COURSE PROCEDURES & FAQs

August 23, 2000

Physics 2220

Lecturer
Richard Price
Office: 215 South Physics
Office hours: (Initially and tentatively) MWF 11:00am -11:45am, or by appointment
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Course web page: http://www.physics.utah.edu/~rprice/2220.html

Text
Physics, 3rd edition, by Wolfson and Pasachoff, Addison-Wesley Publishers. We will cover chapters 23-37 of this text, at a pace of roughly one chapter per week.

Lecture Schedule
2220-001 12:55-1:45 pm Room 103 JFB
2220-010 2:00-2:50 pm Room 103 JFB

Reading
You are expected to do the assigned reading before lectures; the discussions and presentations are based on the assumption that you have done the reading. If you have questions on the reading you may write them up and leave them at the front of the room before class starts. To help motivate you to keep up with the reading, there will be reading quizzes, in the lectures, about once a week. These will be very short quizzes, with no problem solving, designed only to test whether you have read the material.

Course Web Page
Course materials, announcements, etc. will be available at the course web page:
http://www.physics.utah.edu/~rprice/2220.html

Hard copies of all materials will be handed out in class, so you do not need to use the web. The single exception to this involves the option of using the University of Texas Homework Service (see below).

Midterm Exams
For students in 2220-001 (the 12:55 pm lecture) midterm exams will be in room HEB 2004. (Be sure you can find that room for the first exam!). Midterm exams will be 1.5 hours long, so the midterm exam for 2220-001 students will end at 2:25 pm. For students in 2220-010 (the 2:00 pm lecture) midterm exams will be in 103 JFB, the regular lecture room. The exam will start at 2:00 pm and end at 3:30 pm. If you have any scheduling problems in taking a 1.5 hour exam, please see me at least a week before the exam. At the exam you must know the number of your discussion section. You will need to bring a student picture ID to all exams. Midterm exams will be on the following days:

First Midterm  Monday,  September 11
Second Midterm  Monday,  September 25
Third Midterm  Monday,  October 16
Fourth Midterm  Monday,  November 6
Fifth Midterm  Monday,  November 27

Graded midterm exams will be returned at the second lecture after the exam. Your midterm exam grade that is lowest (relative to the class average) will be dropped.

There will be no regrading of any exam done in pencil. If you want the grading of any problem on your exam to be reconsidered (and the problem has been done in pen) write a
short explanation of your case, attach it to the exam, make sure that your discussion section number, and the time of your collab meeting, are on your paper, and hand it in at the end of lecture. This must be done within one week of an exam. **No regrading of an exam paper will start more than one week after the exam.**

On the exams you should *use words as well as symbols.* Explain what you are doing. If you have no explanation, and write down the wrong answer (which happens surprisingly often) there is no way that we can give you credit for the problem; if you explain what you are doing, you may get full or nearly full credit for the problem, even with the wrong final answer.

**Final Exam**
The final exam will be in HEB 2008 on Tuesday, December 12, from 4pm to 6:30pm. The guidelines for the midterm apply to the final exam. For example, there can be no regrading of exams done in pencil, you should give explanations as well as symbols and numbers.

**Homework**
There will be homework due at the beginning of every lecture, and is to be turned in outside the lecture hall. It is to be placed in the bin with your collab section number on it. (Again, it is important that you know your collab section number.) Your graded homework paper will be returned outside the lecture hall at the next lecture. If you do not pick up your homework at that time it will be available at collab sessions. No late homework will be graded.

In addition to homework “problems” (i.e., calculations) you will be assigned “questions” requiring verbal answers. These must be answered in complete coherent sentences.

**Holidays**
There will be no classes on Monday, September 4 (Labor day); on Thursday/Friday October 4-5 (Fall break); on Wednesday – Friday November 22–24 (Thanksgiving break).

**The “collabs”**
In place of traditional (and inappropriately named) “discussion” or (more inappropriately named) “recitation” sections, once a week there will be a two-class-period collaborative learning session. You will work in a group with two or three other students, but you will have to produce an individual “collab report” on the problem. This must be turned in at the beginning of lecture on the day following the collab session. Please list the other members of your group at the beginning of your report. You must attend the collab session to get credit for it. We will drop your lowest collab grade in figuring your final grade.

