

# Alabama Community College System

# GLY 101 Introduction to Geology I (Physical Geology)

# I. GLY 101 Introduction to Geology I (Physical Geology) —4 Semester Hours

# **II.** Course Description

Physical geology is a study of geologic processes and products with focus on plate tectonics. Topics include the origin of magma, volcanoes, earthquakes, weathering, sediments, metamorphism, rivers, glaciers, and groundwater. Laboratory studies include mineral and rock identification and topographic and geologic map reading.

#### III. Prerequisite

As required by the program

#### IV. Textbook

## NOTE: Replace this statement with required textbook information.

Due to the varied selection of quality college-level textbooks, each college will select the textbook needed to meet the requirements of this course.

## V. Course Learning Outcomes

By the end of the course, students will be able to:

- 1. apply the scientific method in theory and laboratory.
- 2. apply content to solve geological problems.
- 3. interpret and analyze topographic maps and geologic data and maps.
- 4. identify common rocks and minerals and recognize their composition and uses.
- 5. explain internal Earth processes and plate tectonics and their relationship to geologic processes.
- 6. describe surface processes and their relationships to the geomorphology of the Earth.
- 7. describe and explain the main methods of relative and absolute age dating of geological materials.

## **VI.** Course Outline of Topics

- 1. Plate Tectonics and Earth's Interior
- 2. Mineralogy
- 3. Magmas and Igneous Rocks
- 4. Plutonic Forms and Features
- 5. Volcanic Forms and Features

- 6. Weathering Processes and Products
- 7. Sedimentary Rocks
- 8. Metamorphism and Metamorphic Rocks
- 9. Streams and Rivers
- 10. Ground Water
- 11. Shorelines
- 12. Winds and Deserts
- 13. Glaciers
- 14. Earthquakes

#### VII. Evaluation and Assessment

Grades will be given based upon A = 90 - 100%, B = 80 - 89%, C = 70 - 79%, D = 60 - 69%, and F = below 60%.

#### VIII. Attendance

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

## IX. Statement on Discrimination/Harassment

It is the official policy of the Alabama Community College System and entities under its control, including all Colleges, that no person shall be discriminated against on the basis of any impermissible criterion or characteristic, including, without limitation, race, color, national origin, religion, marital status, disability, sex, age, or any other protected class as defined by federal and state law. (ACCS Policies 601.02 and 800.00)

#### X. Americans with Disabilities

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College.