



Course Description

PHY1005L | Physics with Applications 2 Lab | 1.00 credit

Laboratory for PHY1005. Prerequisite: PHY1004; corequisite: PHY1005. Laboratory fee.

Course Competencies:

Competency 1: The student will demonstrate an ability to make measurements in the laboratory by:

1. Using various instruments to make measurements that relate to the functioning of simple physical systems in the laboratory.
2. Organizing and recording instrument readings onto a data sheet for each experiment in the lab.
3. Estimating and recording the possible measuring errors with selected measurements in the lab.

Competency 2: The student will demonstrate knowledge of the rudiments of laboratory report writing by:

1. Submitting completed written reports which reflect:
 - a. Organized presentation of materials
 - b. Calculate correctly done
 - c. Graphs correctly plotted, with calculations of slopes and other parameters, when needed
 - d. In selected labs, calculations indicate how measuring errors can affect the results of an experiment.
 - e. Interpretations of results that are consistent with reported observations.

Competency 3: The student will demonstrate an awareness of the importance of observations and measurements as the basis for scientific theory by:

1. Reporting his/her actual observations even if they conflict with his/her preconceptions; when called for, proposing a formula or simple generalization that applies to the measurements made.

Competency 4: The student will demonstrate an ability to apply and verify physics principles in a laboratory setting by:

1. Performing experiments in electricity, magnetism, and optics.

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information