General Physics II Lab - PHYS 216L

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Online
"Office" Hours: By email or appointment. If you would like to arrange to speak on Zoom or another virtual method, please first send an email to set up a time. Otherwise, we can communicate via email.

Schedule of Labs (subject to change)

Lab 1:   Ohm's Law & DC Circuit Fundamentals
Lab 2:   Series and Parallel Circuits
Lab 3:   Capacitors
Lab 4:   Kirchoff's Laws
Lab 5:   Alternating Current (AC) Circuits
Lab 6:   Faraday's Law (EM Induction)
Lab 7:   Reflection and Refraction
Lab 8:   Lenses and Mirrors
Lab 9:   Diffraction and Interference

Attendance

Based on prior experience, there will not be synchronous class meetings. I will post introductory videos twice a week giving some background information about the lab and walking through a rough outline of how the lab will be performed.

Grading

Each lab report will be weighted equally in determining the final grade, and I will drop your lowest lab. There is no final exam. **Lab reports are due each Friday at 5:00 PM (with the exception of the final lab). As the summer session only lasts 5 weeks, there will generally be 2 reports due each week. Late reports will be penalized 20% of the maximum score and must be turned in by the end of the following week.** Your score will be determined using the attached rubric. Your report and results should reflect that all reasonable care was taken to perform the experiment correctly, but **the grade does not depend on getting a perfect result.** If you will not be able to complete a lab on time, and you have a legitimate excuse, please let me know as soon as possible.

	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 - 15 pts)**	Results are reasonable and contain appropriate units. Some errors may be present. **(16 - 20 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 - 40 pts)**
Conclusion	Conclusion questions are missing or contain no meaningful discussion (e.g. single-word answers).. **(0 - 5 pts)**	Conclusion contains significant errors in discussion of results and sources of uncertainty. **(6 - 15 pts)**	Conclusion gives reasonable interpretation of results and contains valid sources of uncertainty. **(16 - 20 pts)**

Academic Integrity

Each lab report must be the sole product of each student's brain and effort, even when completed in a group (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. 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. If you experience or witness discriminatory, abusive, or other unwanted behavior, you should contact me and/or the Title IX Coordinator, as appropriate.