

# GEOL 124 : Earth Systems Science

**Credits** 5

**Quarter Offered** Occasionally

Explores processes that form and shape the earth. These processes comprise a series of integrated systems that interact to produce the earth's continents, oceans, atmosphere, and life. Lab included. Field trips may be required. This class may include students from multiple sections. (Natural Sciences, Elective)

**Prerequisites**

Eligibility for both [ENGL& 101](#) and [MATH 90/91](#)

**Course Outcomes**

Using laboratory procedures and field methods, distinguish between the three major rock types and identify common rocks and minerals.

Explain the theory of plate tectonics and identify the three types of plate boundaries and the geological features that characterize each.

Describe the physical and geological processes that shape the Earth's surface and identify common land forms created by these processes.

Describe and explain the interactions between humanity, geology, and other Earth systems, with a focus on geological and physical hazards, including the consequences of global climate change.

Describe how geologists determine the relative and absolute age of rocks and fossils.