

Physics 221 Lab Syllabus



Section 221001, Fall 2005

Lab location: Room 508 in the Nielsen (Astronomy and Physics) building

Lab time: 5:45 PM - 7:35 PM on Wednesdays

Recitation time: Room 608, 4:40 PM - 5:30 PM (the hour preceding the lab)

Instructor: Usama al-Binni Email: ualbinni@utk.edu

Office hours: Contact me to set up a meeting.

Laboratory manual:

Selected Introductory Physics Experiments

by James E. Parks

Thomson Custom Publishing, ISBN 0759310211

Available at the UT Book and Supply Store

Webpage: <http://web.utk.edu/~ualbinni/221> (Follow its contents regularly)

Lab Guidelines:

- **Attendance:** Attendance is mandatory, both in the recitation hour and in the lab. Remember that this basically a practical course, and accordingly, most of what you learn in it is done during the time you spend in the lab.
- **Quizzes:** Each lab we will have a small quiz in the material of the preceding lab period and/or in the material of the lab you're about to do, so missing labs will hurt your grades, both directly and indirectly.
- **Absence and Make-ups:** If for some reason you are unable to attend the lab, inform me as soon as you can, and preferably before the lab, so we can try arranging attendance in some other section, if possible. The first week of December is reserved for lab make-ups, however, deferring to your lab to that time would be a last resort, if you are unable to do the experiment during the time it is offered. Bear in mind, however, that if you do not come up with an official excuse, you will get a zero for that lab. But no matter what, before the end of the semester, **you must complete all labs and turn in all lab reports!**
- **Participation and Preparation:** Come to the lab prepared. Check the schedule of experiments before you come to the lab, and read through the experiment in the manual and any related sections in the Serway and Faughn text.

Grading:

The lab grade, which makes **20% of the overall course grade**, is divided up as follows:

- **Lab Reports:** 60%
- **Quizzes, Homework, and Pre-Lab Work:** 30%
- **Participation:** 10%

Please supplement the above guidelines with the ones from the 'Teaching Assistant Manual', pp. 10-14. See course's website for more details.

PHYSICS 221 LABORATORY
Schedule of Experiments Fall 2005 Semester

24-Aug	Classes Begin
24-Aug -26-Aug	No Labs
30-Aug -2-Sep	Statistical Analysis, Propagation of Errors, and Linear Regression
6-Sep -9-Sep	Statistical Analysis, Propagation of Errors, and Linear Regression, cont'd
13-Sep -16-Sep	Force Table
20-Sep -23-Sep	Acceleration Due to Gravity
27-Sep -30-Sep	Conservation of Mechanical Energy
4-Oct -7-Oct	Conservation of Linear Momentum
11-Oct -14-Oct	No Labs -- Fall Break Oct 13&14
18-Oct -21-Oct	Centripetal Force
25-Oct -28-Oct	Boyle's Law
1-Nov -4-Nov	Simple Harmonic Motion
8-Nov -11-Nov	Standing Waves
15-Nov -18-Nov	Refraction
22-Nov -25-Nov	No Labs --Thanksgiving Holidays Nov 24&25
29-Nov -2-Dec	Simple Lenses
6-Dec	Lab Final/Makeup
7-Dec -8-Dec	Study Period