

Miami-Dade Community College
PHY 2048L

Course Description: _ The physics labs are separate 1-credit courses designed to be taken in conjunction with a physics lecture. A separate experiment is performed each week with topics chosen to correspond with the material being studied in the lecture.

Corequisites: The corresponding physics lecture.

Course Competencies:

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| Competency 1: | The student will demonstrate an ability to make measurements in the laboratory by: <ol style="list-style-type: none">a. using various instruments to make measurements which 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: <ol style="list-style-type: none">a. an organized presentation of materials;b. calculations correctly done;c. graphs correctly plotted with calculations of slopes when needed;d. in selected labs, calculations which indicate how measuring errors can effect the results of an experiment;e. interpretations of results which 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: <ol style="list-style-type: none">a. reporting his actual observations even if they conflict with his preconceptions;b. when called for, proposing a formula or simple generalization which applies to the measurements made; |