Miami-Dade Community College
PHY1005L

Course Description: Laboratory course for PHY 1005.
The physics lab courses are one-credit courses designed to be taken in conjunction with a physics lecture. A different experiment is performed each week with topics chosen to correspond with the material being studied in the lecture. Each experiment is designed to be completed in about 2 contact hours.

Corequisites: PHY1005

Course Competencies:

Competency 1:	The student will demonstrate an ability to make measurements in the laboratory by:
	a. using various instruments to make measurements that relate to the functioning of simple physical systems in the laboratory; b. organizing and recording instrument readings onto a data sheet for each experiment in the lab; c. 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 submitting completed written reports which reflect:
	a. an organized presentation of materials; b. calculations correctly done; c. graphs correctly plotted, with calculations of slopes and other parameters, when needed; d. in selected labs, calculations that 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:
	a. reporting his/her actual observations even if they conflict with his/her preconceptions; b. 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
	a. performing experiments in the areas electricity, magnetism, and optics.