

GEOLOGY (GLG)

GLG101 / Introduction to Geology I - Physical Lecture

3 Credits / 3.0 Periods for Lecture

Introduction to Earth's materials, surface and internal geologic processes, plate tectonics and geologic time. Prerequisites: None. Course Notes: General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: GLG103. Arizona Shared Unique Number SUN#: GLG 1101. Students may receive credit for only one of the following: GLG101 or GLG101IN.



SUN# GLG 1101

Fulfills: Natural Sciences Quantitative [SQ]; Natural Sciences Quantitative [SQ]-in combo

Division: Physical Sciences and Engineering



GLG101IN / Introduction to Geology I - Physical

4 Credits / 3.0 Periods for Laboratory, 3.0 Periods for Lecture

Introduction to Earth's materials, surface and internal geologic processes, plate tectonics and geologic time. Includes practical experience in rock and mineral identification, topographic maps, and applied problems in geology. Prerequisites: None. Course Notes: Enrollment in both a GLG101IN lecture section and a GLG101IN laboratory section is required. Students may receive credit for only one of the following: GLG101 and GLG103 or GLG101IN.



SUN# GLG 1101

Fulfills: Natural Sciences Quantitative [SQ]; Natural Sciences Quantitative [SQ]-in combo

Division: Physical Sciences and Engineering

GLG102 / Introduction to Geology II - Historical Lecture

3 Credits / 3.0 Periods for Lecture

The origin and history of the Earth, its dynamic geographic and climatic changes. Evolution and sequence of life recorded in the fossil record; tectonic evolution of major continents through time. Prerequisites: None. Course Notes: General Education Designation: Historical Awareness - [H]. General Education Designation: Natural Sciences (General) - [SG] in combination with: GLG104. Students may receive credit for only one of the following: GLG102 or GLG102IN.

Fulfills: Historical Awareness [H]; Historical Awareness [H]-in combo; Natural Sciences General [SG]; Natural Sciences General [SG]-in combo

Division: Physical Sciences and Engineering

GLG102IN / Introduction to Geology II - Historical**4 Credits / 3.0 Periods for Laboratory, 3.0 Periods for Lecture**

The origin and history of the Earth, its dynamic geographic and climatic changes. Evolution and sequence of life recorded in the fossil record; tectonic evolution of major continents through time. Prerequisites: None. Course Notes: Enrollment in both a GLG102IN lecture section and a GLG102IN laboratory section is required. Students may receive credit for only one of the following: GLG102 and GLG104 or GLG102IN.

Fulfills: Historical Awareness [H]; Historical Awareness [H]-in combo; Natural Sciences General [SG]; Natural Sciences General [SG]-in combo
Division: Physical Sciences and Engineering

GLG103 / Introduction to Geology I - Physical Lab**1 Credit / 3.0 Periods for Laboratory**

Includes practical experience in rock and mineral identification, topographic maps, and applied problems in geology. Prerequisites: None. Course Notes: General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with: GLG101. Arizona Shared Unique Number SUN#: GLG 1101. May accompany GLG101. Students may receive credit for only one of the following: GLG103 or GLG101IN.



SUN# GLG 1101

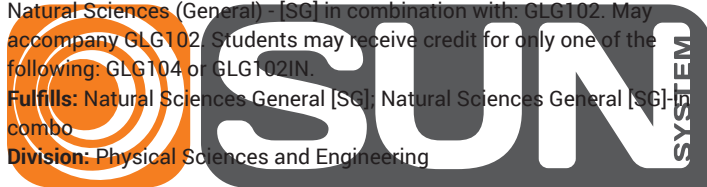
Fulfills: Natural Sciences Quantitative [SQ]; Natural Sciences Quantitative [SQ]-in combo

Division: Physical Sciences and Engineering

GLG104 / Introduction to Geology II - Historical Lab**1 Credit / 3.0 Periods for Laboratory**

The study of minerals, rocks, fossils, geologic maps and structures. Prerequisites: None. Course Notes: General Education Designation: Natural Sciences (General) - [SG] in combination with: GLG102. May accompany GLG102. Students may receive credit for only one of the following: GLG104 or GLG102IN.

