Physics 222 Recitation and Laboratory

Section 001:
- Recitation: Nielsen 608, Friday 8:00-8:50 AM
- Laboratory: Nielsen 510, Friday 9:05-11:00 AM

Section 003:
- Recitation: Nielsen 608, Friday 12:20-1:10 PM
- Laboratory: Nielsen 510, Friday 1:25-3:20 PM

Lab Instructor: Rachel Wooten
Office: South College 310
Email: rwooten1@utk.edu
Office Hours: Monday 12:00-1:00 PM South College 310
                   Tuesday 1:00-2:00 PM South College 310
                   Thursday 1:00-2:00 PM in the Tutoring Lounge, Physics 203
                   Or, by appointment

Grading Policy: Laboratory Reports will make up 60% of the grade, quizzes will make up 30%, and class participation will make up the final 10%. I will use the following grading scale: A = 90-100, B = 80-89, C = 70-79, D = 60-69, F = 0-59.

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 class every time, along with a calculator.

Recitation: We will focus on problem solving and conceptual understanding. And since you learn physics best through practice, we’ll get lots of chances to practice. I will give quizzes at the beginning of class, so be prepared! The quizzes will test your knowledge of the previous recitations material and the current week’s lab.

Laboratory: Only ONE lab can be made up during the semester. If you know that you will be missing a lab, you can try to make it up during a different 222 section that same week (note that unfortunately, 222 Labs only meet on Fridays!), BUT you must always email me and the other TA before recitation. However, you must have a legitimate, official excuse (university function, doctor’s note) to miss a lab. Any lab missed and not made up (including not emailing me about missing lab) results in a zero for that lab with no exceptions! This also holds for Recitation Quizzes.

Before each class: I expect you to have done the following before each recitation/lab:
1) Read the chapters associated with that week’s lectures.
2) Read the experiment in the lab manual.

After completing each lab, you must make sure all equipment has been turned off before you leave. Following each experiment, you will be expected to turn in a lab report describing your findings. No Food or Drink in the Lab!

* Students with disabilities that require accommodation(s) should make an appointment with the Office of Disability Services (947-6087) to discuss their specific needs.
About Laboratory Reports
You will be expected to turn in a typed lab report with your findings at the beginning of the next recitation section meeting.

The University Honors Statement will be strictly adhered to:

HOW TO WRITE A GOOD LABORATORY REPORT

The goal of every lab report is to describe your experiment and results so that another scientist can read and understand the purpose, procedure, and conclusions of your experiment as well as why you performed it in the first place. As such, your writing should be clear and concise! Use complete sentences. As part of the scientific writing style, you should avoid the use of the first person, I, we, he, she, us, etc. You should include the following categories in your lab report:

1) Cover Page: Include lab title, your name first, your partner names next, lab section and time, lastly date of actual lab. If you would rather save paper, you may include this information at the top of your first page instead of providing a separate title page.

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 explain them briefly. *Use Equation Editor!

4) Procedure: Briefly describe how you performed 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. If you do not have Equation Editor, then just neatly write out the formulas. A good lab report should be about 2-3 single-spaced, one-sided 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 your name is at the top of each page of your report. Make sure to include all graphs, tables and calculations in your report. Don’t forget to staple your report!
(Thanks to Tony Wald for the use of his syllabus in designing this one)