

PHYS 450 Electricity and Magnetism

Class Meets: T R, 9:00-10:15 AM, in WAT 114

Instructor:

Luis Elías, Watanabe 310, lelias@hawaii.edu, (808)956-2961

Required Textbook

Electromagnetism

Pollack & Stump, Addison Wesley (2002,) ISBN 0-8053-8567-3

Requirements

PHYS: 350 or consent of the instructor.

Quizzes

Weekly, 15 minute quizzes

Homework

Homework: 7 HW problem sets

Midterms

Three midterm examinations will be given. The midterm grade will be the average of the two highest midterm examination grades. No midterm examination makeups. Exam problems will be selected from problems worked in class and problems assigned as homework.

Midterm examination dates: February 9, March 22, and April 12

Final examination

Thursday, May 10, 9:45-11:45 WAT 114

Final Grade

Midterm average (40%) +FINAL (25%) + HW average (20%) +Quiz average (15%)

Course Content

- Electric and Magnetic fields in matter
- Electromagnetic induction
- Time dependent Maxwell's equations
- Special relativity
- Optics
- Waveguides
- EM radiation