Physical Science Lab - PSCI 101L

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Online, Instructional videos posted weekly
"Office" Hours: By appointment: We can communicate by email, Zoom, Discord, Hangouts, or any other agreeable method

Learning Goals:

By the end of this course, the student will
- Be comfortable recording data and observations from simple experiments
- 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)

June 3:	Measuring Density
June 8:	Investigating Acceleration
June 10:	Graphical Representation of Data
June 15:	Free-Fall Motion
June 17:	Projectile Motion
June 22:	Newton's Second Law
June 24:	Sound Waves and Beats
June 29:	Electric Circuits
July 1:	Electricity and Magnetism

Academic Integrity

Each lab report must be the sole product of each student's brain and effort, although group work is allowed (in other words, all cheating or plagiarism will be reported and handled as detailed in the Student Handbook). There will of course be significant similarity in the reports within a group, but each student should use their own words (and not those of the lab manual nor their lab partner). For my part, I will not discriminate against any student for any reason and will make any reasonable accommodations necessary to meet a student's needs. No discriminatory or hostile behavior toward fellow students will be tolerated.

Grading

Your grade will be determined by the following rubric:

	Poor	Adequate	Exceptional
Completion of lab	Student attempted only a small portion of the lab. **(0 - 5 pts)**	Student did not fully complete the lab activity. **(6 - 15 pts)**	Student completed the lab activity. **(16 - 20 pts)**
Results	Results show little evidence of effort or carefulness. Units are not used (when needed) or are used incorrectly. **(0 - 5 pts)**	Some results are outside acceptable uncertainty/error bounds. Some units may be missing. **(6 - 20 pts)**	Results are reasonable and contain appropriate units. Some errors may be present. **(21 - 25 pts)**
Analysis	Analysis is incorrect and shows little understanding of the physical principles. **(0 - 10 pts)**	Analysis varies in correctness and/or completeness. **(11 - 30 pts)**	Analysis is correct and expressed coherently. Some errors may be present. **(31 - 45 pts)**
Conclusion	Conclusion questions are missing or contain no meaningful discussion (e.g. single-word answers).. **(0 - 2 pts)**	Conclusion contains significant errors in discussion of results and sources of uncertainty. **(3 - 8 pts)**	Conclusion gives reasonable interpretation of results and contains valid sources of uncertainty. **(9 - 10 pts)**

Each lab report will be weighted equally in determining the final grade, and I will drop the lowest lab. **Lab reports are due on the Friday of each week at 5:00 PM (there will generally be two labs due each week). Late work will receive a flat 20 point penalty.** If you know that you will be unable to complete a lab during the assigned week and have a legitimate excuse, please let me know as soon as possible. **Your grade does not depend on getting a perfect result (in fact, this does not enter into your grade at all and would be a bit suspicious).** However, your result should be the product of careful work and represent your best effort.