

PHYSICS 460 – Electrodynamics – Fall 2009

Lecturer: Maarten Golterman

Office: Thornton 305

Phone: 405-0903

E-mail: maarten@stars.sfsu.edu

Webpage: <http://www.physics.sfsu.edu/~maarten>

Office hours: Tu, Th 9-10:30 am

Feel free to make use of my office hours as much as needed, and feel free to drop by some other time if you can't make it to office hours (leave a message on my e-mail or voice-mail if you don't find me). Especially with doing the homework, it helps to come ask questions if you get stuck!

Textbook: D. Griffiths, Introduction to Electrodynamics.

Prerequisites: Physics 360 or equivalent.

Homework: There will be weekly required homework assignments, which together will count for 10% of the grade for the course. They will be posted on my web site. You are encouraged to discuss the assignments with other students, and ask me as many questions as needed, but the writeup of the problems must be your own individual work. I will make solutions available, so **no late homework will be accepted!**

Exams and Grades: There will be one midterm exam (beginning of November) and a final exam. Both exams will be part in-class and part take-home exams; each part counts equally for the total grade for each exam. Each exam will count for 45% of the final grade.

Students with disabilities who need reasonable accommodations are encouraged to contact the instructor. The Disability Programs and Resource Center (DPRC) is available to facilitate the reasonable accommodations process. The DPRC is located in the Student Service Building and can be reached by telephone (voice/TTY 415-338-2472) or by email (dprc@sfsu.edu).

Tentative lecture schedule – Physics 460, Fall 2009

<i>Week</i>	<i>Topic</i>	<i>Reading (chapters)</i>
1	Current and resistance	7
2	electromotive force and inductance	7
3	Maxwell's equations	7
4/5	Conservation laws	8
6/7	EM waves	9
8/9/10	EM waves in matter	9
11/12	Potentials and Fields	10
13/14	Radiation	11
14/15	Special relativity	12