

## **Geoscience Program Level Student Learning Outcomes**

These SLOs are relevant to all of the courses taught presently in the geosciences at CHC, which includes the disciplines of geology, geography and oceanography.

Students will demonstrate an understanding of tectonics and the typical features associated with tectonic plate boundaries, such as volcanoes and earthquakes.

Students will utilize critical thinking skills to interpret, apply and/or evaluate the concept of scale (spatial and time) as it pertains to the geosciences.

Students will collect, analyze and interpret information and clearly articulate the results through their writing, speech or other acceptable style of presentation.

## **Course Level Student Learning Outcomes**

### Geology

Students will differentiate between an element, a mineral and a rock, and delineate how each of these is related to one another.

Students will demonstrate an understanding that ancient geological environments (eolian, fluvial, glacial) exposed in rock on the surface of the Earth were created by the same environmental forces seen in operation today on our planet.

### Geography

Students will identify how the Earth's oceans and atmosphere are responsible for the distribution of the energy received from the sun through an analysis of the interaction of global atmospheric and ocean circulation patterns.

Students will identify and understand that the climate at different places on Earth is dependant upon the amount and duration energy received at that location, and that the climate dictates the type of vegetation as well as the weather conditions.

### Oceanography

Students will identify how the Earth's oceans and atmosphere are responsible for the distribution of the energy received from the sun through an analysis of the interaction of global atmospheric and ocean circulation patterns.

Students will know the basic composition of the ocean, including its chemical properties and structure and how these properties are related to the circulation patterns within the ocean as a whole.

Through the study of the diversity of ocean life, students will identify how humans can affect the ocean environment and demonstrate specific measures that can alleviate these environmental problems.