

PHY222 General Physics Laboratory II (Spring 2010)

Introduction

The purpose of this course is to provide students with intuition about elementary subjects of general physics. The relevant subjects are covered in the PHY212 lecture course. It may happen that the experiments will be done ahead of the lecture, or go beyond the scope of the lecture. Therefore, students are urged to read the theory part of the experimental manual and consult with the textbook if necessary. Since the laboratory time is limited, it is crucial that the students come prepared for the lab. Pre-lab exercises should be done at home. They will be collected by the instructor at the beginning of each laboratory session and graded (2 points) with the report (8 points).

The reports must be completed and submitted during the class. Report sheets are included in the experimental manual. Students should work together on collecting the data and discuss the results with each other, but each student should answer questions in the report sheets **independently** after the discussion with colleagues. Sometimes the student may find it difficult to complete all the measurements and answer all the questions. It is more important to present all the completed measurements clearly rather than to complete all the measurement. **When making graphs it is important to label axes and indicate units.**

Each report will be graded separately and will be based on the pre-lab homework exercises and the report sheets filled in during the class.

Students must sign in at each lab. Labs can be made up only in the same week at another regular section, i.e. on Tuesday through Friday, see times below. It is recommended to consult with the instructor of the other section prior to the make-up lab. Be certain to put not just your name but the name and section of your regular instructor.

As this is a laboratory course, participation in the labs is critical. Typically missing two or more labs results in a F. Grade will be based on 8 points for each lab report, 2 points for each prelab for a total of 110 possible points for the 11 labs, plus a 10 point overall participation and in the lab performance grade, plus 20 points for midterm and 20 points for final resulting in a total possible 160 points. Letters grades will be assigned based on a scaling of the earned points, e.g. typically >90% is an A.

Course Fee

To support the laboratory and related lecture demonstrations in the co-requisite course, PHY212, you have been charged a course fee of \$50. This fee helps pay for (i) laboratory manuals and other handouts, (ii) supplies, small pieces of apparatus, and maintenance for the laboratory equipment, (iii) supplies and small pieces of apparatus for lecture demonstrations, and (iv) undergraduate students working in the student and demonstration laboratories.

PHY222 Lab Schedule (Spring 2010)

Week of:	Experiment:	
	Number	Title
Jan 18-20		NO LABS, but pick up first lab write-up outside room 111 Physics Bldg, pre-lab assignment due at beginning of first lab.
Jan 25-28	I	Electric Charges
Feb 1-4	II	Electrostatic Fields
Feb 8-11	III	Electrostatic Fields (continuation)
Feb 15-18	IV	Ohm's Law
Feb 22-25	V	DC Circuits
Mar 1-4	VI	RC Circuits
Mar 8-11		Individual 40 min midterm exam
Mar 15-18		Spring Break
Mar 22-25	VII	Magnetic Fields
Mar 29-Apr 1	VIII	Motion of Electrons in Electric and Magnetic Fields
Apr 5-8	IX	Ampere's Law
Apr 12-15	X	Faraday's Law
Apr 19-22	XI	Interference and Diffraction of Light
Apr 26-29		Individual 40 min lab final

Lab sessions are at the following times:

M	10:35 AM-12:35 PM	12:45-2:45 PM	3:45-5:45 PM
TU	2:00-4:00 PM	5:00-7:00 PM	7:00-9:00 PM
W	12:45-2:45 PM	3:45-5:45 PM	

Because most labs are full and to facilitate the return of graded lab reports and tests, it is important to go as much as possible to your assigned session. If you do go to an unassigned session it is your responsibility to track down your returned lab. Please keep all returned labs until after grades are finalized at the end of the semester.

PHY222 General Physics Laboratory II (Spring 2010)

Lab Supervisor:



Prof. Kenneth Foster

Office: Physics Building, Rm. 225
Phone: 443-9220
E-mail: kwfoster@syr.edu
Office hours: by appointment.

Undergraduate Physics Office



Secretary: Arlene Johnston

Office: Physics Building, Rm 111
Phone: 443-1915
E-mail: acjohnst@syr.edu

Lab Instructors:



Kun Gao
Office: Physics Building, Rm 408
Phone: 443-3877
E-mail: gaokun@syr.edu



Shiliyang "Bryce" Xu
Office: Physics Building, Rm 255
Phone: 443-3877
E-mail: sxu01@syr.edu

Academic Integrity

The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The work reported in a laboratory must be your own. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort.

For more information and the complete policy, see <http://academicintegrity.syr.edu>

Disability Services

Students who may need academic accommodations due to a disability are encouraged to discuss their needs with the instructor at the beginning of the semester. In order to obtain authorized accommodations, students should be registered with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498 and have an updated accommodation letter for the instructor. Accommodations and related support services such as exam administration are not provided retroactively and must be requested in advance."

For more information about services and policy, see Office of Disability Services.