Fulfills: Natural Sciences General [SG]; Natural Sciences General [SG]-in combo
Division: Physical Sciences and Engineering

**GLG105 / Introduction to Planetary Science****4 Credits / 6.0 Periods for Lecture & Lab**

A survey of solar system objects and their geologic evolution, surfaces, interiors, and atmospheres, and the methods used to study them; weekly laboratory for data analysis and experiments; possible weekend field trip. Prerequisites: None.

Fulfills: Natural Sciences General [SG]; Natural Sciences General [SG]-in combo

Division: Physical Sciences and Engineering

GLG106 / Life in the Universe**4 Credits / 3.0 Periods for Laboratory, 3.0 Periods for Lecture**

Introduction to the search for life in the universe for the non-science major. Earth's location in space and time, nature of life, light and the spectrum, origin and history of the universe, origin of life on Earth and the possibility of life on other planets. Prerequisites: A grade of C or better in MAT090 or MAT091 or MAT092 or completion of higher level mathematics course, or satisfactory placement.

Crosslisted: AST106

Fulfills: Natural Sciences Quantitative [SQ]; Natural Sciences Quantitative [SQ]-in combo

Division: Physical Sciences and Engineering

GLG110 / Geological Disasters and the Environment**3 Credits / 3.0 Periods for Lecture**

Acquaints students with the use and importance of geological studies as they apply to the interactions between people and the earth. Includes geological processes and hazards such as earthquakes, volcanoes, floods and landslides. Examines environmental impact and use of mineral and energy resources. Prerequisites: None. Course Notes: General Education Designation: Global Awareness - [G]. General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with GLG111. Students may receive credit for only one of the following: GLG110 or GLG110IN.

Fulfills: Global Awareness [G]; Global Awareness [G]-in combo; Natural Sciences Quantitative [SQ]; Natural Sciences Quantitative [SQ]-in combo

Division: Physical Sciences and Engineering

GLG110IN / Geological Disasters and the Environment**4 Credits / 3.0 Periods for Laboratory, 3.0 Periods for Lecture**

Acquaints students with the use and importance of geological studies as they apply to the interactions between people and the Earth. Includes geological processes and hazards such as earthquakes, volcanoes, floods and landslides. Examines environmental impact and use of mineral and energy resources. Prerequisites: None. Course Notes: Enrollment in both a GLG110IN lecture section and a GLG110IN laboratory section is required. Students may receive credit for only one of the following: GLG110 and GLG111 or GLG110IN.

Fulfills: Global Awareness [G]; Global Awareness [G]-in combo; Natural Sciences Quantitative [SQ]; Natural Sciences Quantitative [SQ]-in combo

Division: Physical Sciences and Engineering

GLG111 / Geological Disasters and the Environment Lab**1 Credit / 3.0 Periods for Laboratory**

Introduction to geological processes and concepts. Application of basic geologic knowledge to evaluate, interpret and propose solutions for a variety of current and past geology-related environmental disasters and hazards. Prerequisites: None. Course Notes: General Education Designation: Global Awareness - [G] in combination with GLG110.

General Education Designation: Natural Sciences (Quantitative) - [SQ] in combination with GLG110. May accompany GLG110. Students may receive credit for only one of the following: GLG111 or GLG110IN.

Fulfills: Natural Sciences Quantitative [SQ]; Natural Sciences Quantitative [SQ]-in combo; Global Awareness [G]; Global Awareness [G]-in combo

Division: Physical Sciences and Engineering

GLG121 / Geology of the Grand Canyon**1 Credit / 2.0 Periods for Lecture & Lab**

Introduction to the physiography and geology of the Grand Canyon. Includes a hiking field trip to the Grand Canyon. Prerequisites: None. Course Notes: GLG103 suggested but not required.

Division: Physical Sciences and Engineering

GLG140 / Introduction to Oceanography**3 Credits / 3.0 Periods for Lecture**

Investigates the marine environment in terms of basic scientific concepts. Emphasizes the impact of ocean pollutants, climate fluctuations, and resources from the sea. Prerequisites: None.

