

## DE ANZA COLLEGE – PHYSICS 50 – SPRING 2021

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**Instructor:** Eduardo Luna  
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**Homepage:** <http://faculty.deanza.fhda.edu/lunaeduardo>  
**ZOOM Office Hours:** MTW 1:30 – 2:20PM, TH 10:30 – 11:20AM, F 8:30 – 9:30AM. ZOOM link for office hours is provided on Canvas.  
**Lecture Hours:** PHYS 50.1Z - 8:30 – 9:20AM, M-TH  
PHYS 50.2Z - 2:30 – 3:20PM, M-TH  
Recorded ZOOM lectures will be available to view on Canvas.  
**Final Exam Date:** PHYS 50.1Z - 8:30 – 9:20AM, Wednesday, June 23, 7 - 9AM  
PHYS 50.2Z - 2:30 – 3:20PM, Thursday, June 24, 1:45 – 3:45PM  
**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 exams for the quarter will be available on Canvas. You will need to have access to Canvas from MyPortal in order to take the quizzes and exams. You are also required to have a laptop and reliable internet connection to attend the lectures and take the quizzes and exams. If you need help with Canvas is the link: <https://www.deanza.edu/online-ed/help.html>.

**Note: Last day to drop a class with a “W” is Friday, May 28 . 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 in class at the beginning of each class for the rest of the quarter. In order to help you review for the quizzes and exams, the lectures will be recorded on ZOOM and posted on Canvas on a weekly basis. 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. If you are having difficulties with the class/homework, I strongly encourage you to attend the ZOOM office hours.

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

There will be a quiz every Thursday, the last 25 min. of class. The quizzes will be available on Canvas from 8:55AM – 9:20AM for the PHYS 50.1Z class and from 2:55PM – 3:20PM for the PHYS 50.2Z class. This is the time you have to take the quizzes and then upload them into Canvas. The quizzes will generally be based on homework and lecture material for 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!** Lowest quiz score will be dropped at end of quarter.

## EXAMS

There will be three 50 minute exams and a comprehensive 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 exams will be from 8:30AM – 9:20AM. The exams will be available on Canvas from 8:30AM – 9:20AM. This is the time you have to take the exams and then upload them into Canvas. The key to the success on the exams is preparation; **DO THE HOMEWORK**, attend 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 three in-class exams and replace the lowest with the average. You must take ALL 3 exams in order to replace the lowest exam 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** 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	20%
Exam 1	20%
Exam 2	20%
Exam 3	20%
Lecture Final	20%

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):**

\*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.