

# GEOLOGY (GEOL)

## GEOL 1010 - Introduction to Geology - How the Earth Works (4 Credits)

This course investigates the processes that form and change Earth with plate tectonics as a central theme. It takes an Earth Systems Science approach to develop an understanding of the interactions of the Earth's major systems. Major topics include the study of plate tectonics; minerals and rocks; volcanoes, earthquakes, tsunamis, and natural disasters; mountain building; river systems; coastal environments; global climate change, glaciation, and sea level change; and groundwater. In addition, students learn about Earth's natural resources, their uses, and associated environmental issues. Completion of this course satisfies one laboratory science requirement in the liberal arts and general studies programs.

Lecture: 3 hours, Lab: 2 hours

### Course completes the following requirements:

Gen.Ed. Ability 2A  
Gen.Ed. Ability 3A  
Lab Science Requirement  
Mathematics and Science  
*URI/RIC Transfer General Education Transfer Opportunity: Yes*

## GEOL 1020 - The Earth Through Time (4 Credits)

This course investigates the geological and biological history of the Earth. Students use the history recorded in rocks to interpret how and why Earth's past landscapes and life have changed over geologic time. Major topics include plate tectonics; the rock cycle; past climates, including the Ice Age; the fossil record; and evolution and extinction, including the extinction of the dinosaurs. The course explores how these topics have interacted through time resulting in today's landscapes, oceans, and life. An off-campus field trip to a geologically interesting location is usually scheduled. Completion of this course satisfies one laboratory science requirement in the liberal arts and general studies programs.

Lecture: 3 hours, Lab: 2 hours

### Course completes the following requirements:

Gen.Ed. Ability 2A  
Gen.Ed. Ability 3A  
Lab Science Requirement  
Mathematics and Science  
*URI/RIC Transfer General Education Transfer Opportunity: Yes*

## GEOL 1030 - Natural Disasters (3 Credits)

This course studies the Earth by focusing on natural disasters. It examines causes and consequences of such events within the framework of earth science. Major topics include earthquakes, volcanoes, tsunamis, landslides, climate change, hurricanes, severe weather, and floods. Students examine how natural processes and human activities can combine to exacerbate natural disasters and recommended strategies for minimizing the effects of disasters on people. Completion of this course satisfies a free elective requirement in the liberal arts and general studies programs.

Lecture: 3 hours

### Course completes the following requirements:

Gen.Ed. Ability 2A  
Gen.Ed. Ability 3A  
Mathematics and Science  
*URI/RIC Transfer General Education Transfer Opportunity: Yes*

## GEOL 1050 - Urban Geology (4 Credits)

This course explores the relationship of cities to their natural settings. The Earth's surface features, geological processes, and internal structure are explored, including plate tectonics, earthquakes, volcanoes, the rock cycle, rivers, and mass wasting. These and more are investigated in terms of their effect on urban areas. Topics include building stone, water supply, sanitation, population growth, and megacities in the developing world. There will be a field trip to look at stone buildings in Providence or Newport.

Lecture: 3 hours, Lab: 2 hours

### Course completes the following requirements:

Lab Science Requirement