Fall 2010, Physics 221-010 Lab Syllabus

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Office Hours: Monday 11:15 – 12:15 in the tutoring center, Room 201, or by appointment.

Grade Division
70% Lab Reports
20% Quizzes
10% Attendance

Quizzes
Quizzes will be given during the first ten minutes of recitation. If you come in after the quiz is over, you may not make up the quiz. Similar to the tests that you will have in lecture, the quizzes will be closed notes and closed book. No calculators allowed. The quizzes will be primarily multiple choice. The quiz will generally consist of three questions. One question will usually be a concept question from material recently covered in lecture. Another question will usually be a problem similar to homework problems assigned in lecture.

Attendance
Attendance is split into recitation and lab attendance. Both sections have equal weight. If you miss recitation then you will get a zero for the recitation attendance and the quiz. If you miss lab then you will get a zero for the lab attendance and the lab report.

Make-ups
Each student’s lowest lab, quiz, and attendance grades will be dropped. So you can miss one recitation and lab without affecting your grade. However, that means there will be no make-ups.

General Lab Rules
For each lab, students will work in groups of two or three. However, each student must turn in their own lab report. No group lab reports will be accepted. A lab report must be turned in for every experiment performed. Lab reports are due at the beginning of the next scheduled lab.

Late Lab Reports
If you do not turn in a lab report directly to me then put it in my mailbox in Nielson 401b, the room across from the elevator. (Keep in mind that this room is locked at around 4:30 p.m. every day so be sure to plan accordingly.) Please do not email me your lab report. For every day the lab report is late, 10 points will be deducted.

If You Miss a Lab
If you miss an experiment then you will get an automatic zero for the lab report of that experiment. Do not write a lab report for a lab you did not attend.
Even if you miss a lab you are still responsible for turning in the previous lab report in a timely manner. If you miss a lab you will have one extra day to turn in your previous lab report without suffering any points for lateness. (Lab is on Thursday so if you miss then you have until Friday to turn in your report.) Afterwards, 10 points will be deducted for each day the lab report is late.

**Lab Reports**

Each lab report will be worth 100 points. Each report should contain the following sections.

1) **Title section** will be worth approximately 5 points. This section should include:
   a) Your name
   b) Your partner’s name(s)
   c) Title of the experiment as written in the lab manual or on the lab schedule
   d) Date of the experiment (The date should be the date the experiment was performed, not the date turned in!)

2) **Introduction section** is worth approximately 25 points. This section should include:
   a) The title “Introduction”
   b) One or two sentences describing the general purpose of the experiment. For example, “The purpose of this experiment was to measure the acceleration due to gravity, g.”
   c) A very brief description in your own words of how the experiment was performed. Try to describe what data you took and how you obtained it.

   The introduction section should be at least 4 sentences and no more than half a page in length. Try not to copy the lab manual. Some examples of sentences to avoid are: “We followed what was written in the lab manual.” or “I had fun.” or “I learned a lot from this experiment.”

3) **Graphs and tables section** will be worth approximately 50 points. This section is the data sheet that you print out during lab.

   If you get an error larger than 15% then you probably did something wrong. So if you have a large percent error you should look for a mistake and fix it. The two most common mistakes are not using the correct units or typing a formula into Excel incorrectly. If you get a large error and you can not find the source then you should ask for help!

4) **Conclusion section** will be worth approximately 20 points and should include:
   a) The title “Conclusion”
   b) The final result of the experiment. For example, “We measured the acceleration due to gravity, g, to be 9.71 m/s^2.”
   c) The percent error found in the experiment (if applicable)
   d) A discussion about any conclusions you drew

   This section should be between two sentences to half a page and should not be more than a page in length.