

# PHYS 2521-001, University Physics Laboratory II

## Fall Semester 2009

**Instructor: Prof. Gary Erickson**

**Office: NSCI-330G**

**Phone: x3135**

**Office Hours: MWF 10:00-11:50 AM**

**The tentative schedule of 11 meetings this semester includes 10 lab exercises and a make-up lab, and is outlined below:**

- LAB 1 (9/9): Finding Absolute Zero and Boyle's Law
- LAB 2 (9/16): Speed of Sound in Air
- LAB 3 (9/23): Electric Potential and Field Mapping
- LAB 4 (9/30): Resistivity and Ohm's Law
- LAB 5 (10/7): Series and Parallel Resistance
- LAB 6 (10/14): RC Circuits
- No Lab on 10/21 – Mid-Term Week
- LAB 7 (10/28): Magnetic Field Laboratory
- LAB 8 (11/4): Magnetic Induction
- LAB 9 (11/11): RLC Circuits
- LAB 10 (11/18): Reflection and Refraction of Laser Light
- No Lab on 11/25 – Thanksgiving Week
- Make-Up Lab (12/2): Diffraction Grating

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**Meeting Place and Time:** This Laboratory meets every Wednesday of the Fall semester from 9/9 through 12/2 (except on 10/21 and 11/25) in room NSCI 301, from 2:00pm to 4:50pm. Every effort should be made to be on time, since we will start at exactly 2:00pm, and pre-labs (see below) will not be accepted after 2:05pm. Although a few of the labs may not last until 4:50pm, it is important to be on time and prepared to stay the entire period. A lab manual can be found at Prof. Erickson's web page (go to "Physics", "People", and click on Prof. Erickson).

**Objectives:** To enable students to have a hands-on experience with the physical laws, especially those dealing with electricity, magnetism and light (the focus of this Laboratory). This lab will also strengthen students' skills in the use of a laboratory, skills which include choosing an approach, solving a problem, following safety procedures, etc.

**Lab Reports & Attendance:** A pre-lab report will be due from each student at the start of each lab (except Lab 1). Groups of 3 or 4 students will work at each experimental setup. Each group will turn in a group lab report in the format described in class. The group lab report will be due at the end of class. Attendance is required and a roll will be taken. No grade is given for lab periods where the student does not have a valid excuse for missing the lab. A student can make up one missed lab by the end of the semester (note the make-up lab scheduled on 12/2).

**Grading:** Prior to each lab, students will be provided with a lab report; individuals must complete the pre-lab questions to be turned in at the start of lab; the group must complete the data, data analysis and conclusion sections. The pre-lab will count for 30% of the final grade, while the group lab report will count for 70%. If after fair warning, a member of a group is not contributing to the performance and/or reporting of an experiment, that person's name may be excluded from the report and that person would be regarded as absent. Anticipate that a cumulative performance of 20% is required for a "D", 40% for a "C", 60% for a "B", and 80% for an "A" as your final grade in the course. In addition, a student will be penalized one letter grade for each unexcused missed lab.

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## **Prairie View A&M University Policy Statements**

**Attendance Policy:** Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive Absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F." Absences are accumulated beginning with the first day of class.

**Student Academic Appeals Process:** Authority and responsibility for assigning grades rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

**ADA Statement:** Students with disabilities who believe they may need an adjustment in this class are encouraged to contact the Office of Disabilities Services at (936) 857-2693/2694 as soon as possible. Once you receive a letter of adjustment from the office, kindly make an appointment with me to discuss appropriate adjustments for this class.

**Cheating and Plagiarism:** Prairie View A&M University is dedicated to a high standard of academic integrity among its faculty and students. In becoming part of the Prairie View A&M academic community, students are responsible for honesty and independent effort. Disciplinary action will be taken against any student who alone or with others engages in any act of academic fraud or deceit.

**Grade of "I":** A grade of "I" may be given in cases of documented emergencies or tragedies that prohibit a student from completing a course. In order to receive a grade of "I", approval must be granted by the Department Head and Dean.