I. GEO 101 Principles of Physical Geography I – 4 Semester Hours

II. Course Description

Physical Geography I is the first in a two-part sequence including topics such as weather and climate relative to the earth and relationships between the earth and sun. Laboratory is required.

III. Prerequisite

None

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 Objectives

1. To introduce students to physical geography through a survey of the nature and properties of the earth’s atmosphere.
2. To demonstrate the interaction between climate and the physical and biological systems at the earth’s surface.
3. To encourage students to develop an appreciation for the complexity of the physical processes at the earth’s surface.

VI. Course Outline of Topics

1. Geographic Grid, Map Projections
2. Earth-Sun Relationships – Planetary Motion, Solar Delination, Seasons, Longitude and Time
3. Structure of the Atmosphere – Atmospheric Composition, Horizontal Layering
5. Pressure and Winds, Atmospheric Circulation – Pressure Gradient Force, Coriolis Effect, Cyclones and Anticyclones
6. Atmospheric Moisture and Precipitation – Humidity and Cloud Formation, Atmospheric Stability and Instability, Convection, Orographic Precipitation
7. Air Masses, Fronts, Cyclonic Storms – Air Mass Boundaries (Cold and Warm Front), Mid-Latitude Wave Cyclones, Polar Front and Jet Stream, Tropical Cyclones
8. Climate Controls, Climate Classification
9. Climatic Regions – Low, Mid and High Climates
10. Paleoclimatology, Climatic Change – Pleistocene and Holocene Climate Cycles

VII. Evaluation and Assessment

Written exams

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.