

PHY

E-Mail: Please put PHYC50 in the subject line of any course-related e-mails. I will endeavour to reply as quickly as possible to your e-mail

OCTOBER 21 and OCTOBER 23
Energy and Forces (4.4.4)
Multipole Expansion of the Magnetic Vector Potential (5.4.3)

OCTOBER 28 and OCTOBER 30
Torques and Forces on Magnetic Dipoles (6.1.1-6.1.2,6.1.4)
Bound Currents (6.2.1-6.2.3)

NOVEMBER 4 and NOVEMBER 6
Ampere's Law in Magnetized Materials (6.3.1-6.3.3)
Linear and non-Linear Media (6.4.1-6.4.2)

NOVEMBER 11 and NOVEMBER 13
Electromotive Force and Induction (7.1.1-7.2.3)
Inductance and Maxwell's Equations (7.2.3-7.3.6)

NOVEMBER 18 and NOVEMBER 20
Charge and Energy, Poynting's Theorem (8.1.1-8.1.2)
Momentum, Maxwell's Stress Tensor (8.1.2-8.2.2)

NOVEMBER 25 and NOVEMBER 27
Angular Momentum (8.2.3-8.2.4)
Review Problems

ASSESSMENT:

A COMPREHENSIVE FINAL EXAM (3 hrs): 50%

MIDTERM TEST (90 minutes): 22%

4 ASSIGNMENTS (tutorial and take home work): 16% in total

3 TUTORIAL PRACTICALS/QUIZZES: 12% in total

TESTS AND EXAM:

Both the midterm and final exam will draw from lecture and tutorial materials. This could include material presented in the lectures or tutorial material that is not covered in the text. The chapters from the text that

NOTES:

Due dates and times will appear on the assignment handouts. Late assignments will be penalized by 50% per day. Assignments must be handed in at the tutorial on the day they are due. Assignments handed in later on the same day will be considered 1 day late. Each 24 hour period following from the end of the tutorial time slot is considered a day. Assignments that are more than one day late will not be accepted.

I expect that, in the course of doing your assignments, you will discuss them with your classmates at some level. This is fine, and a normal part of the study process. What you must not do, is copy another student's work. It is fine to discuss the problems, but when it comes to actually writing out your solutions you should do this by yourself. To copy answers from someone else is an academic offense. Plagiarism will not be tolerated. Students are expected to submit their own work for grading. Should you choose to disregard this advice, be aware that academic offenses will be turned over to the university for the determination of an appropriate penalty. I will not enjoy the process anymore than you so please don't put it to the test.

For all graded problems, in addition to any mathematical work, I expect clear written statements at each stage in the solution. Full marks will not be awarded without this. Another problem that sometimes arises is that of legibility. It takes a lot of time and effort to grade problem sets and it is very frustrating for the marker if assignments are messy and difficult to read. You will likely be more successful on your problem sets if you do what you can to not frustrate the marker. Please put some effort into ensuring that your work is clearly written. And please staple the pages of your assignments together.