

PHYC 152L

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Hello - I am here to help you do your labs and learn some physics that will help you in your lecture class and future courses. Always feel free to ask questions or make suggestions. Also, feel free to talk to the Lab Director in room RH 113, phone 277-2751. Welcome to Physics 152L!

An electronic version of this document is available online at <http://unm.edu/~jagross/courses/phyc152l>.

Description

Physics 152L is the laboratory associated with the 152 lecture covering topics in electricity, magnetism, geometrical optics and wave optics. Hands on experiments involving data collection and analysis give students a better conceptual framework for understanding physics. Lab experiments mirror and enhance lecture topics. (*Pre- or co-requisite: Physics 152*)

Objectives

This course serves to reinforce concepts presented in lecture and to familiarize students with various experimental techniques. Lab students will:

- Read and interpret procedural instructions
- Gather and analyze data using electronic and optical devices
- Observe electrical, magnetic and optical phenomena
- Relate observed phenomena to mathematical and physical models
- Use basic laboratory equipment (e.g., timer, balance, rods, clamps, etc.)

Attendance

Lab attendance is very much mandatory.

Scheduled absences: If you cannot make it to your usual section, attending a different lab section is highly desirable. Contact me BEFORE the class meeting to make sure there is room. If you wish to attend a lab that is not taught by myself, contact BOTH TAs before the appropriate times.

Unscheduled absences: Unscheduled absences WITH A VAILD EXCUSE must be made up in the following week. Contact me to arrange a mutually convenient time.

Unexcused absences: One unexcused absence will cause your final grade to drop one letter grade. Two unexcused absences will cause you to fail the class.

Materials

Lab workbooks are available at the Bookstore. Every student is required to purchase one before the second week of lab. No copies will be provided.

Preparation

Glance at the lab before coming to class. The order of the labs is approximately the order in which they appear in the laboratory workbook, but check the posted schedule at <http://panda.unm.edu/regener/lab/>.

Students with Disabilities



Qualified students with disabilities needing appropriate academic adjustments should contact me as soon as possible to ensure your needs are met. Handouts are available in alternative accessible formats upon request.

Grading

Each week, you will receive a score with three components: one for attendance, one for attitude and participation, and one for the physics and other details in the lab report. Score for everything well done: $2(\text{attendance}) + 2(\text{participation}) + 4(\text{lab report}) = 8$. A score of 8 corresponds to a letter grade of A. Your semester grade will be based on the weekly scores and on quizzes which may be given at announced times in the semester.

Below are guidelines for the weekly scores:

Attendance

<i>Grade</i>	<i>Situation</i>
0	Not present in your section. Attendance in another section not verified by TA.
2	Attendance <i>verified by TA</i> .

Attitude/Participation

<i>Grade</i>	<i>Situation</i>	<i>Example Behavior</i>
0	No participation	Reading newspaper, doing homework, antagonizing lab partners, etc.
1	Passive participation	Merely recording data, not helping with set up, not participating in discussions, copying partners, etc.
2	Active participation	Helping with set up, participating in data taking, asking questions, participating in discussions, etc.

Lab Report

<i>Grade</i>	<i>Quality</i>	<i>Example</i>
0	No report	Blank paper
1	Unacceptable	Student turned in report but it was unacceptably poor. Significant errors, unanswered questions, missing data, etc.
2	Acceptable	Report is OK, but there are small errors or missing entries (minimal).
3	Good	Report has only minor error(s).
4	Standard	The report is everything I would expect. All entries are complete, all questions meaningfully answered, data record including graphs is clear and correct, all calculations and units are correct. The report is organized and legible.