyday life.

Prerequisites: GEOL-101 and GEOL-101L

Corequisites: GEOL-255L