

Syllabus for General Physics 1 Lab
Fall 2020
Online

Instructor: Brian Espino

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Scheduled Office Hours: **M/W/F 11:30 – 12:30 and T/Th 2:05 – 3:00.** Office hours are sketchy now with the COVID-19 pandemic. My office can have room for maybe one student. Otherwise, email me any questions you have.

<u>Lab Assignment</u>	<u>Due Date</u>
1-D Motion on an Incline	September 3
Projectile Motion	September 10
Forces in Equilibrium	September 17
Atwood's Machine	September 24
Conservation of Mechanical Energy	October 8
Momentum and Kinetic Energy in Collisions	October 15
Rolling Motion	October 22
Buoyancy	November 5
Specific Heat	November 12
Ideal Gas Law	November 19

Lab Manuals: There is nothing to buy for this lab.

Online Labs: The online nature of this lab course makes this a unique semester. Big important note: I teach my online labs in a completely different format than the rest of the department. Instead of giving you “paper labs” and/or having you work with online simulators, you will observe the labs in videos as I perform them in real time. I have recorded the labs and uploaded the videos onto youtube. Links to these videos are found on the lab section’s D2L page. Each lab video starts with a brief introductory lesson before going through the experiment and recording the data. I will announce and record the data as it is measured. It is then up to the student to perform some calculations, fill out table(s), analyze the data, and answer some questions. If you have questions about any of the labs, do not hesitate to email me and I can answer your questions. For your own sake, do not wait until the assignment is nearly due to contact me. I picked Thursdays for the due dates. I have multiple lecture classes on Thursdays. You should definitely have your questions asked by Wednesday evening to allow enough time to solve any problems.

What to include in your lab reports: There are no formal lab reports to complete. **Simply follow the directions that I give for each assignment.** For each lab, I give

the directions on the board, and also provide a printout on D2L. The printouts will contain table(s) and some questions to answer. Either edit the files so you can fill out the tables or make your own tables in a word or excel document and answer the questions. **Just be organized.** Please don't have a table where the last column(s) are cut off and found on a separate page. Some labs will require you to add a graph or two, so make sure you are comfortable with making a graph on excel or any other plotting software. Then copy and paste any graphs onto your assignment.

Attendance: This is a lab course and attendance would normally be mandatory. Note that during a "normal" semester, we would have lab meetings on either Monday or Tuesday depending on what section you are enrolled in. However, the online nature of the lab this semester changes things a lot. You will be able to perform the labs on your own time, as long as you turn in your work by the respective due dates. I have chosen or modified these labs, or have designed new labs myself; to give you a broad variety of topics that corresponds to the material I cover in the lecture course. Due dates are chosen so that the lab course corresponds smoothly with the timeline of my lecture course. If you are in one of my lecture classes, treat the labs as extra practice. If you want to work ahead of schedule, go ahead. If there is an emergency that keeps you from turning in your lab on time, let me know as soon as possible. Keep in mind, if you avoid procrastinating, you reduce the chances of an emergency getting in the way.

How to turn in the labs: Labs are to be turned in using the dropbox on D2L. Simply turn your labs into a word file or pdf and upload them to the dropbox. I will then be able to grade your assignment using the editing tool in D2L. You will then be able to see how I graded your assignment, with any notes I have added, and your grade for each lab. I will then put your grades into the gradebook on D2L. One benefit of using the dropbox is that there will be a record of all your labs for the semester. Dropbox does not allow me to grade and mark on ".pages" files or lab reports turned in on google docs, so do not use these formats. If you use a Mac, just save it as a word or pdf file, or if necessary save as an image and upload the image(s).

Late lab reports: I try to make these labs efficient and remove any "fluff". These lab assignments should not take long to complete after going through the lab videos.

The due dates are there to keep the students on pace. Reports will be due by 11:59 PM on the respective dates. If a report is turned in late, I will deduct (1/10) 10% from the grade for that assignment. If a lab is more than two weeks overdue, it will not be graded. The dropbox will still allow reports to be turned in late; it just automatically makes a note of when the assignment was turned in. In addition, all labs must be turned in by Thursday December 3rd to receive a grade.

Copying of lab reports: It is acceptable for students to work together on labs and offer help to each other. However, it is a completely different story when a student copies or mooches off another lab student's report. Everybody needs to do their own work. Due to the nature of the demo labs, everybody in the class should have the same measurements. Do the necessary calculations and data analysis on your own. Also, write up the report, answering the conclusion questions in your own words. If there are pairs or groups of students turning in identically formatted or worded lab reports, I will still grade them, but the students will need to evenly share the points that are earned. For example if a pair of students make the same exact blatantly illogical errors on lab reports, it will stand out. Alternatively, if students have the same uniquely weird formatting for their tables and graphs, I will notice. Let's say I find this occurring and the lab report would have made an 8/10. The two students will each get a 4/10.

My grading scale for my lab sections:

Note that labs will be worth 10 points each. The exception is the projectile motion lab that is worth 20 as it counts for two labs.

Grade Scale:

90% - 100%	A
88% - 89.9%	A-
86% - 87.9%	B+
80% - 85.9%	B
78% - 79.9%	B-
76% - 77.9%	C+
70% - 75.9%	C
68% - 69.9%	C-
66% - 67.9%	D+
60% - 65.9%	D
< 60%	F

Special needs: Any student with a special need for an accommodation for any course activity should meet with the instructor as soon as possible to make arrangements for any necessary arrangements.