

**Physics 4A, sections 60, 62**  
**Physics for Scientists and Engineers**  
**Mechanics**  
Winter 2024

Lecture, MW 5:30pm – 7:45pm, Room S34  
Lab (section 60 ONLY), 8:00pm – 10:55pm, Room S11

Instructor:

Kasra Khazeni

Office:

S13

Contact:

email: khazenikasra@fhda.edu

Office Hours:

M, 12:00pm-1:00pm on Zoom  
T, 12:00pm-1:00pm in my office

Text:

Physics for Scientists and Engineers, 9th edition, by Serway and Jewett. This is an old book and is usually found used online or in pdf format.

Attendance:

Attendance is necessary in order to keep up with the materials covered in class, as I may not follow text book's sequence. Attendance is crucial in the first two weeks of the quarter as you may get dropped out of the class. If you are ill, please notify me by email so I know the reason for your absence.

Objective:

This is a calculus-based physics class. Physics 4A covers Newton's laws of motion, work, energy momentum, rotation, gravity, and oscillations. Students need to have a strong background in algebra, trigonometry, geometry, and some knowledge of calculus.

You will require a SIMPLE non-graphing calculator with scientific notation. Please turn off all cell phones/iPods/computers or similar devices while in class. No cell phone use during exams. NO SHARING of calculators during exams will be permitted.

Homework:

Suggested problems from the book will be assigned at the end of each chapter, which will not be required to be turned in, but it is strongly suggested that you work them out and become comfortable with recognizing the type of problem it represents and its solution. Working out the HW problems is one of the best ways to be prepared for the weekly quizzes, midterms, and the final exam. Please feel free to come and see me to discuss homework problems if you have any questions.

Quizzes:

There will be approximately one quiz every week CLOSELY related to the homework assignments. No makeup quizzes will be permitted. Instead, the lowest quiz grade will be dropped at the time course grades are being determined.

Exams:

There will be two exams 1/3 and 2/3 into the quarter. No makeup exams will be permitted:  
Midterm 1 on Monday February 5  
Midterm 2 on Monday March 4  
Final on Monday March 25

Cheating Policy:

Cheating on an exam will result in an automatic "F" on that exam, with two incidents of cheating resulting in an automatic "F" in the class.

Grading:

Final grade, based on a curve of the whole class:

88% - 100% = A  
76% - 88% = B  
64% - 76% = C  
50% - 64% = D

Breakdown of the final grade:

Quizzes = 30%                      1 or 2 problems, approx. one quiz every week  
Exams = 25%  
Lab = 20%  
Final = 25%

There are no make-up exams, quizzes, or the final.

**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:**

T	12:00 PM	01:00 PM	In-Person	S13
M	12:00 PM	01:00 PM	Zoom	