

PHYSICS 294H

Honors Physics II – Electromagnetism

Fall 2010

General Information

- Course outline: Electromagnetism
- Prerequisites: PHY 193H
MTH133 or MTH153H or LBS119 or concurrently
- Instructors: Prof. Michael Thoennessen
Office: W-209 Cyclotron Laboratory,
Phone: 908-7323
On-campus 5-9672 ext 323
- Lectures: Monday, Tuesday, Wednesday, Thursday, 9:10-10:00am,
BPS 1420
- Office hours: Thursday, 1:00 - 3:00 PM and by appointment.
- Course computer framework: MSU's LONCAPA (<http://msu.loncapa.org>) system will be used for the course e-mail communication, homework and quizzes. One of the advantages of the LONCAPA system is that students may enter solutions to questions and problems and know immediately if they are right. Incorrect answers may be entered many times without penalty and credit is earned if the correct answer is entered within a prescribed number of trials prior to the due date. The LONCAPA system is accessible via most web browsers, in particular using computers in the Charles J. Strosacker learning center, BPS 1248.
- Textbook: *Physics for Scientists and Engineers, 2nd Edition*
by R. D. Knight, Volume 3 and 4, Pearson - Addison Wesley
- Reading: Students are expected to read the chapters listed in the course schedule prior to each lecture. There will be LONCAPA-based quizzes on the reading assignments posted following each lecture, with a due date at 8:00 AM on the day of the forthcoming lecture. The reading quizzes will, in particular, provide an opportunity to communicate to the lecturer difficulties with physics understanding of the material covered in the reading assignments; special attention will be dedicated to the problematic topics during the lecture. By default there is only one try for any single quiz question. Maximum reading quizzes contribution the final grade is 7%. There will be no make up for missed quizzes.

- Quizzes: In addition, there will be unannounced short quizzes during lectures and recitations. For quizzes and exams you will need a calculator and a #2 pencil.
- Homework: There will be 12 LONCAPA homework assignments, which are due on Mondays at 9:00 am (see course schedule). By default there are 30 tries for each homework problem. Maximum homework contribution the final grade is 15%. There will be no make up for missed homework.
- Exams: There will be three, one-hour long, in-class exams and one, two-hour long, final exam. Maximum in-class exam contribution the final grade is 14% each, 42% total. Maximum final-exam contribution the final grade is 38%. Make up for missed exams may be considered only for special, well justified cases, indicated to the instructor prior to the scheduled time for the exam.
- Course schedule: Detailed course schedule with deadlines for the assignments can be found [here](#)
- Disabilities and other special needs: Students with disabilities or/and any other special needs should identify themselves to the instructor in the first week of classes. Individual arrangements will be made to accommodate these needs on a case-by-case basis.
- Help: Help is available during the regular office hours, Thursdays 1:00-3:00pm (see office hours). In addition, there is a discussion forum within LONCAPA where students can post and answer questions.
- Final grade contributions: The final grade will be calculated based on contributions given below.
Contribution to the final grade:
- | | |
|----------------------|------|
| Homework assignments | 15 % |
| Quizzes | 7 % |
| Midterms (14 % each) | 42 % |
| Final exam | 38 % |
- This adds up to 102%, and includes 2% bonus points for potentially missed quizzes or homework.
- Final grades: The final grades are going to be calculated based on the following thresholds:
- | % of total points | Final grade |
|-------------------|-------------|
| from 90 to 100 | 4.0 |
| from 83 to 89 | 3.5 |
| from 76 to 82 | 3.0 |
| from 70 to 75 | 2.5 |
| from 64 to 69 | 2.0 |
| from 58 to 63 | 1.5 |
| from 52 to 57 | 1.0 |
| from 0 to 51 | 0.0 |