

PHY221 General Physics Laboratory I (Spring 2011)

Introduction: This course provides hands on intuition about general physics covered in the PHY211 lecture course and develops some practical laboratory skills. Sometimes the experiments are ahead of the lecture or go beyond the scope of the lecture in which case please consult with your PHY211 textbook when doing prelabs.

Lab worksheets will be provided when you come to the class. You will work in a team of two or three people. Each person will submit a lab report at the end of the lab meeting, however only one report will be graded along with a single set of printouts or figures. The individual reports make it possible for everyone to keep a copy of the report when they are handed back the following lab class. Even though the whole team should contribute to the consensus reports, they will have different responsibilities during the lab's exercises. One person on the team ("Scribe") will be responsible for writing down results. Another person ("Leader") will be responsible for proposing actions and what should be put into the reports. Finally, if there is a third person the ("Critic") will be responsible for suggesting alternative actions. Different tasks, for example, operating the computer must be rotated among the team members so that each member can learn to perform all tasks alone as will be **required on the midterm and final**.

If the same team assembles each week, students are required to alternate their roles in the team. The reports must be completed and submitted during the class. Occasionally the team 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 measurements. **When making graphs it is important to label axes and indicate units.**

No lab grades will be dropped. A student's performance will be assessed by submitted lab reports out of 8 points for each of the 11 labs. An additional 2 points can be awarded for correct Prelabs, which are handed in at the beginning of the lab session. There is also a 10 point individual participation grade which is an assessment of how active you are in the lab. Finally, there is a midterm and final mini-labs (20 points each) in which one works by oneself and not as a team. Letter grades are based on scaling of these points. In a laboratory course it is crucial to attend the lab sessions, **missing more than two labs** typically results in an F.

Students must sign in at each lab. While it is **highly** recommended that you always attend your assigned section, labs can, for compelling reasons, be made up in the same week at another regular section held 5pm Thursday to 1pm Thursday. It is recommended to consult with the instructor of the other section prior to doing the make-up lab. Be certain to put not just your name but the name and section of your regular instructor. If for religious observant reasons you cannot attend at your regularly scheduled time it is your responsibility to do the lab at a different time during the week.

If you have questions please consult with your lab instructor, see contact information below.

Course Fee: To support the laboratory and related lecture demonstrations in the co-requisite course, PHY211, 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 laboratory equipment, (iii) supplies and small pieces of apparatus for lecture demonstrations, and (iv) undergraduate students working in the student and demonstration laboratories.

PHY221 Lab Schedule (Spring 2011)

Laboratories begin Thursday at 5 PM Jan 20th during the first week of school.
Except for the last week, each lab week ends at 1 pm each following Thursday.

Week of:	Number	Title
Jan 20 - Jan 27	I	Position, Displacement, and Average and Instantaneous Velocity (no prelab)
Jan 27 - Feb 3	II	Acceleration and Uniform motion
Feb 3 - Feb 10	III	Motion in One and Two Dimensions
Feb 10 - Feb 17	IV	Forces and Springs
Feb 17 - Feb 24	V	F = ma and Friction
Feb 24 - Mar 3		Individual 34-minute midterm
Mar 3 - Mar 10	VI	Work and Energy
Mar 10 - Mar 24	VII	Linear Momentum and Collisions
(Note school closed between Mar 13 and 20 due to Spring Break)		
Mar 24 - Mar 31	VIII	Torque, moment of inertia, and rotational dynamics
Mar 31 - Apr 7	IX	Moment of Inertia, Angular momentum and its Conservation
Apr 7 - Apr 14	X	Conservation of Energy
Apr 14 - Apr 21	XI	Behavior of Gases

This laboratory exam week runs from Monday through Friday at your regular assigned time

Apr 25 - Apr 29 Individual 34-minute lab final

Lab sessions are at the following times:

M	8:25-10:25AM	10:35AM-12:35PM	12:45-2:45PM	3:45-5:45PM
M	6:00-8:00PM	8:00-10:00PM		
T	8:00-10:00AM	11:00AM-1:00PM	5:00-7:00PM	7:00-9:00PM
W	8:25-10:25AM	10:35AM-12:35PM	12:45-2:45PM	3:45-5:45PM
W	6:00-8:00PM	8:00-10:00PM		
Th	8:00-10:00AM	11:00AM-1:00PM	5:00-7:00PM	7:00-9:00PM
F	8:25-10:25AM	10:35AM-12:35PM	12:45-2:45PM	3:45-5:45PM

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.

PHY221 General Physics Laboratory I (Fall 2010)

Lab Supervisor:



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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.