**Basis for Grades**
Your grade will be determined according to one of two methods of weighting the elements of the course:

1. Best 4 midterms: 36%; Final exam: 20%; Homework: 28%; Collabs: 12%; Reading quizzes: 4%;

2. Best 4 midterms: 28%; Final exam: 28%; Homework: 28%; Collabs: 12%; Reading quizzes: 4%;

We will automatically figure an average for you using both methods, and give you the higher figure. The numbers that go into the weighting formulas are not your raw score, but the score normalized (divided) by the class average. Thus if you receive a 50 on an exam on which the class average is 40 the number that enters the grading formula is 1.25. If on another exam you receive an 80 and the class average is 70, the number 1.143 goes into the grading formula. This normalization process applies to collabs, homework, etc.

**The Exams**
The midterm exams will consist of four questions, each worth 25% of the exam grade. Some
of the questions may be divided into parts, with an indication of the credit for each part. Approximately 50% of the exam will be based directly on work that is done in the collabs or the homework.

One of the four questions will be a question in which you must give verbal explanations, not calculations. This “essay” question will consist of several parts and will typically not have a quantitative or symbolic answer. You may be asked if something is true or false; you may be asked if some quantity increases or decreases in some process. In each case, simply giving the correct choice (“false,” “increases”…) is worth little or no credit. You must explain your reasoning, and it must be clearly written in complete coherent sentences. It will be graded by a TA who will be in a foul mood from having already looked at 100 exam papers. These TAs will not give you the benefit of the doubt if you are unclear. Do yourself a favor. Be clear.

Help Lab
There are several forms of help available. The schedule and location of the TA Help Lab will be announced.

Extra Problems (Texas Homework Service)
The best way for most students to study is by doing extra problems. To help with this, on an experimental basis, I will be making available homework problems on the web from a bank of problems provided by the University of Texas. This is just as new to me as it is to you. The facility will keep track of a grade for you. (I couldn’t turn off this feature.) I will not look at these grades, but you can use a phony name in setting up your account to protect your privacy. The idea of this service is that I create a problem set from a bank of problems they have, and you download it as a PDF or Postscript file. You then supply answers to the problems directly in the web page. You will get immediate feedback as to whether you are right or wrong. After the “due date” (which is irrelevant to us) you can view worked out solutions. I intend to set the due dates early enough so that you can look at the solutions immediately.

To get started, log in to their server. Using a web browser, go to URL

http://hw10.ph.utexas.edu/studentInstructions.html

and read the instructions. They will tell you to start by adding yourself to the class roster. To do this, you do not need an access password, but you will need the “unique number” of the course. It is 22212. Follow the instructions for filling out the registration page, then you can log in any time you want at http://hw.ph.utexas.edu and you can pick up the “homework” assignment, submit answers, pick up solutions, etc. etc. The web pages for the Texas Homework Service are also linked to the 2220 course homepage.

So far I have created only a single homework assignment: homework02. (Ignore homework01.) If there is no class interest in this resource, I will discontinue it. I would like to know your reaction to this service, as would the people at the University of Texas.

Courtesy
During class there will be exercises during which you are encouraged to discuss problems with the students around you. You are also encouraged to ask questions during lecture. Aside from these times, it is traditional courtesy, once the class has started, to maintain silence. Talking to your neighbor may be very annoying to another neighbor.

If you know that you will be leaving the lecture before the end, please sit at the back of the lecture hall.
Frequently Asked Questions

FAQ: Is this going to be on the exam?
A: Yes.

FAQ: Will computers be used in the course?
A: There will be no use of spreadsheet calculations in the course. You may of course find computers useful for some computations and calculations, but it will not be assumed that you have such tools at your disposal. It will be assumed that you have access to a scientific calculator, and you will be allowed to use a calculator on the exams.

FAQ: Will I be allowed to use a “cheat sheet” on the exams?
A: You may take into the midterms a 3” × 5” card carrying any information you want. For the final exam you may take two such cards.

FAQ: Is the course graded on a “curve”?
A: A single grade index is made up for you based on the weightings described above. All students in the course are rank ordered on the basis of this grade index, and grades are given approximately based on the traditional distribution of A,A-,B,… in PHYCS 2220. In this sense, yes, the course is approximately graded on a curve.

FAQ: Am I allowed to work with other students on the homework?
A: Yes, in fact you are encouraged to do this. The work you hand in as your own, however, must be your own, not copied from another student.

FAQ: What’s the best way to study for this course.
A: Do extra homework problems. Do homework problems that challenge you. Don’t give up or seek help immediately; seek help (TAs, other students) if you’re stuck. Struggle a bit. (Lots of learning goes on in this struggle.) But don’t struggle forever. When the struggle is no longer leading to learning, seek help.

FAQ: Do I choose my partners for the collabs?
A: No. We will assign the collab groups.

FAQ: On the collabs, my grade will be influenced by the work of other students. Is this fair?
A: Yes.