I. GLY 102 Introduction to Geology II (Historical Geology) – 4 Semester Hours

II. Course Description

Historical geology is a study of earth history. Special attention is given to the geological development of North America. Topics include geologic time, paleontology, structural geology, sea-floor spreading and continental drift, and mountain building. Labs include studies of invertebrate fossils, geologic structures, paleogeography and geologic maps.

III. Prerequisite

As required by program.

IV. Textbook

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 Competencies and Objectives

The student will:

1. Identify specimens of invertebrate fossils and to list their characteristics.
2. Determine relative or absolute age of rock units on cross-sections or maps.
3. Construct geologic cross-section from geologic maps.
4. Recognize structures, ages and history from a geologic map.
5. Understand the geologic time scale and be familiar with earth history.

VI. Course Outline of Topics

1. At least one field trip is normally taken
2. Introduction
3. Rock Review
4. Famous geologists, controversies, principles
5. Geologic time: stratigraphy and radioactivity
6. Paleontology: fossilization, evolution, origins, Paleozoic Life
7. Mesozoic Life, Cenozoic Life
8. Folding, faulting and structural geology
9. Early evolution of the earth
10. Continental drift, sea-floor spreading, paleomagnesism, plate tectomics
11. Mountains, geosynclines, orogenies
12. Precambrian Shields
13. The Paleozoic Craton
14. The Cordilleran Belt; displaced terranes
15. Cenozoic Physiography
16. Quaternary Glaciations

VII. Evaluation and Assessment

Lecture tests
Lecture quizzes
Lab tests
Fossil tests
Lab Final and Comprehensive final exam

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

The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual’s race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

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.