PHS 111
Physical Science I

I. PHS 111 Physical Science - 4 Semester Hours

II. Course Description

This course provides the non-technical student with an introduction to the basic principles of geology, oceanography, meteorology, and Astronomy. Lab is required.

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 Objectives

The student will:

A. Gain an understanding of basic geology, oceanography, and meteorology.
B. Appreciate our planetary earth with its fragile environmental spheres in a boundless universe.
C. Develop basic laboratory skills.

VI. Course Outline of Topics

A. Fundamental concepts – time, earth spheres, basic cycles, atoms, molecules, isotopes, radioactivity. Lab and activities: size of molecule, background radiation, geologic time
B. Rock cycle – mineralogy, igneous, metamorphic and sedimentary rocks. Lab and activities: crystal lab, mineral lab, rock labs
C. Shaping the earth’s crust – plate tectonics, earthquakes, igneous activity, weathering, work of water, glaciation. Labs and activities: effect of particles in settling, soil labs, river basins
D. Earth’s oceanic system – structure, physiography, ocean processes, coastal sculpture. Labs and activities: ocean currents
E. Earth’s atmosphere – structure, composition, circulation, weather, climate. Labs and activities: dew point, cloud formation, weather maps.
F. Astronomy – earth, moon, sun, solar system, stars, and galaxy. Labs and activities: determination of latitude, retrograde motion, sunset pt.

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

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.