General Information PHGN361

Coordinator: Frank Kowalski Office 438 Ph. 273-3845

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: Tentatively, we will have four hour exams plus a final all will contribute 70% of the final grade while the homework will contribute 10% and class participation 20%.

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 any homework questions. However, direct copying will be treated as academic dishonest.

Homework due at the beginning of class Jan. 20

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 Principles, Method of Solution, Check and write the appropriate solution below each of these boxes. Draw a line at the end of each problem.
- 4. Include a well-labeled diagram where appropriate and work each part to an answer.
- 5. Staple pages together with problems in numerical order.
- 6. If the work presented is not legible to the grader then credit will not be given.