2AL-001: Introductory Physics Lab I  
Spring, 2007

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Co/Prerequisites: PHYC 2A (and all prerequisites therein)

Course description: This is a non-calculus-based physics lab covering the subjects of mechanics, fluids, heat, and sound.

Weekly schedule:

2AL-001 (lab, CRN 34719): M 2pm–5pm in S178
Office hours: M 12noon–1pm and R 12noon–1pm, or by appointment

Lab procedure

Each week, we will perform one lab from the lab textbook. Read the lab write-up in the lab textbook in advance of arriving to lab. I will begin each lab with a brief lecture and demonstration of the lab. Students will then perform the lab. Generally, this involves performing the activities in the lab textbook and filling out the report sheet which can be found at the end of the lab writeup. After you complete the activities of the lab, you must return the lab station to the state it was in before you arrived. This includes putting away any equipment that you took out exactly as you found it.

All data acquisition should be completed during the three-hour lab period. Students who opt to leave the lab before the lab period has ended must turn in their completed report sheet, including answers to all questions and exercises, when they leave. Students who stay the entire three-hour period will have the option of keeping their report sheet for up to one extra day in order to complete the assignment.

In any case, the report sheet must be turned in by Tuesday. Students are responsible for making sure I get the report sheet by that time (either turn it in to me personally or arrange to have it placed on my office desk). Report sheets will be returned to you at the beginning of the next lab period. Late report sheets will be severely penalized. I will “forgive” a total of 2 late days during the semester and not impose a penalty — after those days have been used up, you will lose 20% for each day late. Labs turned in after the next lab has been performed will not be graded.
**Exams**

There will be two exams during the semester (a midterm and a final). For each exam, you will be allowed to bring one \(8\frac{1}{2}'' \times 11''\) sheet of paper, on which you may place anything you wish. No other written materials will be permitted, including the lab textbook. The first exam will cover the experiments performed up to that point, and the second exam will cover all experiments between the first exam and the second exam. Exam questions may involve the theory behind the lab, details of the lab procedure, the functionality of the lab equipment (what it does and how it works), and data analysis. You may be called upon to perform an experiment. *The best preparation for the lab exam is to actively participate during the labs and to do the lab reports.* Your lab partner(s) will be doing you no favor by doing the work for you.

**Attendance**

Attendance will be taken at the beginning of each lab. Attendance in and of itself will not be counted towards your final grade — however, if you miss a lab, you will receive a zero for that lab. The lowest lab score during the semester will be dropped, so students can afford to miss one lab (although you will still be responsible for the material covered in that lab on the exam). Students are responsible for all material covered and announcements made during the lab whether they attend or not. *Excessive absences will severely affect your grade, and may also be grounds for being dropped from the course.*

**Final grades**

The final lab grade will be based on the exams and the report sheets in the following proportion:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>50% (2 x 25%)</td>
</tr>
<tr>
<td>Report sheets</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
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In lieu of a curve, letter grades will be assigned as follows:

- **A** Above 90%
- **B** 80%–90%
- **C** 65%–80%
- **D** 50%–65%
- **F** Below 50%
Policies

Students are expected to arrive on time to lab, and to behave themselves while in the lab. Proper behavior is especially critical in a laboratory, as the equipment you are using can be damaged or can seriously hurt you or someone else if it is mistreated. Students are expected to comply with all safety regulations.

Each student must turn in his or her own work. Naturally, it is to be expected that lab partners will consult one another when performing the experiment and writing up the report sheets. However, each student’s report sheet must be in his or her own words.

Exams are closed book and closed notes (except for one 8$\frac{1}{2}$" × 11" sheet of paper). Students cannot have any materials other than those necessary for taking the exam (pencils/pens, erasers, calculator, rulers, ...). Students are required to do their own work during the exams: there is to be no communication of any kind, nor sharing of any materials during an exam. Students caught cheating on an exam will receive a zero. Exam seating will be assigned.

DSPS statement

If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. My office location and hours are given at the top of the syllabus.

You may also contact DSPS. They can be reached at:

DSPS
Rosenberg Library — R323
50 Phelan Avenue
San Francisco, California 94112
(415) 452-5481 Voice
(415) 452-5451 TDD
(415) 452-5565 FAX