

PHYS2350 EV1 Laboratory Syllabus

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Meeting Day/Time: Tuesdays, 6:00PM – 8:45PM

Classroom: Parker Building, Room 102

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This syllabus can be changed at any time at the instructor's discretion, but warning of changes will be given.

Welcome to the laboratory component of PHYS2350, General Physics I! The laboratory component is worth 20% of your grade in PHYS2350, overall, so it's very important to do well in the lab if you wish to earn a good grade in the class. The grading for the lab is going to be based on three components, but half of the grade is going to come from attendance and participation; it is crucial to attend the lab regularly to do well in the course!

Required Text: The lab manual for the class is provided online, at http://www.nova.edu/~castanod/lab_inst.pdf. The lab manual is written and maintained by Prof. Diego Castano, and **it is regularly updated** throughout the semester. Because of this, it is recommended that you **only** print out the chapter for the specific experiment you will be conducting during class. If, for instance, you print out a chapter for an experiment 3 weeks in advance, there is a chance that the lab manual could be updated by the time that experiment is done in class, and you would have the incorrect version of that particular chapter.

Class Structure: Mainly, you will be performing experiments that test aspects of what you learn in the lecture, and writing reports on your data and analysis of the data from the experiments. You will be conducting the experiments in groups, and you will be allowed to discuss your data and data analysis within your group, but you will be doing the analysis alone at home between labs, and turning in your completed report the following class. Note that labs do not occur each week, so there will be times when you will have more than one week to complete your lab report. The lab schedule is included in the course syllabus and on the course website.

Grading: The lab grade breaks down as follows:

Attendance/Participation	50%
Lab Report	40%
Quizzes	10%
Total	100%

The lowest graded lab report and quiz will be dropped.

Lab Reports: The **lab reports** are included in the laboratory manual, all you need to do is conduct the experiment as outline, perform the calculations required and input the numbers into the spaces provided, and then answer some post-experiment questions. Important formulas should be included at the start of the chapter for the experiment, or will be provided by the instructor. **It is important when taking measurements and recording data that the units are correct and provided.** If the lab manual asks that a measurement be taken in centimeters, make certain you are measuring in centimeters and include that unit with your data. While the lab reports won't be graded following a specific rubric, **the experimental part of the report will be worth 2/3 of the grade, and the post-experiment questions will be worth 1/3 of the grade.** For example, sections A – D in Experiment 1 concern the actual experiment conducted in the laboratory, and section E has the post-experiment questions. 2/3 of your grade for the lab report will be due to work done in sections A through D, and the remaining 1/3 for the work done in section E.

Quizzes: After you complete your experiment, you will be provided with a short quiz on the conceptual aspect of the experiment you just performed. The quizzes will vary in length, but **will typically be 2-5 questions** and should take roughly 15 – 20 minutes to complete.

Policies:

- You **must be on time** for the labs. Your group depends on you to help out with the experiment. If you are too late for lab (meaning your group has made significant progress on the experiment without you), you will be required to make up the lab or receive a zero for that experiment.
- If you **miss a lab**, you can attend any other PHYS2350 lab during the same week and make up the lab. Just email the instructor with the date/time you will be making it up and have the instructor of the makeup lab sign your data to indicate that you actually did perform the experiment in lab.
- While conducting the experiments and writing the lab report, feel free to use any resource at your disposal, including the internet, other students, the instructor, etc. The only thing you **cannot do is plagiarize** a resource in a response on your lab report.
- While taking the quizzes, **you will not be allowed the use of any resource**, unless specifically told otherwise. For the most part, the questions on the quizzes will not require the use of a calculator.