# DE ANZA COLEGE - PHYSICS 4A LAB - SPRING 2024

## **Administrative**

**Instructor** Mehmet Artun

Email artunmehmet@fhda.edu

Office Science and Technology Village S55

Office Hours Thursday 12:15pm to 1:15pm S55

Tuesday 2:30pm to 3:30pm S55

**Lab Hours** Th  $2:30 \rightarrow 5:20$  PM (Room S11 - Sec 04Y)

Tue 10:30 AM → 2:20 PM (Room S11 - Sec 03Y) (Prof. Eduardo

Luna)

**Text** Physics for Scientists and Engineers (Vol. 1), 9th Edition,

By Serway/Jewett

Required Casio FX-300MS, TI – 30XIIS, TI-30Xa, or equivalent

**Prerequisites** Physics 50 with a grade of C or better, or the equivalent (including

high school physics); Completion of Math 1A with a C or higher and

concurrent enrollment in Math 1B (or already completed).

**Note** Last day to drop a class with a "W" is Friday, May 31st. Students who

do not drop by this date will be given the appropriate grade for their

achievement in the class at the end of the quarter.

#### **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 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. Attendance will be taken at the beginning of class. If you are late or 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 However, if you stop attending lecture or lab it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid an "F" in the course.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 section that they are scheduled to attend. Leaving the classroom before the end of the lab session will result in a "ZERO" for that that lab.

### LAB EXPERIMENTS

Lab experiments will be available in Canvas. A copy of the lab schedule for the quarter is also provided on Canvas. You will need to 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 in performing the lab. Lab reports need to be typed and written according to the Lab Report Format handout and rubric included in the website. The lab reports need to be submitted on Canvas by the indicated due date and time. Lab reports will NOT BE ACCEPTED after Canvas closes.

Make sure to submit lab reports at least 1 hr. before deadline to avoid any technical or last minute issues.

### De Anza College Academic Integrity

"The following types of misconduct for which students are subject to disciplinary sanctions apply at all times on campus as well as to any-off campus functions sponsored or supervised by the college: cheating, plagiarism or knowingly furnishing false information in the classroom or to a college officer" This implies that any submitted lab report must be your own individual work. Although you are encouraged to work together with other students in the class any submitted work must be your own individual work. Viola ing the Academic Integrity Policy will result in a grade of "F" in the class and the incident will be reported to the college disciplinary office.

### **GRADING**

- 1. Your lab report grades will be determined by the following scores:
  - Error Propagation Handout 14 pts
  - Lab 1 : 20 pts
  - Lab 2: 20 pts
  - Lab 3: 20 pts
- 2. Only 3 labs reports will be graded. At the end of the quarter I will take the average of the lowest and highest lab score and replace the lowest with the average. I will only do this if you've submitted ALL the lab reports.
- 3. Lab reports will be worth 50 % of final lab grade
- 4. 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. It is closed lab notebook.
- 5. 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.