

General Information

PHGN361

Coordinator: Frank Kowalski

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Text: *Introduction to Electrodynamics: Third Edition* by David J. Griffiths.

Prerequisites: PHGN200 and PHGN311.

Topics: Static electric and magnetic fields in free space, dielectric materials, and magnetic materials; steady currents; scalar and vector potentials; Gauss's law and Laplace's equation applied to boundary value problems; Ampere's and Faraday's laws.

Grades: Four exams will each contribute 50% of the final grade while the homework will contribute 25% and class participation 25%.

Homework: Problem assignments will be made and collected on a weekly basis. Four exams and a final will be given. They will cover your understanding of the homework and lectures. You may consult me or other students about homework questions you might have. However, direct copying will be treated as academic dishonest.

Homework due at the beginning of class Jan. 18

1. Chapter 2: problems 1-12, 20, 21, 25, 29

Homework rules

1. Write a statement of the assignment (chapter number and problem numbers) at the top of the first sheet.
2. Write your name in block letters, last name first.
3. Circle the problem number, box in answers, and draw a line at the end of each problem.
4. Include a well-labelled diagram where appropriate and work each part to an answer.
5. Staple pages together with problems in numerical order.
6. You may look up integrals without explicitly doing them. However please cite where the integral comes from (i.e. Dwight "Tables of Integrals and other Mathematical Data" page, Mathematica, etc.).
7. If the work presented is not legible to the grader then credit will not be given.