DE ANZA COLEGE – PHYSICS 4A – SPRING 2026

Instructor:	Eduardo Luna
Email:	lunaeduardo@fhda.edu (*Do not email me through CANVAS because I do not check email on CANVAS*)
Homepage:	http://faculty.deanza.fhda.edu/lunaeduardo
Office:	S56A
Office Hours:	MTW 1:30 - 2:20PM
Lecture Hours:	M-TH, 9:30-10:20AM (Room S34), Friday 9:30-10:20AM (ZOOM). Check Canvas page for ZOOM link for Friday lecture.
Lab Hours:	MW10:30AM- 1:20PM (Room S11)
Lecture Final Date:	Tuesday, June 23 from 9:15 – 11:15AM
Text:	Physics for Scientists and Engineers (Vol. 1), 9th Edition, 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: See MyPortal for last day to drop 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 a calculus-based course in Classical (Newtonian) 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. 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 and other formulations of such laws (Work and Kinetic Energy Theorem, Conservation Energy, Linear and Angular Momentum). Law of gravity will also be discussed.

ATTENDANCE

You are expected to be in class at the beginning of each class for the rest of the quarter. If you are late ***or*** absent **5** or more times you will be dropped from the class. However, if you stop attending 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 and lecture material). If you are having difficulties with the class/homework, here are some things that I recommend to help you succeed in the class:

1. Ask for help during class and attend office hours.
2. Work together and discuss problems with other students in the class.
3. Math & Science Tutorial Center.

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.** Answers to homework even problems are posted on the class homepage.

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.

DISRUPTIVE BEHAVIOR POLICY

Any DISRUPTIVE BEHAVIOR during class will NOT be tolerated. If a student is in any way disruptive during the class, the student will be given a warning. If the problem continues, the student will be asked to leave the class and a formal disciplinary report will be filed with the college disciplinary officer. The incident will be recorded in your college record and will be sent with your transcripts to any university/college requesting student records.

ELECTRONIC DEVICE POLICY

The only electronic devices allowed in class are calculators and phones. The use of laptop computers is NOT allowed during class. Phones need to be set on 'silent' mode to avoid disturbing other students in the class. Phones or any other electronic device cannot be used to take video of any lecture material during class. Note-taking electronic devices are permitted with instructor's prior permission.

QUIZZES

There will be a quiz every Monday the last 30 min. of class. The quizzes will generally be based on homework problems 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!** Lowest quiz score will be dropped at end of quarter. There will be a take-home extra credit quiz towards end of 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. Only one of the listed calculators can be used during the exam. 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 lowest and highest 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, 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%
Lab	20%
Exam 1	20%
Exam 2	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

There is NO Canvas for the lecture part of the class since it is not needed. Make sure to keep all returned quizzes/exams so that you can calculate your current grade at any time during the quarter.

Student Learning Outcome(s):

• Examine new, previously un-encountered problems by critically analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of mechanics.
• Acquire skill and confidence in taking precise and accurate scientific measurements, with their uncertainties, and then with calculations from them, analyze their meaning as relative, in an experimental context, to the verification and support of physics theories.

Office Hours:

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