Physics 222
Lab and Recitation Syllabus
Fall 2007

Instructor: Dan Hernandez
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(904) 673-4403
Office Hours: Room 201, Wednesday 12:10-1:20

Required Text: Selected Introductory Physics Experiments
James E. Parks, Thomson Custom Publishing
ISBN: 0759310211

Section 222-3: Recitation: Nielsen 608, Friday 12:20-1:10pm
Lab: Nielsen 510, Friday 1:25-3:20pm

Section 222-5: Recitation: Nielsen 608, Friday 4:40-5:30pm
Lab: Nielsen 510, Friday 5:45-7:35pm

Grading Policy:
A brief quiz will be given at the beginning of each recitation section to ensure understanding of the material, as well as to confirm attendance. The topic of this quiz will usually be the experiment of the current or preceding week. Quizzes will count towards 20% of your final grade. Attendance itself is worth 10%. Lab reports will comprise the remaining 70%.

Expectations:
Prior to coming to class you are expected to have read both the appropriate textbook sections for the week and the experiment in the lab manual. Lab reports are due at the beginning of class the following week. Follow all instructions and safety procedures while in the lab. Turn off all equipment and clean up any messes before leaving the lab.

Make-up Policy:
Failure to do an experiment or turn in a lab report will result in a grade of zero for that experiment. If you know that you will be unable to attend one of the labs, you must notify me in advance with a sufficient excuse, and you will be allowed only one make-up during finals week. If there are extreme circumstances or emergency resulting in multiple missed labs, documentation will be required (medical, police, etc.). If such circumstances arise, please contact me as soon as possible.

Conduct:
Standard University conduct rules apply. Please turn off cell phones and mp3 players. No food, drinks, smoking, etc. Please limit discussions to physics-related topics.
Lab Reports

This course assumes that you have completed Physics 221 Lab, and therefore you have perfected the art of composing A+ Lab reports. Even so, here is an outline of what I expect:

1. **Title Page:** Separate page containing the title of experiment, you and your partner’s names, lab section, date you performed the experiment, and date of report submission.

2. **Purpose and Theory:** Explain the purpose of the lab. What did you set out to do? Explain the key concepts and include relevant equations. You don’t need to list every equation presented in the Lab manual.

3. **Procedure:** Explain what you did in your own words. Do not copy the lab manual verbatim. This section should only be a few sentences summarizing the procedure.

4. **Data:** All of the information that you collected should be presented here in properly labeled tables and graphs. Please do not staple in pages torn from your lab manual. Create new tables using a spreadsheet program.

5. **Results and Conclusions:** Give the numerical results of your calculation including percent error, then give a written interpretation of what these results mean. Explain any problems or sources of error and be specific.

6. **Questions:** Unless instructed otherwise, answer the questions presented in the “Questions” section of your lab manual. Many of the solutions can be found in your textbook.

**Make it look professional:**
Write the report as though the reader is at your level but unfamiliar with this particular experiment. All papers should be neatly stapled. The report should be typed in an appropriate font, tables and charts should be clear and readable, and the sections should be in the correct order. It is acceptable to write-in equations by hand if you are unable to type them properly, but make sure that your writing is legible and in pen. I will not penalize mistakes in grammar and spelling, but I can’t give it a good grade if I can’t understand it. Remember to include units of measure with your numbers. Plagiarism will not be tolerated.

The full schedule of experiments can be found online at http://www.phys.utk.edu/labs/ph222svl.pdf