DeAnza College

Physics for Scientists and Engineers: Mechanics

Department of Physics — Fall 2026

Course Information

Course:	Physics for Scientists and Engineers: Mechanics
Units:	6
Room:	S32
Day/Times:	M T W R · · · 1:30 P.M. – 2:20 P.M. Class (**S32**)
	· · · · F · · 1:30 P.M. – 2:20 P.M. Class (**online**)
	M · · · · · · 10:30 A.M. – 1:20 P.M. Lab (**S11**) (Section 08Y)
	· · W · · · · 10:30 A.M. – 1:20 P.M. Lab (**S11**) (Section 09Y)
Prerequisites:	Physics 50 with a grade of C or better, or the equivalent high school physics; Completion of Math 1A with a C or better and concurrent enrollment in Math 1B (or already completed).
Textbook:	Physics for Scientists and Engineers (Vol. 1), 9th Edition, Serway/Jewett

Instructor Information

Name:	Anthony LaTorre
Email:	latorreanthony@fhda.edu
Website:	https://www.deanza.edu/faculty/latorreanthony/
Office Hours:	M T W R · · · 2:30 P.M. – 3:30 P.M. (**S43**)

Course description

This is a calculus-based introduction to Newton's laws. By the end of the class you should be familiar with concepts like force, mass, position, velocity, acceleration, momentum, and energy. The primary objective in this class will be to learn how to model systems so that you can apply Newton's laws to solve problems.

Advice

The only way to really learn the material in this class is by attending lecture, reading the textbook, and spending as much time as possible doing the homework. If you are stuck on a homework problem, going over and over it, reading the textbook, and hitting your head on the desk because it's difficult, **that is what learning looks like**! If you are looking up the answer the first time you can't immediately proceed, that is not learning.
If you eventually get too stuck, you can come to office hours or go to free tutoring at the Math, Science, & Tech Resource Center.

Course Evaluation and Grading Policies

Grades are based on:

Quizzes	20%
Lab	20%
Exams	40%
Final Exam	20%

Final grades will be determined as follows:

92	–	100	A
90	–	91	A-
88	–	89	B+
82	–	87	B
80	–	81	B-
78	–	79	C+
60	–	77	C
50	–	60	D
0	–	50	F

Overall class scores may be curved.

Quizzes

Quizzes will be given at the end of classes, so make sure to attend! The material will generally cover what we have already covered in class and the homework. The lowest quiz grade at the end of the quarter will be dropped. There are no makeup quizzes.

Exams

There will be two midterms and one comprehensive final. There are no makeup exams. Make sure to bring a pencil, eraser, and scientific calculator to the exams. Graphing calculators, phones, laptops, tablets, etc. are not permitted. No additional notes or materials are allowed on the exams.
Communicating with other classmates or using any of the electronic devices not permitted may consitute cheating and result in a zero for the exam.

Topic Schedule

Week 1 ..... Time and Distance
Week 2 ..... Motion
Week 3 ..... Newton's Laws
Week 4 ..... Conservation of Momentum
Week 5 ..... Vectors
Week 6 ..... Forces
Week 7 ..... Work and Potential Energy
Week 8 ..... Rotation
Week 9 ..... Center of Mass and Moment of Inertia
Week 10 ..... Gravity
Week 11 ..... Harmonic Oscillator
Week 12 ..... Final Exam

NOTE: Schedule is tentative and subject to change.

Additional Resources

These books are *not* required for the class, but they each have some interesting information that may help you if you want to supplement the textbook or dive into more advanced topics.

The Feyman Lectures on Physics, Richard Feynman
A free online book covering all material in a slightly different format.

Introduction to Error Analysis, John R. Taylor
A good reference for correctly treating errors in lab.

The Visual Display of Quantitative Information, Edward Tufte
An amazing book about how to create informative graphs. You likely will not have the time each week to spend too much time crafting graphs for your lab report, but it is still a fun read.

The Elements of Style, Strunk and White
A very short book explaining how to write well. Although it isn't targeted at scientists, the advice in here is very applicable to writing good lab reports.

Important Dates

September 21 ..... First day of class
October 4 ..... Last day to drop class without W
November 11 ..... Veterans day – no class
November 13 ..... Last day to drop class with a W
November 26 ..... Thanksgiving holiday – no class
November 27 ..... Thanksgiving holiday – no class

Electronic Devices

The use of phones and laptops during class is **NOT** permitted, except for limited exceptions:

1. You may set your phone to vibrate if you expect an urgent call and leave the class to take a call.

2. You may use a tablet if working with a stylus to hand-write notes

If you have any other special request please discuss it with me after class.

Grading Mistakes

Grading mistakes will be considered for **genuine** errors only when the student submits a written cover letter with the exam or quiz in question, and the decision will be final.

Cheating

Any form of cheating is strictly forbidden and will result in a zero for the assignment and a report to the college disclipinary office. For more information see the De Anza Academic Integrity Policy here: https://www.deanza.edu/policies/academic-integrity.html.

Tutoring

The Math, Science, & Tech Resource Center offers **free** tutoring for any students in math and physics. You can drop by building S43 anytime for general help or stop by and ask about one on one tutoring. See https://www.deanza.edu/studentsuccess for more information.

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:

S43	M,T,W,TH	2:30 PM - 3:30 PM