

Technical Physics II Lab - PHYS 201L

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Office: LSF L103H, (843) 661-1445

T 12:45 - 3:45 PM MSB 118

Office Hours: T 10 - 11 AM, W 12:30 - 1:30 PM, TH 3:30 - 4:30 PM (or by appointment)

Learning Goals:

By the end of this course, the student will

- Be comfortable recording data and observations from experiments
- Be able to apply lab skills and data analysis techniques to produce trustworthy results
- Be able to express and discuss the results of an experiment in a clear manner that allows for the student's work to be reproduced by others

Schedule of Labs (subject to change)

Week of January 18:	Graphing and Excel I
Week of January 25:	Graphing and Excel II
Week of February 1:	NO LAB
Week of February 8:	Pendulums and Statistical Significance I
Week of February 15:	Pendulums and Statistical Significance II
Week of February 22:	NO LAB
Week of March 1:	Freefall and Model Comparisons I
Week of March 8:	Freefall and Model Comparisons II
Week of March 15:	Practice Presentation: Freefall
Week of March 22:	Springs and Model Fidelity I
Week of March 29:	Springs and Model Fidelity II
Week of April 5:	Practice Presentation: Springs
Week of April 12:	Student Projects I
Week of April 19:	Student Projects II

Grading

Prelab:	15%
Lab Notebook:	35%
Formal Reports:	30%
Project Presentation/Report:	20%

The prelab will contain questions and activities related to the coming week's lab and must be completed before your lab session. During each lab session, you will keep an electronic lab notebook (using Google Docs or Word) in which you

- Summarize any discussions you have with other students
- Record your ideas and/or plans for the day's activities
- Carefully lay out what you did and what happened
- Record any problems and how you fixed them
- Record any conclusions, observations, or thoughts

Another student should be able to read your lab notebook and exactly replicate your work. This is science. Anything less is just a fun story about a thing that happened to you one time.

I will more thoroughly discuss the requirements and rubric for the formal reports before they are due. The last two weeks of the course will allow each student to design, perform, analyze, and present an experiment that expands upon one of the previous labs.

ADA Statement

If you have a disability that qualifies you for academic accommodations, I am happy to accommodate you. The [Office of Counseling and Testing](#) will provide me a letter listing your needs, but please come talk to me about how we can implement them in the context of this class. More information can be found in the [Student handbook](#).

Academic Integrity

The labs can be completed semi-collaboratively, but each lab notebook, report, and presentation must be the sole product of each student's brain and effort (in other words, all cheating or plagiarism will be reported and handled as detailed in the Student Handbook). For my part, I will not discriminate against any student for any reason. No discriminatory or hostile behavior toward fellow students or the Learning Assistant will be tolerated. If you experience or witness discriminatory, abusive, or other unwanted behavior, you should contact me, the Title IX Coordinator, and/or the Vice President for Student Affairs, as appropriate.