PHYSICS 231

FUNDAMENTALS OF PHYSICS: ELECTRICITY AND MAGNETISM

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General Information
Class Hours: 9:05 – 9:55 Monday/ Wednesday
Office Hours: 10:00 – 11:00 Monday/Wednesday and by appointment. I’m usually also available on Tuesdays and Wednesday afternoons, but you should check in advance.

General Course Description
The course is intended to provide a foundation in electricity and magnetism as well as an introduction to DC and AC circuits. The course will cover most of chapters 21-31 of the text.

Lecture Notes and Communication
Lecture notes will be posted on Online@UT (blackboard). My main modes of communication are:
1) Through the lectures, and the times before and after,
2) Through blackboard and in particular the discussion boards,
3) In my office during office hours or an appointment
Questions related to the course should be posted on the discussion board forums on blackboard. In this way other students can participate in the discussions. Email communication is reserved for personal matters, such as not being able to attend class due to sickness, or exam schedule conflicts. Emails relating to general questions about the course, homework etc. will be sent back with a request that it be posted on the discussion board. Eventually such emails will simply be deleted.

Reading Assignments
Reading the relevant chapter or sections for each week’s lectures is a compulsory and vital part of the course. There will be reading tests prior to each chapter.
Course Philosophy
This course will run in a slightly different way to standard physics classes and you should be aware of this from the beginning. It is absolutely essential to read the relevant chapter in the textbook before coming to class. A short reading test will need to be completed before each new chapter is approached in the lecture session. Not all the material contained in the course will be covered in the lecture sessions; however, any of it may be tested via homework assignments or exams. Similarly, material may be covered in lectures that cannot be found in the text, and again this may be tested.

Please consult the official UT final exam schedule for the date of the final examination

ACADEMIC HONESTY

All work submitted by a student is expected to represent their own work. Students are expected to enter their own homework on the CAPA system without assistance from others. Students are expected to perform all work in conformance with the University policies regarding Academic Honesty.

Classroom Environment

I firmly believe that the classroom atmosphere should be comfortable and open, allowing students and teachers to discuss the material. This requires a great deal of respect and listening to one another as well as reducing side conversations to a minimum. I request that laptops not be used in the classroom as they can easily become a distraction e.g. email, facebook etc, believe me, I know! This does mean that I expect you to take any notes on paper with a pen, or you can print out my slides and write on them (I post all my slides on blackboard).

Grading Policy

The semester Grade will be based on a Weighted Averages of the mid-term exam grades, final exam grades, as well as laboratory scores, and homework scores.
Homework will comprise 15% of the final semester Grade
Homework sets will be assigned On-Line using the WebAssign software system (http://www.webassign.net). You will need to purchase an access code for WebAssign (approx $20). Due dates for problem sets are firm. In lieu of extensions, the two lowest scores on homework sets will be dropped from the average. You can log in to WebAssign through blackboard.

Reading tests are included in the homework grade (20%). Reading tests comprise of three short questions and will be posted on blackboard.

NO EXTENSIONS OR MAKE-UP PROBLEM SETS WILL BE GIVEN

Laboratory Scores will comprise 25% of the final semester Grade.
While laboratory work will be graded by each Lab Instructor independently, an effort will be made to insure a uniform grading policy between different laboratory sections. Laboratory make-ups are entirely at the lab instructor’s discretion and arrangements for such must be made with the lab instructor.

Hour Tests & Final Exam will comprise 60% of the final semester Grade
There will be two short tests and one final exam. The total exam grade will be a weighted average of the short tests and the final exam with the final being equivalent of two short tests. In computing this average, a student’s lowest “effective” short test exam score will be dropped. If the lowest grade is a short test, that grade will be dropped and the total exam weighted average will be the average of the other short test (having a weight of 1/3) and the final (with a weight of 2/3). If the lowest grade is on the final exam, the total exam grade will be the average of both short tests (each having a weight of 1/3) and the final (with a weight of 1/3). If one short test is missed, it will be considered to be the low score and will be dropped in the averaging. Because one test may be missed without direct penalty:

MAKE-UP SHORT TESTS WILL NOT BE GIVEN

IMPORTANT NOTE: Questions on the short tests and final will generally NOT require only a purely numerical answers (like the homework). Short test and final questions will generally be similar in character to example problems in the book and example problems given in lectures. Short exams will be closed book, but a list of useful equations will be provided.
If, for any reason, there is a concern about a grade given on an exam or exam question, an appeal will be entertained if it is raised no later than one week after the date on which the graded exams are made available for return to the class. After this “appeal period” of one week, exam grades will be considered final and will not be altered.

MISSING THE FINAL EXAM IS VERY SERIOUS AND MAY WELL RESULT IN FAILURE OF THE COURSE

Grading Scale
Final Grades are determined from the weighted average, where the weights are:

<table>
<thead>
<tr>
<th>Homework</th>
<th>15% (20% of which comes from reading tests)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs</td>
<td>25%</td>
</tr>
<tr>
<td>Exams</td>
<td>60%</td>
</tr>
</tbody>
</table>

See discussion above for full explanation, especially regarding missed homeworks and tests.

The final grade will be assigned from the weighted average based on the following provisional grading scale.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum Score</th>
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<tbody>
<tr>
<td>A</td>
<td>80 and above</td>
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<tr>
<td>A-</td>
<td>77 and above</td>
</tr>
<tr>
<td>B+</td>
<td>73 and above</td>
</tr>
<tr>
<td>B</td>
<td>70 and above</td>
</tr>
<tr>
<td>B-</td>
<td>67 and above</td>
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<tr>
<td>C+</td>
<td>63 and above</td>
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<tr>
<td>C</td>
<td>60 and above</td>
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<tr>
<td>C-</td>
<td>57 and above</td>
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<tr>
<td>D+</td>
<td>53 and above</td>
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<tr>
<td>D</td>
<td>50 and above</td>
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<tr>
<td>D-</td>
<td>47 and above</td>
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<tr>
<td>F</td>
<td>below 47</td>
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</table>
Please note that this grading scale gives a 10% advantage over that used by most professors, hence, **YOU SHOULD NOT EXPECT FURTHER CURVING OF GRADES**

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office of Disability Services at 865-974-6087 in Hoskins Library to coordinate reasonable accommodations for students with documented disabilities.