

PHYS 2511-001, University Physics Laboratory I

Spring Semester, 2007

Instructor: Prof. Gary Erickson

Office: NSCI-330G

Phone: x3135

Office Hours: M-W, 3-4 PM

T-Th, 1-2 PM

The tentative schedule of 12 meetings this semester includes 10 lab exercises and an exam, and is outlined below:

- LAB 1 (1/23): Orientation to lab, syllabus and lab manuals distributed; introduction to measurement and graphing techniques, calculation of density
- LAB 2 (1/30): Vectors on a force table
- LAB 3 (2/6): Introduction to computer interface experiments & linear air track: examples of one-dimensional motion such as position, velocity, and acceleration
- LAB 4 (2/13): Projectile motion
- LAB 5 (2/20): Static and kinetic friction
- LAB 6 (2/27): Centripetal force
- LAB 7 (3/6): Conservation of linear momentum
- Spring Break: No lab on 3/13
- LAB 8 (3/20): Torque, equilibrium, and the center of gravity
- LAB 9 (3/27): Rotational inertia of a disk and ring (with the rotary motion sensor)
- No lab on 4/3
- LAB 10 (4/10): Simple harmonic motion, Hooke's law
- Review and Make-up Lab (4/17/07)
- Final Exam (4/24/07)

Meeting Place and Time: This Laboratory meets every Tuesday of the Spring semester (except the first week, 3/13 (Spring break), 4/3, and after the lab final) in room NSCI 307, from 2:00pm to 4:50pm. Every effort should be made to be on time, since we will start at exactly 2:00pm. 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.

Objectives: To enable students to have a hands-on experience with the physical laws, especially those dealing with Newtonian mechanics (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: The lab report will be due at the end of class. Groups of 3 students will work at each experimental setup. Each group will turn in a lab report in the format described in 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 class. A student can make up one missed lab by the end of the semester (note the Lab Make-up day scheduled for one week before the exam).

Grading: For each lab, groups will be provided with a lab report; the group must complete the data, data analysis and conclusion sections for up to 10 points credit. From time to time, each group might be required to complete the entire lab report for up to 20 points credit. An exam worth up to 50 points might be given on the date indicated above. The laboratory reports can be group projects, but the exam must be an individual endeavor. 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, the student will be penalized one letter grade for each unexcused missed lab.

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.