PHYSICS 208

ELECTRICITY, MAGNETISM AND LIGHT

Prerequisites: You should have taken Math 151 and be, at least, currently enrolled in Math 152. You are expected to have a working knowledge of plane/solid geometry, trigonometry, algebra, vectors, differentiation, and integration.

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Office Hours: Tuesday 12:30-1:30; Wednesday 5:00-6:00

Webpage: http://faculty.physics.tamu.edu/fry/

Textbooks:
- Physics for Scientists & Engineers (Volume II) by D. C. Giancoli. Prentice Hall.

Recitation/Laboratory:
Recitations meet in 119 Heldenfels Hall for the first hour, and then proceed to the Laboratory session for the remaining two hours.

Note 1: There will be no lab or recitation meetings during the week of August 30th.
Note 2: Students retaking the course are not required to retake the laboratory if their lab grade was 80 or higher. Such students must notify the instructor, and must still attend Recitation and take weekly quizzes.

Recitation/Homework:
Homework assignments are to help you practice your problem solving techniques. The homework assignments for the semester are on the back of this page. Recitation is a problem solving session, where the recitation instructor will work problems and answer questions. During the semester at least 10 quizzes will be given in recitation. Each will test your ability to work one of the assigned homework problems.

Exams: There are three Major Exams and a Final Exam. Major Exams are 75 minutes and will generally consist of problems similar in content and difficulty to the homework. Each exam will consist of six multiple choice (10 pts each) and two essay type problems (20 pts each). Each multiple choice question has six choices and no partial credit is given. For the essay type problems, the entire solution will be graded and partial credit given for partially correct solutions; but your work must be shown. If your work is a maze of random scribbles, no credit should be expected; write equations and logic in a clear easily followed sequence. The answer alone (even the correct answer) is not sufficient and will receive zero credit. We will judge your use of physics in arriving at the solution. You can expect at least 1 problem to be something you have not seen, but that can be worked with the material presented in the course. An important objective of the course is understanding, not memorization. To de-emphasize memorization, you will be allowed to bring to each exam a 3” x 5” card upon which you have written anything you wish. However, you will not be given any equations or constants. Thus, you must put some thought into the preparation of your card so that it provides any information you might need. You may bring a calculator to the exams; but, if you have a programmable type calculator, you will be asked to clear its memory before beginning the exam. If you miss an exam due to an excused absence as outlined in the University Regulations, you must provide your lecturer with written documentation within one week. If the excuse is accepted, the final exam will be counted an additional 100 points. Missing two or three exams requires retaking the course.

The Final Exam is comprehensive and lasts for 2 hours. It will consist of sixteen multiple choice and two essay type problems; it is similar in content and difficulty to the other exams.

Exam Grades: Exam grades may be “curved” so that the resulting letter grade distribution reflects, in the Professor's judgement, an accurate measure of the performance of the class. In no case will a curve result in a lower letter grade than the standard 90-100% A, 80-89% B, 70-79% C, 60-69% D, and <60% F.

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<thead>
<tr>
<th>Points</th>
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<tbody>
<tr>
<td>3 Exams</td>
<td>300</td>
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<tr>
<td>Final Exam</td>
<td>200</td>
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<tr>
<td>Laboratory</td>
<td>100</td>
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<tr>
<td>Recitation/Lecture</td>
<td>100</td>
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Course Grade: The course grade will be determined using a numerical score for each component so that, for example, a high B on Exam 1 will result in a higher final average than a low B on the same exam if all other grades are the same. You must pass both the laboratory and lecture parts (exams plus final) in order to pass the course!

Alternate Scheme: In the case of improvement on the final exam, an alternative grading scheme is available. This allows the final to count 300 points toward the final grade, with the 3 exams counting 200 points and the lab and recitation each counting 100 points. This scheme is limited to improving your final grade by at most a letter grade from the average calculated using the standard grading scheme.

If there is an excused absence: The final counts 300 points, the 2 exams are 200 points, and the lab and recitation are 100 points each.