Lecture Hours: Mon, Wed and Fri, 9:05 - 9:55 AM, Rm. 131 Sharp Lab (SHL)

Recitation Sessions:
020D: W 1:25-2:15 PM SHL 122 Evan
021D: W 3:35-4:25 PM GOR 222 Evan
022D: Th 12:30-1:20PM SMI 219 Evan
023D: Th 3:30-4:20 PM PRN 331 Sa-Han

Professor: Henry Glyde, Rm 229 Sharp Lab Tel: 831-8051 or 831-2661 email: glyde@udel.edu Office Hours: M, W, F, 10 - 11 AM

Teaching Assistants:
Evan Kimberly – Recitation, Rm 320 SHL, ekimberl@udel.edu
Sa_Han Jang - Recitation, Rm 104 SHL, jang@udel.edu
Zhiyuan Chen - Laboratory Rm 310 SHL czy@udel.edu
Nagitha Ekananayake – Lab Rm 014 SHL nagitha@udel.edu
Inci Ruzybayev – grader Rm xxx SHL inci@udel.edu


Prerequisites: Basic calculus (Math 241), PHYS 207

Description: Electric Fields, Gauss’s Law, Electric Potential, Capacitance and Dielectrics, Current and Resistance, Direct Current Circuits, Magnetic fields, Sources of Magnetic Fields, Faraday’s Law, Inductance, Electromagnetic Waves

The course will cover Chapters 23 through 32 and 34 of the text. A typical chapter has 50 to 60 problems. Between 8-10 problems will be assigned as homework. You will be asked to do one of the problems in class and this problem will be marked for credit. Or a short quiz based on the problems will be given in class. The problems are an important part of the course and learning the material.

Registration accepted up to Sept. 16, 2008 (last drop/add day).

Marking Scheme: Midterms (2) – 30 %, Final -30%, Laboratory - 20 %, Problems/Quizzes – 20%.

Course Web site: http://www.physics.udel.edu/~glyde/PHYS208
Laboratory:

Laboratory Sessions:  
20L: M 1:25-3:25 PM, SHL101B  
021L: M 3:35-5:35 PM, SHL101B  
022L: Tu 12:30-2:30PM, SHL101B  
023L: Tu 3:30-5:30 PM, SHL101B  
024L: M 7:00-9:00 PM, SHL101B

Laboratory work is an essential part of the physics course. It will likely play an important role in your career as scientist or engineer as well. Time spent in the laboratory, developing skill and experience in making good measurements, is a critical part of your training. Our laboratory schedule presents nine laboratory exercises that have been selected to develop further your ability to:

- use standard instruments such as multimeters and oscilloscopes effectively
- make reliable measurements,
- recognize and troubleshoot errant circuits,
- present results more clearly through graphs and tables,
- analyze data to reveal underlying relationships,
- use computers for curve fitting and preparing graphs,
- estimate experimental uncertainties and understand their consequences,
- report reliable calculations with the appropriate number of significant figures,
- keep an accurate and complete laboratory.

The laboratory manuals can be downloaded from “Class Schedule” part of this web site. In the “Class Schedule” click on the name of the Laboratory you are seeking. There is generally one lab each week.

Satisfactory laboratory work is required to receive a passing grade for this course. Attendance is mandatory; attendance at a section different from your normally scheduled one may be arranged beforehand with permission of the lab instructor. **All lab reports must be submitted to the lab instructor within 48 hours.** The grading schedule for late reports and the makeup policy for missed labs will announced by the lab instructor. **The lowest lab grade will be dropped; this can be used to accommodate one missing lab assignment.**

All lab reports have to be typed, no special paper is required. You can share the data with your group members, but lab reports have to written individually with your analyses. A good report should be concise and follow the format below:

1. Introduction: Briefly describe why you are doing this lab and what the objectives are.
2. Experiment: Describe how you do the experiment.
3. Results: Present measured results.
4. Analysis: Analyze the results and research the conclusions. Have you achieved your objectives? How accurate are your results? What are the sources of error? How would you
improve the experiment? A most important point is that bad or inaccurate experimental data or results do not mean you will get bad grade. If you successfully identify where you went wrong, what caused the errors, you can still get good grade.

5. Summary: Summarize what was done and identify the important findings (perhaps only one) of this experiment. Try to write the summary so that readers will still grasp the basic experiment and findings even if they read only the summary.

The lab manual should be studied before coming to the lab meeting. A short discussion may be given at the beginning of each lab to orient each student to the equipment and instructor’s expectations. Generally the lab exercised will be performed by teams for two to three students.

Other Matters:

Any student with disabilities who seeks accommodations in this course are encouraged to speak with the instructor to make appropriate arrangements. UD’s Academic Services Center should also be consulted.

Throughout the semester, you are invited to leave anonymous suggestions/comments for the instructor via the online form. When possible these notes will be posted to a follow-up area along with clarifying comments, as appropriate.

Rules and Responsibilities for students at UD includes good descriptions of what constitutes plagiarism, fabrication, cheating, and academic misconduct. I try to avoid academic improprieties and I encourage you to do the same. You should also adhere to the Policy for Responsible Computing.