

Physics 520B - Electrodynamics

Spring 2008 Mon/Wed/Fri. at 11:00am-11:50am in Neckers 410

Lecturer: Dr. Leo Silbert
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Office Hours: MWF 3:00pm - 5:00pm

Course Textbook: *Classical Electrodynamics*, J. D. Jackson, 3rd Ed. (Wiley).
You may also want to consult, *Introduction to Electrodynamics*, D. J. Griffiths, 3rd Ed. (Prentice Hall).

Course Outline

Essentially we will cover, in part, Chapters 6-11 of Jackson's textbook:-

- i) Maxwell's Equations
- ii) Electromagnetic Waves & Wave Propagation
- iii) Waveguides and Resonant Cavities
- iv) Radiation
- v) Scattering & Diffraction
- vi) Special Theory of Relativity

Grading

Homework* (to be assigned weekly or biweekly)	35%
Mid-term Exam	30%
Final Exam	35%

*to include standard problem solving as well as in-class assignments/participation

Final Grade A: > 85%, B: 70% - 84.9%, C: 60% - 69.9%, D: 50% - 59.9%, F: < 50%

Course Statement

You will be expected to read the textbook without prompting and be able to solve problems not covered in the lecture notes or textbook. You are strongly encouraged to consult other textbooks to aid you. Solving problems in groups is not frowned upon, however copying and plagiarism are both strongly discouraged.

<http://www.physics.siu.edu/~lsilbert/Lectures/Phys520/phys520.htm>