

PHY 250– Selected Topics in Physics Laboratory Syllabus

Credit

1 semester hours (3 hours laboratory per week)

Prerequisites

Instructor's consent

Course Description

Laboratory investigations of selected topics in physics. May be taken more than once with different topics.

Rationale for Course

In general, the study of physics gives students an in-depth understanding of the fundamental principles that govern the physical world around us, and a set of cognitive and technical skills which include thinking analytically, defining and solving problems, and collecting and analyzing and interpreting data. This course provides a means for students to earn 1 hour of physics laboratory credit in a selected topic.

Learning Objectives

The subject matter will vary according to the needs of the students and the proficiency of the instructor. A topic specific syllabus will be distributed for each course. In all cases, however, the students will acquire further knowledge in the subject of physics.

Laboratory Outline

Laboratory outlines will vary based on the topic selected.

Academic Integrity

Mississippi College students are expected to be scrupulously honest. Dishonesty, such as cheating or plagiarism, or furnishing false information, including forgery, alteration or misuse of University documents, records or identification, will be regarded as a serious offense subject to severe penalty, including, but not limited to, loss of credit and possible dismissal. See the *Mississippi College Student Handbook* or University Policy 2.19 for specific information regarding penalties associated with dishonest behavior at Mississippi College. Copies of the *Mississippi College Student Handbook* are available in the Office of the Vice President for Enrollment Management and Student Affairs, Nelson 313. Copies of University policies are available on the Mississippi College web site.

Method of Instruction

Laboratory periods will require students to perform detailed experiments with the primary objective of observationally verifying theoretical physical concepts. Students will write lab reports detailing the results of their experimental findings.

Methods of Evaluation

Grading for this course will follow a standard 10–point grading scale:

<u>Letter Grade</u>	<u>Final Numerical Average</u>
A	90–100
B	80–89
C	70–79
D	60–69
F	0–59

Lab points will be determined based on lab report grades. Lab reports will be graded on the basis of 20 points per lab, broken down as follows:

- Report format, content, detail, neatness (6 points)
- Data and Results accuracy and appropriate presentation, tables, graphs, etc. (10 points)
- Conclusions (4 points)

No late lab reports will be accepted.

Instructional Materials

Instructional materials will vary based on the topic selected.

Attendance Policy

Class attendance and participation is an essential part of a university education, and students are expected to attend and participate regularly and punctually in all classes and laboratories. The responsibility for any work missed as the result of an absence rests entirely with the student. Cumulative absences and nonparticipation may result in a lowered grade or loss of credit for the course. Tardiness is also subject to penalty, as is any failure to complete required class work on time. A student will receive a grade of F immediately upon accumulating the following number of absences, whether excused or unexcused:

- 12 in semester classes meeting three times per week
- 8 in semester classes meeting two times per week
- 4 in semester classes meeting once a week

If a student misses more than the number of class periods specified in university policy and believes that there are reasonable explanations for the absences, he/she may appeal the absences to the Dean of the School of Science and Mathematics.

Dropping the Course

Refer to the Mississippi College Academic Calendar for the final drop date for the course. Drops after this date will only be permitted for extreme circumstances and will require approval from the course instructor, department chair, Dean of the School of Science and Mathematics, and the Vice–President for Academic Affairs.

Early Alert System

Mississippi College has adopted the practice of finding students early in the semester who may be exhibiting behaviors that could ultimately have a negative impact on their academic progress. These behaviors are often called “red flag” behaviors and include, but are not limited to, excessive absences, poor test grades, and lack of class participation or evidence of non–engagement. Identifying these behaviors early gives the instructor the opportunity to raise the “red flag” on behalf of a particular student so that the student can

take the appropriate action to redirect his/her progress. The system alerts the student, the student's advisor, and the Office of Student Success.

These messages are intended to help a student recognize an area of concern and to encourage him/her to make some choices to improve the situation. When a student receives an Early Alert message, the student should quickly make an appointment to talk with his/her professor about the situation. Also, students can make full use of the Office of Student Success to set academic goals and connect to campus resources.

Students with Disabilities

In order for a student to receive disability accommodations under Section 504 of the Americans with Disabilities Act, he or she must schedule an individual meeting with the Director of Student Counseling Services immediately upon recognition of their disability (if their disability is known they must come in before the semester begins or make an appointment immediately upon receipt of their syllabi for the new semester). The student must bring with them written documentation from a medical physician and/or licensed clinician that verifies their disability. If the student has received prior accommodations, they must bring written documentation of those accommodations (example Individualized Education Plan from the school system). Documentation must be current (within 3 years).

The student must meet with SCS face-to face and also attend two (2) additional follow up meetings (one mid semester before or after midterm examinations and the last one at the end of the semester). Please note that the student may also schedule additional meetings as needed for support through SCS as they work with their professor throughout the semester. Note: Students must come in each semester to complete their Individualized Accommodation Plan (example: MC student completes fall semester IAP plan and even if student is a continuing student for the spring semester they must come in again to complete their spring semester IAP plan).

Student Counseling Services is located on the 4th floor of Alumni Hall) or they may be contacted via email at mbryant@mc.edu . You may also reach them by phone at 601-925-7790. Dr. Morgan Bryant is director of MC Student Counseling Services.