# DE ANZA COLLEGE - PHYSICS 50 - SUMMER 2020

**Instructor**: Eduardo Luna

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**Lecture Hours:** Recorded ZOOM lectures will be available to view starting at 8:30AM, TWTH.

Each lecture will be 2 hrs long. I will be available LIVE ZOOM from 11 -

11:30AM, TWTH for any questions or help you may need.

Final Exam Date: Section 1 (CRN 00895) & Section 2 (CRN 11183), Thursday, August 6, from

10:00AM - 12:00PM (noon)

**Text:** PHYSICS 4<sup>th</sup> Edition Vol. 1 by James S. Walker

Required Calculator: Any type

**Advisory:** Mathematics 43 and Physics 10.

The quizzes and lecture final for the quarter will be available on Canvas. You can access Canvas through My Portal or the De Anza College homepage. Here is the link to getting help on using Canvas: https://www.deanza.edu/online-ed/help.html

Note: Check My Portal for the 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:

- 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**

Lectures will be pre-recorded on ZOOM and uploaded into the ZOOM cloud M-Th. They will be available to view starting at 8:30AM from M-TH. I will email the class the link to each of the lectures. You are expected to view the lectures on a daily basis at your convenience for the rest of the quarter. If you stop attending class for any reason, it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid an "F" in the class..

### **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, I strongly encourage you to attend office hours. I will be having live ZOOM office hours daily.

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"

## **QUIZZES**

There will be a quiz every Thursday from 2:00PM – 3:00PM. This time includes 45 min. to complete the quiz and 15 min to download/upload the quiz to Canvas. The quizzes will generally be based on homework and lecture material from the corresponding week. Therefore, it is to your advantage to attend 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!** At end of quarter I will take the average of the lowest and highest quiz scores and replace the lowest with the average. You must take ALL quizzes in order to replace the lowest quiz score by the average!

Note: If there is a dispute in the grading of any quiz or exam I will consider looking at them a second time **only within 2 days** after I grade them.

### **GRADING**

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

Quiz 1	20%
Quiz 2	20%
Quiz 3	20%
Quiz 4	20%
Lecture Final	20%

Grades will be determined as follows:

# **Student Learning Outcome(s):**

\*Critically examine 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.