

## DE ANZA COLLEGE – PHYSICS 50 - Online Asynchronous

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| <b>Instructor:</b>          | Eduardo Luna   |
| <b>Email:</b>               | Email me through Canvas  |
| <b>Homepage:</b>            | Check Canvas   |
| <b>Office:</b>              | S56A   |
| <b>Office Hours:</b>        | See Canvas   |
| <b>Lecture Hours:</b>       | Class is fully Asynchronous. We do NOT meet face-to-face throughout the quarter. All lectures will be recorded and posted on Canvas. |
| <b>Final Exam Date:</b>     | Week 12 during lectures finals week.   |
| <b>Text:</b>                | PHYSICS 4 <sup>th</sup> Edition Vol. 1 by James S. Walker  |
| <b>Required Calculator:</b> | Casio FX-300MS, TI – 30XIIS, TI-30Xa, or equivalent  |
| <b>Advisory:</b>            | Mathematics 32 and Physics 10.   |

**Note: See MyPortal for last day to drop a class with a “W”. 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**

This is an algebra-based course in Classical Mechanics. The main objective of the course is for the student to understand the laws/theories and principles of Classical Mechanics in order to be able to describe the motion of a system so that we can better understand the physical world around us. The foundation laws of Classical Mechanics are Newton’s Laws of Motion. Thus, we can equivalently state that the main objective is for the student to learn and understand Newton’s Laws of Motion from a conceptual and practical viewpoint. This course will also help you develop the problem-solving skills as a preparation for Physics 4A. Classical Mechanics is often divided into two parts:

- a) Kinematics – The description of the motion of an object without regard to the forces causing the motion. We will describe the motion of an object (system) moving in 1-D and 2-D.
- b) Dynamics – The description of the motion of an object with regard to the forces that cause the motion. We will use Newton’s Laws of Motion to help us describe the motion of an object (system) with regard to the forces acting on an object.

In our study of kinematics we will learn how to analyze the motion of a particle in 1-D and 2-D. In dynamics we will learn to analyze the motion of a particle (system) by using Newton’s Laws of Motion.

### **ATTENDANCE**

You are expected to be active and participate in the class throughout the quarter. Make sure to watch the lectures, submit the quizzes, and all the exams. If you stop participating in the class it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid receiving an “F” in the course.

### **HOMEWORK**

Homework will be assigned on a regular basis but will NOT be collected. **However, it is your responsibility to have the homework completed before the following lecture.** It is essential to your success in this course that you put a solid effort into the homework. This is how you will learn physics and succeed in the class. (The quizzes you will be taking will generally be based on the homework problems assigned). If you are having difficulties with the class/homework, here are some things that I recommend to help you succeed in the class:

1. Attend office hours.
2. Work together and discuss problems with other students in the class
3. Attend the Student Success Center for tutoring.

On the homework, quizzes, as well as on the exams, you need to show all your work in complete detail in order to receive full credit. Your solutions should show your step-by-step process and logic that was used to obtain the answer. **No credit will be given if no work is shown even if you obtain the correct answer to the problem.**

### **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”

Violating 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.

### **QUIZZES**

See Canvas for quiz date and due date. The quizzes will generally be based on homework and lecture material from the corresponding week. Therefore, it is to your advantage to watch every lecture and have **ALL** the homework completed. If you miss a quiz you will get a **ZERO** for that quiz. **NO MAKE-UP QUIZZES!** Quizzes will be submitted on Canvas and due by the indicated date and time. Quizzes will **NOT BE ACCEPTED** after the assignment is closed on Canvas. Make sure to submit your quizzes at least 1 hr. before deadline to avoid any technical or last minute issues. Quizzes need to be submitted in PDF format and you can only submit one single PDF file. Lowest quiz score will be dropped at end of quarter. There will be an extra-credit quiz during the quarter.

### **EXAMS**

There will be three exams including the lecture final. Exact dates for exams will be given at least four days prior to each exam. The exam format may be work-out problems, multiple-choice, conceptual, or a combination of the three. The key to the success on the exams is preparation; **DO THE HOMEWORK**, watch the lectures, read the textbook and make sure you understand it, and ask questions if you don't understand. **THERE ARE NO MAKE-UP EXAMS!** If you miss an exam you will get a **ZERO** for that exam. At end of quarter I will take the average of the lowest and highest exams (including the lecture final) and replace the lowest with the average. You must take **ALL 3** exams in order to replace the lowest exam score by the average! Exams will be submitted on Canvas and due by the indicated date and time. Exams will **NOT BE ACCEPTED** after the assignment is closed on Canvas. Exams need to be submitted in PDF format and you can only submit one single PDF file. Make sure to submit your exams at least 1 hr. before deadline to avoid any technical or last minute issues.

Note: If there is a dispute in the grading of any quiz or exam I will consider looking at them a second time **only** if it is handed back to me **within 2 school days** after I return them.

### **GRADING**

Grades will be based on the following components with the weights shown:

|               |     |
|---------------|-----|
| Quizzes       | 25% |
| Exam 1        | 25% |
| Exam 2        | 25% |
| Lecture Final | 25% |

Grades will be determined as follows:

88% --->100% = A  
76 %---> 87% = B  
65% ---> 75% = C  
54% ---> 64% = D  
0 ---> 53% = F

**Student Learning Outcome(s):**

- Examine critically new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of mechanics.

**Office Hours:**

|      |       |                     |
|------|-------|---------------------|
| S56a | M,T,W | 1:30 PM - 2:20 PM   |
| Zoom | TH    | 10:30 AM - 11:20 AM |