

# GEOLOGY (GEO)

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## Course Descriptions

### **GEO 100. Earth Science (MOTR PHYS 110ES). 3 Credit Hours.**

Earth Science is an introductory geoscience course that emphasizes basic principles of astronomy, geology, oceanography, and meteorology. Topics covered include the origin of the Universe, solar system, and Earth; minerals and rocks; plate tectonics; geologic time; prehistoric life and evolution; ocean structure and life; and weather and climate change.

Prerequisites: Concurrent enrollment in RDG 079 or Reading Proficiency

### **GEO 101. Earth Science Laboratory (MOTR PHYS 110LES). 1 Credit Hour.**

Earth Science Laboratory is an inquiry-based course that includes introductory laboratory exercises in astronomy, geology, oceanography, and meteorology. A field trip to a geological site is a requirement of this course.

Prerequisites: Concurrent or prior enrollment in GEO 100 with a minimum grade of "C" and Reading Proficiency

### **GEO 103. Environmental Geology (MOTR GEOL 100). 3 Credit Hours.**

Environmental Geology is an introductory geoscience course that focuses on natural hazards and the human consequences associated with geologic processes. Topics include the study of plate tectonics, earthquakes, volcanoes, floods, tornadoes, storms, wildfires, climate change, and global warming. Emphasis is placed on how those hazards affect humans and how human activity affects the Earth's environment.

Prerequisites: Reading Proficiency

### **GEO 104. Prehistoric Life. 3 Credit Hours.**

This course is an introductory Historical Geology course that emphasizes paleontology and evolution through the fossil record. Topics covered include the origin of the Universe, the origin and evolution of Earth through geologic processes, plate tectonics, origin and evolution of life on Earth through four billion years of geologic time and hands-on study of fossils including dinosaurs.

Prerequisites: Reading Proficiency

### **GEO 111. Physical Geology (MOTR GEOL 100L). 5 Credit Hours.**

Physical Geology introduces earth processes and products, including the origin of rocks, volcanos, landforms, mountain belts, earthquakes, and the structure of Earth within the framework of plate tectonics. The interdependence between humans and the geological environment is emphasized throughout the course. A one-day field trip is required.

Prerequisites: Reading Proficiency

### **GEO 113. Oceanography (MOTR PHYS 1100). 3 Credit Hours.**

Oceanography is an introductory course focusing on the physical, biological, and geological aspects of oceanography. Topics covered include properties of seawater, marine life, plate tectonics, and the relationship between atmosphere and oceans. Special emphasis is placed on worldwide, human-induced changes within the marine environment.

Prerequisites: Reading Proficiency