

Physics 4B Lab

Instructor: Eduardo Luna
Email: lunaeduardo@fhda.edu
Homepage: <http://faculty.deanza.fhda.edu/lunaeduardo>
Office: S55A
Office Phone: 408-864-8666
Office Hours: SEE HOMEPAGE
Final Exam Date: During lab on the last week of class
Required: Lab Notebook (8.5" x 11") spiral type, Scientific Calculator, Metric Ruler

OBJECTIVE

1. To obtain a personal, hands-on experience with the experimental methods used in Electricity and Magnetism. This includes performing a variety of experiments in AC and DC circuits and using various electronic equipment to make required measurements.
2. Reinforce the concepts and theories presented in the lecture.
3. Develop the knowledge and skills required to make accurate measurements and learn to analyze the errors and uncertainties associated them.
4. Learn to analyze data using graphical, statistical, and computer based techniques.
5. To write a coherent comprehensive scientific lab report in the appropriate format.
6. Collaborate with lab partners during the experimental procedure to accomplish the objective.

CLASS ATTENDANCE

You are expected to be here at the beginning of each class, every day for the rest of the quarter. If you miss 2 or more labs you will be dropped from the lab class which means you will also be dropped from lecture. However, if you stop attending lecture or lab **it is your responsibility** to ensure being dropped or withdrawn from the course in order to avoid an "F" in the course. I will take roll at beginning of class. If you are not there when your name is called you will be marked absent. Students can only attend the lab session that they are scheduled to attend.

LAB EXPERIMENTS

Lab experiments will be available on my HomePage at <http://faculty.deanza.fhda.edu/lunaeduardo/>. A copy of the lab schedule for the quarter will be given to you. You will need to download and read the experiment for the corresponding week before you come to lab. Doing this will allow you to come to lab class prepared and be more efficient. Lab experiments are to be done in an 8.5"x 11" notebook and according to the Lab Report Format handout. Only write on one side of a page and start a new lab report at the top of a page. Write the names of your lab partners at the top right-hand corner of the lab report. The lab reports are due at the end of class. You will turn in the lab notebooks at the end of class, you do not take them home.

GRADING

1. Only 4 lab reports will be graded. Each lab will be worth 20 point.
2. Lab reports will be worth 50 % of final lab grade
3. Lab final will be worth 50% of final lab grade. It will be a comprehensive final based on all the experiments that were performed during the quarter. You will be allowed to take the lab notebooks home to study for the lab final, but you cannot use the lab notebooks during the lab final.
4. There are no make-up labs. If you miss a lab you get a ZERO. You cannot attend another lab session to make-up lab.