

Phy 452/ 652 Electricity and Magnetism

Catalog Description: Fundamental laws of electricity and magnetism from viewpoint of fields. Electromagnetic waves; time-dependent potentials and fields; radiation; resonant cavities; waveguides and transmission lines.

Textbook: *Introduction to Electrodynamics*, third edition, David J. Griffiths, Prentice Hall, 1999.

Course Instructor: Dr. Jerry Clark
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Tentative Office Hours: MWF before class

Homework and Grades

I plan to assign a homework set each week, usually due at the beginning of class one week later or posted with a due date. Homework assignments will be distributed in class but they will also be available from the course web page.

Homework Policy: You are encouraged to discuss the homework problems with your classmates and with the instructor, but you must write up your solutions *independently*. Of course, you must not copy from anyone else's solutions.

Approximate Grading Weights: Homework:	30%
Class participation	10%
Midterm Exam:	30%
Final Exam:	30%

I may decide to add exams and modify the exam grade distribution.

Course Content:

1. Electromagnetic Waves
2. Potentials and Fields
3. Radiation
4. Wave Guides

Addendum

This addendum to the Syllabus is to state my policy on allowed vs. **unethical** cooperation in the preparation of homework problems:

I consider it advantageous if students discuss both material of the lectures and strategies to solve specific homework problems with each other. In fact, I encourage students to pair up with each other for regular discussions and to study together.

I consider it unethical to copy the solution of a homework problem verbatim from another student's solution or from a book (including study guides etc.) and the internet.

Each student must turn in their own (hand- or computer- written) version of each homework assignment. You may neither copy from another student's final (or close to final) solution nor let another student peruse or copy yours. You must properly cite all sources you use, except informal discussions. You have to attempt to solve each problem yourself and make sure that you thoroughly understand the solution you turn in; I will test your understanding to prove or disprove any claims of unethical copying. If you find the solution for a given homework problem in a freely available book, you need to cite this as a source. Again it is **unethical** to simply copy verbatim from a book you have to formulate the solution in your own words and in accordance with the nomenclature used in class.

Also, of course **no** cooperation is allowed on any of the exams.