

**PHYSICS 221 RECITATION AND LABORATORY  
FALL 2005**

**RECITATION: NIELSEN 608 FROM 2:30 – 3:20 WEDNESDAY  
LABORATORY: NIELSEN 508 FROM 3:35 – 5:30 WEDNESDAY**

**Instructor: Tony Wald**

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**Office Hours: Nielsen 201: Friday 12:10 – 1:20.**

**By Appointment: Nielsen 603, Desk #11: Nielsen 603, Desk #11.**

**Grading Policy:** Laboratory Reports are 60% of the lab grade. Quizzes are worth 30% of the grade, and Class Participation is worth the last 10% of the grade. Together these grades comprise your total laboratory grade. Grading scale: A = 100 – 90, B = 89 – 80, C = 79 – 70, D = 69 – 60, F = 59 – 0. A new department policy in effect this semester states that all grades are final after one week.

**Laboratory Manual:** *Selected Introductory Physics Experiments* by James E. Parks and is available at the UT Book and Supply Store. The lab manual must be brought to every class, along with a calculator.

**Laboratory Schedule:** <http://www.phys.utk.edu/labs/ph221syl.pdf>

**RECITATION:** There will be a short quiz worth 10 points every week, and you can drop the lowest quiz score. You will be expected to bring your textbook *College Physics, Seventh Edition* by Serway/Faughn, and a calculator to every recitation class. Active class participation is essential to learning and understanding the material, so group work will be emphasized, both in working and in presenting solutions.

**LABORATORY:** Only ONE lab can be made up during the semester. However, you must have a legitimate, official excuse (university function, Doctor's note) to miss a lab. Any lab missed and not made up will result in a zero for that lab. This also holds for Recitation Quizzes. Before each lab/recitation I expect you to have done the following:

- 1) Read necessary material from Serway/Faughn regarding topics to be covered in lab.
- 2) Read the experiment in the lab manual; this is important since the information will most likely be on the recitation quiz.
- 3) Do the pre-lab assignment, if there is one.

After completing each lab, you must make sure all equipment has been turned off before you leave. When turning in completed labs, make sure you include all graphs, tables, and calculations. In addition, make sure you STAPLE your lab report. Reports not stapled will receive an automatic deduction of 10%. **NO FOOD OR DRINK IN THE LAB.**

**Laboratory Reports:** Must be **TYPED** and are due at the beginning of the next lab session. Lab reports given to me by e-mail will not receive credit. **LATE REPORTS WILL NOT BE ACCEPTED.**

The Physics Tutor Center in Nielsen 201 & 203 has physics tutors available MTWRF:  
<http://www.phys.utk.edu/labs/F05tutoringsched.pdf>

Students who have a disability that requires accommodation(s) should make an appointment with the Office of Disability Services (947-6087) to discuss their specific needs.

The University Honors Statement will be strictly adhered to:  
[http://diglib.lib.utk.edu/dlc/catalog/images/u/2005/u\\_app.pdf](http://diglib.lib.utk.edu/dlc/catalog/images/u/2005/u_app.pdf)

## **HOW TO WRITE A LABORATORY REPORT**

There are several items that comprise good technique for writing reports. By following these simple rules your laboratory report will be clear and concise (always the goal in any writing project!). Below are the major categories you need to incorporate in the report:

- 1) **Cover Page:** Include lab title, your name, your partners' names, lab section and time, date.
- 2) **Purpose:** Explain why you did the lab. What ideas are you trying to understand by doing this lab?
- 3) **Theory:** Define concepts used in the lab. Include the major equations and the importance of said equations. Use Equation Editor!
- 4) **Procedure:** Briefly *but comprehensively* discuss how you proceeded to perform the lab in your own words.
- 5) **Data:** Include data tables and graphs completed during the lab or during the process of analyzing your data at home. Graphs need titles and labeled axes. Use Excel!
- 6) **Results:** Show calculations in detail (work out every step). If the same calculation is done many times, just show all the steps the first time, and list results for each additional calculation.
- 7) **Conclusions:** Highlight the main points of the lab. What did you learn? What is the significance of collected data, error results, and graphs? This section should be distinctly different from the **Purpose** section.
- 8) **Questions:** Answer the lab questions. Type the actual question from the lab manual in your report, then answer said question.

Use complete sentences when typing your reports. A good lab report should be about 3-4 pages in length, not including the cover page. Though you will be working in groups to complete the labs, **every student will write a lab report**. Reports that are identical or have sections "copied and pasted" will receive ZERO CREDIT. **DO YOUR OWN WORK!** Be sure to have your name at the top of each page of your report.