

PHYSICS 4A Lab – Winter 2017

Instructor: Tom Marshburn
Email: marshburnthomas@fhda.edu
Lab Hours: W 2:30PM-5:20PM (Room S17)
Final Exam Date: Wednesday, March 22 during lab time
Required: Quad-Ruled Lab Notebook, Casio FX-300MS Scientific Calculator or similar

OBJECTIVE

1. To obtain a personal, hands-on experience with the experimental methods used in an introductory Classical Mechanics Laboratory course.
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 with 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.

ATTENDANCE

You are expected to be here at the beginning of each lab. Roll call will be taken when your name is called to pick-up your lab notebook. If you are not there to pick up your lab notebook you will be marked

absent. If you are marked absent 2 or more times 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 However, if you stop attending lecture or lab it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid an "F" in the course. 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://www.deanza.edu/faculty/marshburnthomas/phys-4a-lab.html>

A copy of the lab schedule for the quarter is also provided at this website. 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 a quad-ruled lab notebook and according to the Lab Report Format handout. You must 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. Your lab report grades will be determined by the following scores:

Lab 1 : 20 pts

Lab 2: 20 pts

Lab 3: 20 pts

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.

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 a lab.