Division: Physical Sciences and Engineering

GLG229AB / Field Studies for Educators**2 Credits / 10.0 Periods for Laboratory**

Field trips to selected geological areas in Arizona in order to collect and/or observe geological phenomena. Designed for pre-college teachers. Prerequisites: None.

Division: Physical Sciences and Engineering

GLG229AC / Field Studies for Educators**3 Credits / 15.0 Periods for Laboratory**

Field trips to selected geological areas in Arizona in order to collect and/or observe geological phenomena. Designed for pre-college teachers. Prerequisites: None.

Division: Physical Sciences and Engineering

GLG230AA / Field Geology of the Southwest**1 Credit / 5.0 Periods for Laboratory**

Field trips to selected areas in the Southwest, such as Arizona, Utah, California, and Sonora to observe and interpret various geological features and phenomena. Prerequisites: None. GLG103 suggested but not required. Course Notes: GLG230AA may be repeated for a total of four (4) credit hours.

Division: Physical Sciences and Engineering

GLG230AB / Field Geology of the Southwest**2 Credits / 10.0 Periods for Laboratory**

Field trips to selected areas in the Southwest, such as Arizona, Utah, California, and Sonora to observe and interpret various geological features and phenomena. Prerequisites: None. GLG103 suggested but not required. Course Notes: GLG230AB may be repeated for a total of eight (8) credit hours.

Division: Physical Sciences and Engineering

GLG230AC / Field Geology of the Southwest**3 Credits / 15.0 Periods for Laboratory**

Field trips to selected areas in the Southwest, such as Arizona, Utah, California, and Sonora to observe and interpret various geological features and phenomena. Prerequisites: None. GLG103 suggested but not required. Course Notes: GLG230AC may be repeated for a total of twelve (12) credit hours.

Division: Physical Sciences and Engineering

GLG231AA / Special Topics in Geology**0.5 Credits / 0.5 Periods for Lecture**

Exploration of important topics in geology. Specific topic varies.

Prerequisites: None. Course Notes: GLG231AA may be repeated for a total of two (2) credit hours.

Division: Physical Sciences and Engineering

GLG231AB / Special Topics in Geology**1 Credit / 1.0 Periods for Lecture**

Exploration of important topics in geology. Specific topic varies.

Prerequisites: None. Course Notes: GLG231AB may be repeated for a total of four (4) credit hours.

Division: Physical Sciences and Engineering

GLG231AC / Special Topics in Geology**2 Credits / 2.0 Periods for Lecture**

Exploration of important topics in geology. Specific topic varies.

Prerequisites: None. Course Notes: GLG231AC may be repeated for a total of eight (8) credit hours.

Division: Physical Sciences and Engineering

GLG231AD / Special Topics in Geology**3 Credits / 3.0 Periods for Lecture**

Exploration of important topics in geology. Specific topic varies.

Prerequisites: None. Course Notes: GLG231AD may be repeated for a total of twelve (12) credit hours.

Division: Physical Sciences and Engineering

GLG280 / Geology of Arizona Lecture**3 Credits / 3.0 Periods for Lecture**

Acquaints students with the physical and historical geology of Arizona, including the origin of present-day land forms and outstanding modern geologic features and processes now in operation. Prerequisites: None.

Division: Physical Sciences and Engineering

GLG281 / Geology of Arizona Lab**1 Credit / 3.0 Periods for Laboratory**

May accompany GLG280. Examples of specific geologic processes and local areas. May require field trips. Prerequisites: None.

Division: Physical Sciences and Engineering

GLG282AA / Volunteerism for Geology: A Service Learning Experience**1 Credit / 1.0 Periods for Laboratory**

Service-learning field experience within human service organizations, government offices, public schools, or hospitals. Prerequisites:

Permission of Instructor. Course Notes: GLG282AA may be repeated for a total of six (6) GLG282 credit hours; may not repeat specific agency assignment for more than three (3) credit hours. Standard grading available according to procedures outlined in catalog.

Division: Physical Sciences and Engineering