



GLG 101: Introduction to Physical Geology

An introduction to the study of the Earth as a dynamic, changing planet. The course considers the structure of the Earth, properties of the materials that compose it, the nature of the landscape and processes that have contributed to its development. Also covered are the concept of geologic time, the interpretation of Earth's history, and current problems and recent advances in geology (including the theory of plate tectonics). Students must be able to visualize sequences of events as they occur in space and time. Prerequisite: One year of lab science in high school or one semester of college lab science. Three lecture hours and two laboratory hours per week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Scientific Reasoning and Discovery. 4 credits Spring

Course Student Learning Outcomes

1. Describe the way geologists view evolution and the origin of the earth. 2. Learn the common vocabulary of geology 3. Describe the characteristics and origin of Earth materials (minerals, rocks, fossils). 4. Describe the basic ideas of plate tectonics and explain how these concepts account for various geologic phenomena (e.g. earthquakes, volcanoes, mountain belts, ocean basins, distribution of mammals.) 5. Describe how various surface processes operate to shape the landscape (mass wasting, streams, groundwater, glaciers, deserts, coastline, soils). 6. Describe how various geologic resources form (e.g. fossil fuels, ore deposits). 7. Describe the basic methods used to determine geologic time. 8. Describe the structure of the Earth and the evidence for it.

Credits: 4

Program: Geology