**4B-001: Physics for Scientists and Engineers II**  
Fall, 2004

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**Office:** S184


**Prerequisites:** PHYC 4A and MATH 110B.

**Course description:** This is a calculus-based course in electricity, magnetism, and circuits.

**Weekly schedule (lecture and conference sections are mandatory):**
- 4B-001 (lecture, CRN 71814): MWF 9am–10am in S100
- 4B-002 (conference, CRN 71815): F 11am–12noon in S113
- 4B-003 (conference, CRN 71816): F 12noon–1pm in S113

Office hours: M 11am–12noon and R 12noon–1pm, or by appointment

**Exams**

There will be three midterm exams and one comprehensive final exam during the semester. Exam dates will be announced in class. All exams are closed book, although one $8\frac{1}{2}'' \times 11''$ sheet will be allowed for each exam. *Bring your own calculator and pencil/pen to the exam* — these materials will not be provided for you. Exam questions will be based on material covered in the lectures and conferences, as well as textbook and homework problems. The lowest midterm exam score will be dropped (only two midterm exams will count towards your final grade). *There are no makeup exams* — if you miss an exam, that exam is the one dropped.

**Quizzes**

There will be a 15 minute quiz at the start of most conference sections during the semester. Generally, the quizzes will cover the material which was covered in lecture the previous week. The lowest quiz score will be dropped. There are no makeup quizzes.

**Attendance**

Attendance will be taken during the lectures and conferences, and will count towards your final grade (see the graph at the end of the syllabus). Excessive absences will hurt your grade, and may also be grounds for being dropped from the course. Students are responsible for all material covered and announcements made during the lectures and conferences whether they attend or not. If you miss a lecture or conference for a valid reason (e.g., illness, injury, family emergency, etc), be sure to let me know about it, as *excused* absences will not count against you. However, excessive excused absences will require written documentation.

*Make sure you sign the sign-in sheet every day you attend.* Absences add up really fast, so it is important that you make sure that I have an accurate record of your attendance.
Homework

Homework is not collected or graded. However, quizzes and exams will be based, in part, on these problems, so it is strongly recommended that you do them. Answers to odd-numbered questions can be found in the back of the textbook — answers to even-numbered questions will be provided in the handout.

Make sure as you solve the homework problems that you understand the problem and how to solve it. It will do you no good to simply look up the answers or copy the solution from another source. You should get into the habit of explaining your reasoning in words. You should also take care to express your final answer with correct units and correct significant figures. These things will be required on exams and quizzes.

Final grades

Final grades will be based on the midterm exams, final exam, quizzes, and attendance, in the following proportion:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Midterm exams</td>
<td>40% (2 × 20%)</td>
</tr>
<tr>
<td>Quizzes (total)</td>
<td>25%</td>
</tr>
<tr>
<td>Final exam</td>
<td>30%</td>
</tr>
<tr>
<td>Attendance</td>
<td>5%</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 each class, and to behave themselves during class time. Do not talk to your neighbors during class. Also, all cell phones and pagers must be turned off during class. Students who repeatedly violate these rules may be asked to leave. Excessive tardiness may also affect your attendance grade.

Exams and quizzes are closed book and closed notes (one $8\frac{1}{2}'' \times 11''$ sheet is permitted for exams but not for quizzes). Students cannot have any materials other than those necessary for taking the exam (pencils/pens, erasers, calculator, ...). Students are required to do their own work during exams and quizzes: there is to be no communication of any kind, nor sharing of any materials during an exam or quiz. Students caught cheating on an exam or quiz will receive a zero which will not be dropped. 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

Grade (%) How the attendance grade is calculated

Unexcused absences (including conferences)