

PHY 302: Electromagnetic Theory II

Instructor: Professor V. J. Goldman, office: B-137 (Physics)
office hours: Tue, Thu 1 - 2 and by appointment
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TA: TBA

Text: D. J. Griffiths, Introduction to Electrodynamics, 4th edition

Course organization and grading:

- Two 1.5 hour lectures per week (Frey 317, Tue, Thu 11:30 - 12:50)
- Homeworks (paper only): posted on Thursdays, due next week Thursday in class
- Late HW: in B-137 only (slide under the door, if closed), not in mailbox, not to TA
- Late HW penalty: 20% per day, so that model solutions can be posted promptly
- Exams: two Midterms (Mar 3, Apr 7, in class), and Final (Tue, May 17, 11:15-1:45)
- Exams are closed book, except can bring 2 (two) handwritten pages
- Course grade = 20% HW + 20% each Midterm + 40% Final; Final is comprehensive
- There is no provision for doing extra or outside work to improve your grade

Blackboard: *syllabus, assignments:* HWs, *documents:* HW solutions, exams, etc.

Course outline (continues PHY 301):

1. Conservation laws in electrodynamics
2. Electromagnetic waves in vacuum
3. Electromagnetic waves in matter
4. Potential formulation of electrodynamics
5. Radiation of electromagnetic waves
6. Electrodynamics and special relativity

Material will be presented primarily in lectures, readings assignments from the text, and homework problems. Lecture will cover the material to be learned, some important examples, and will direct your study from the text, however some material will be presented in class that is not in the text. Generally, students who attend the lecture do better on exams, and have better overall class experience. Thus, you should attend class, pay attention while there, and take notes over the material. You should plan on 2-3 hours of study outside of class for every lecture.

Working together: Students are encouraged to study in small groups, discuss the material and HW problems. It should be perfectly clear that each person is responsible for completing and submitting the work. It is NOT acceptable to divide the problems, when one solves problem 1 and the other problem 2. Exchange of any information between the students during an exam is unacceptable.

Note: If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Student Accessibility Support Services. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

http://sb.cc.stonybrook.edu/bulletin/current/policiesandregulations/policies_expectations/min_instructions/student_resp.php