PHYSICS 221 RECITATION AND LABORATORY
SECTION 017, FALL 2006
RECITATION: NIELSEN 608 FROM 8:00 am – 8:50 am TUESDAY
LABORATORY: NIELSEN 508 FROM 9:05 am – 11:00 am TUESDAY

Instructor: Tony Wald
email: awald@utk.edu
Office Hour: Nielsen: Nielsen 203, 3:25 pm – 4:35 pm, Thursday
            By Appointment: Nielsen 603, Desk #11. Out of elevator, turn right,
            end of the hall.
            By email: 7:30 am to midnight, usually answered the same day.

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.
                Scores for returned graded work will be 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 class. 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/extra problems will be emphasized.

LABORATORY: Only ONE lab can be made up during the semester. If you know you
will be missing a lab, you can try to make it up during a different 221 section that same
week 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. No exceptions! This also holds for Recitation Quizzes.
Before each lab/recitation I expect you to have done the following:
   1) Read from Serway/Faughn regarding topics to be covered in every recitation
      and lab. You know what material will be covered--see Levin's schedule.
   2) Read the experiment in the lab manual--see 221 lab schedule link.
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.
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:  

**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!). The key component in writing a lab report is to not use the words I, we, he, she, us, etc. Keep everything in a narrative form. Below are the major categories you need to incorporate in the report:

1) **Cover Page:** Include lab title, your name *first*, your partner names *next*, lab section and time, lastly date of actual lab.

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. 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.

Students are responsible for any changes to this syllabus as deemed necessary by the Lab Instructor.