PHYS 350 Electricity and Magnetism

Class Meets: TR, 10:30-11:45 AM, in WAT 415

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: 152 or 272 or 272A; and Math 244 (or concurrent) or MATH 253A (or concurrent) or Math253A (or concurrent); 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: September 22, October 25, and November 17

Final examination

Thursday, Dec 15, 9:45-11:45 WAT 415

Final Grade

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

Course Content

- Vector Calculus. Basic Principles of Electrostatics
- Electrostatic and Conductors
- General Methods for Laplace's Equation
- Electric Currents.
- Magnetostatics
- Electrostatics and Dielectrics
- Magnetic Field and Matter