ASSIGNMENTS AND HANDOUTS

See our pages on courseweb.library.upenn.edu

CONTACTING ME

My office hours are for you, so please come. Besides, personal contact is always the most effective way to learn! We will arrange my office hour times to suit the class. My office is DRL room 2N8, phone 8-7001. You can also leave messages directly in my department box.

E-mail is not necessarily a fast or reliable way to reach me.

GRADING

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Midterms (2)</td>
<td>30%</td>
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<tr>
<td>Final</td>
<td>30%</td>
</tr>
<tr>
<td>Homework</td>
<td>30%</td>
</tr>
<tr>
<td>Lab (250 only)</td>
<td>10%</td>
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In accordance with University policy, cheating will not be tolerated. If you are caught cheating, you will be given a failing grade.

LECTURES

Attendance at class is essential. Many things I will say are not in the main text, and vice versa. I will assume that you have attended all the regular Tuesday/Thursday lectures or obtained notes from someone else. The Wednesday recitation hour will usually be discussions of past and current homework assignments, background material, etc., but sometimes I may instead schedule a makeup lecture for this time.

READING

The main text is the book by Bernstein et al. We won’t cover it all, but still it’s worth reading cover-to-cover. One reason for this is that the Graduate Record Examination for grad school draws heavily on books like this one. I have had to rearrange the topics a bit because I think you can learn better that way. The weekly assignment sheets will give detailed recommendations for when to read what.

I have also written handouts to help you with some of the material. These will be available on Courseweb.

I will also suggest some supplementary readings in the weekly assignments. These will all be available via Courseweb, or on reserve in the library in the Physics 240/250 folder. These are either sources to review material from first-year physics, or suggestions in case you want to pursue some topic in greater depth.

Feynman’s book QED is assigned for deep background. You are not supposed to be able to reproduce the sorts of arguments in this book, and you shouldn’t worry if you can’t follow everything, but it’s very short and it’s one of the most beautiful popular physics books I’ve ever read.

In short, everything I expect you to read will be listed on the assignment sheets and can be found either in the two texts, via Courseweb, or on reserve in the Math/Physics library.

EXAMS

<table>
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<tr>
<th>Exam</th>
<th>Date</th>
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<tbody>
<tr>
<td>Midterm 1</td>
<td>Weds Feb 9</td>
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<tr>
<td>Midterm 2</td>
<td>Weds Mar 23</td>
</tr>
<tr>
<td>Final</td>
<td>Thurs Apr 28</td>
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There will be no makeup midterms. If because of illness you cannot be present for an exam, I’ll use your other work to compute your grade. Certification of the reason for your absence will be required. If you have some other truly exceptional problem preventing you from taking an exam, you must get me to agree at least 24 hours before the exam.
All exams are to be taken with closed books. Bring a calculator.
The final examination is scheduled by the Registrar and must be taken at the scheduled time. After grading, your final exams will be available for you to look at, but not remove.
Mistakes may sometimes be made in grading examinations. If you believe a mistake has been made in the grading of your exam, write a description of the mistake, as you see it, on a separate piece of paper and give it to me in person within a week after I return the exam.

HOMEWORK
Most weeks there will be assigned homework problems. Actually doing the problems is crucial to understanding the material! You can’t think the big think without some facility with the math, and practice is the only way to get it. The good news is that it gets much easier with practice.
I collect homework at the start of class on the due date. If you cannot be there at the start of class, turn it in under my office door before class. Please do not submit your work directly to the grader. Please submit hard copy, not electronic files.
Your work will be checked for completeness and selected problems will be graded. Make sure your work is neat and tells a logical story.* Technical communication is one of your most important job skills, no matter what you do later on, and again the only way to get good at it is to practice. Do your scratch work on separate paper. Put a box around the answer to each question.
Each of you may turn in any one homework set 48 hours late with no penalty for any reason (or no reason). Write, ‘This is my freebie’ on the top. Apart from that, late homework will not be accepted. Forty-eight hours does not mean “two business days.”
If you feel the grader has incorrectly graded a homework paper, you must discuss it with him first. In any case changes in homework grades will only be made within one week after the homework was returned.
Scientific work is usually done in collaboration. Collaboration is fun, and it really helps you to argue with your friends. Feel free to work together on the problems, but of course the smart way is to take the necessary ideas from each other and then go work out the details yourself — otherwise you won’t know the material for the exams.

MAPLE
I will ask you to do some computer problems. Various packages are available, but you probably learned Maple in calculus, and it’s great, especially for generating graphs. We won’t need anything fancy, just the basics. Maple is installed on hundreds of public computers on campus. On the other hand Maple can’t help you with the concepts! Think of it as your hardworking but dull assistant.
If you’re unfamiliar with Maple, the Math department offers lots of help; contact the Math department for details.

LABORATORIES
There will be several labs in 250, though not every week. Study the lab handout before the laboratory meeting. The lab descriptions are in a booklet available at the organizational meeting. Passing the laboratory is a requirement for passing 250. Anyone who has taken the laboratory previously and wishes to be excused must obtain permission from me prior to the first laboratory meeting.

SUGGESTIONS
My whole aim is to help you to teach yourself this difficult material. I can’t make the ideas any easier, but still if you think the lectures could be done differently in a way which would help you more, I’d like to hear from you. You can tell me, or if you prefer tell the TA, but please don’t wait till the end of the term. If you do, you’ll only be helping future students!

* Uncommented Maple worksheets are generally unreadable; explain your work either separately or as comments in your worksheets.