

Common Course Outline

PHYS 111/PHSC 111

General Physical Science Lab

1 Semester Hours

3 Laboratory Hours

The Community College of Baltimore County

Description

General Physical Science Lab

Provides the laboratory accompanying General Physical Science; gives a general understanding of the scientific method and its application to the real world; draws principles from basic physical science (physics/chemistry); emphasizes laboratory work. Requires elementary mathematics.

Prerequisite or Corequisite: PHSC 101, or consent of instructor

Overall Course Objectives

Upon completion of this course, the student will be able to:

1. Collaboratively (groups of 2 or 3)collect and record observations from experiments in the laboratory. (I, III, VI, 1, 2, 3, 6)
2. Write a formal lab report. (II, 3, 4)
3. Analyze data from each experiment done in the lab and relate the results to the basic principles learned in class. (I,III,VI,1,2,3)
4. Read measuring instruments like the meterstick, vernier caliper, laboratory balance, etc.(I, III, 1, 2, 3)
5. Plot linear graphs and get the slope and y-intercept from them.
(I, III, 1, 2, 3)
6. Use a computer for data analysis. (IV, V, VI, 3, 5, 6)

Major Topics

- Linear Graphs
- Measurements
- Calculation of “g”, acceleration of gravity
- Equilibrium of Forces
- Projectile Motion
- Torque
- Energy
- Rotation
- Density
- Specific Heat

Course Requirements

Grading/Exams: Grading procedures will be determined by the individual faculty member teaching the course but will include the following:

1. minimum of two examinations.
2. minimum of two quizzes.
3. final examination.
4. minimum of ten written laboratory reports.

Writing: Additional writing assignments may be given by the faculty member teaching the course.

Other Course Information

1. This course and PHSC 101 (General Physical Science) may be used to fulfill 4 credits in the biology/physical science area of the general education requirements.
2. Individual faculty members may include additional course objectives/topics.