

Effective Date: Fall 2006-2007

Course Description

Prerequisite: A grade of “C” or better in PHSC 1001. Laboratory course in the fundamentals of physical science.

Course Objectives

Students will:

1. Learn to test and verify selected fundamental concepts, laws, and theories of physics as a part of the scientific method.
2. Learn proper basic chemistry techniques.
3. Become familiar with lunar phase problems and magnitude problems.
4. Understand the basic principles of magnetism and electricity.

Procedures to Evaluate these Objectives

1. Written laboratory reports which required the student to execute and explain an experiment
2. In-class exams composed of both objective and subjective questions
3. A comprehensive final exam

Use of Results of Evaluation to Improve the Course

1. Laboratory reports will be evaluated to determine student understanding of the experiments. Experiments will be added, revised, or deleted if deemed necessary.
2. All exams will be graded and examined to determine areas of teaching which could use improvement.
3. All evaluation methods will be used to determine the efficacy of the material presentation.

Detailed Topical Outline

1. Astronomy
2. Solid Earth
3. Atmosphere, Weather, Climate, and Storms
4. Water, Oceans, and Surface Water
5. Introduction to Chemistry Lab
6. Elements, Compounds, and Mixtures
7. Chemical Reactions and Paper Chromatography
8. Solutes, Solvents, and Solutions
9. Simple Pendulum
10. Vibrating String
11. Electricity
12. Magnetic Field Mapping