GEOL COURSE STUDENT LEARNING OUTCOMES

GEOL 100 - Earthquakes, Volcanoes and Natural Disasters

Students will be able to evaluate the volcanic or seismic hazard level of a region using the principles of plate tectonics.

Students will be able to compare and contrast the impact of natural disasters on communities of disparate socioeconomic statuses.

Students will be able to describe how anthropogenic climate change increases the magnitude and frequency of many natural hazards.

GEOL 101 - Geology: Exploring Planet Earth

Students will be able to identify and interpret the origins of common minerals and rocks.

Students will be able to interpret the geologic history of a selected region, applying appropriate field observation techniques and literature review.

Students will be able to evaluate sequences of events in the rock record using the tools of relative and absolute dating.

GEOL 102 - Earth and Life Through Time

Students will be able to apply the criteria used to differentiate among periods of geologic time to points of change in the past and to present Earth conditions.

Students will be able to explain how physical processes, such as climate change, tectonic activity, and rare extraterrestrial events can affect the evolution of life on Earth.

Students will be able to interpret the geologic history of a selected region, applying appropriate field observation techniques and literature review.

GEOL 198 - Selected Topics in Geology

Students will be able to demonstrate knowledge of the specific substantive area of geology being studied.

Students will be able to synthesize existing knowledge, abilities and skills with new practical skills while gaining theoretical understanding of the substantive area of geology being taught.

GEOL 260 - Introduction to Field Methods

Students will be able to collect, plot, and interpret structural data.

Students will be able to accurately assess depositional environments and stratigraphic patterns from field observations of layered rocks.

Students will be able to produce geologic maps based on field observations of lithology and structure.

Students will be able to effectively communicate the results of a field study in written or poster-presentation format.