DE ANZA COLLEGE – PHYSICS 2A – Spring2025

Instructor: Ching-Yee Chang, PhD

Email: changchingyee@fhda.edu

Lecture Hours: Mon, Tue, Wed, Thu 9:30 AM-10:20 AM

Classroom: S32

Office Hours: Thu 4:30 PM-5:20 PM (@ Rm S13)

Final Exam Date: June 24th Tuesday 9:15 AM -11:15 AM

Textbook: COLLEGE PHYSICS 12th Edition by Raymond A. Serway, Chris Vuille

Prerequisites: High school trigonometry or Mathematics 51 and May be taken Mathematics 1A

Calculator: Any scientific calculator

OBJECTIVE

This course covers the concepts of energy, momentum, and angular momentum—three conservation laws of classical mechanics. It includes kinematics, vectors, problem solving techniques, mathematical techniques, and various definitions, as well as oscillations and waves.

REQUIRED TEXTS/READINGS

Textbook

Title: COLLEGE PHYSICS 12th Edition
Authors: Raymond A. Serway, Chris Vuille
Publisher: Cengage Learning

WebAssign + eBook: College Physics 12th Edition

Cengage has experts available to help walk you through the complete registration of your eBook. Feel free to join any day to ask your questions or learn more about these course materials.
Cengage Support Options:

Chat Support	Tel:1-800-354-9706
Virtual Meetings for technical questions and access to the material/online platform	https://www.cengage.com/coursepages/Spring_QTR1. Dates: Tuesday, April 1st - Thursday, April 17th (**Tuesdays & Thursdays ONLY**) Times: 12-2 PM PST

ATTENDANCE

You are expected to be in class at the beginning of each class 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 If you stop attending class for any reason, it is your responsibility to ensure being dropped or withdrawn from the course to avoid an "F" in the class.

HOMEWORK

Homework will be assigned on a regular basis. It is essential to your success in this course that you put a solid effort into the homework. The assignments will be accessed through **Cengage** Learning's **WebAssign** learning system. Access to **WebAssign** will require an access code to be purchased. Homework assignments are worth **10%** of the final grade.

QUIZZES

Quizzes based on the homework will be held weekly. There may be a second in-class quiz each week based on lecture material. Your lowest quiz scores will be dropped; you may arrange to make-up one (only one) missed quiz.

EXAMS

There will be two midterms in-class exams (50 minutes in duration for each) and a comprehensive final exam (2 hours in duration). Midterms are worth 15% each and the final is worth 25% of the total grade. 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 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.

Note: If there is a dispute in the grading of any quiz/midterm, 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:

Homework	10%
Weekly Quizzes	20%
Midterm	30%
Lab	15%
Final	25%
Bonus Points*	Up to 10 points

*Bonus points can be earned by answering the bonus questions. Bonus questions are those that I ask in class which are not part of weekly quizzes and are usually requesting you to volunteer to answer them by stating the answers verbally. Bonus questions can also be in the format single/multiple selection questions provided on Canvas.

Grades will be determined as follows:

A	88% --100%
B	76 % -- 87%
C	65% -- 75%
D	54% -- 64%
F	53% and below

COURSE SCHEDULE & LIST OF TOPICS

Below is the tentative schedule of topics for the course. Please refer to the Modules page on Canvas for the most up-to-date schedule.

	Topic	Time (weeks)
Topic 1, 2	Units, Trigonometry, and Vectors & Motion in 1D	1
Topic 3	Motion in Two Dimensions	1
Topic 4	Newton's Laws of Motion	1
Topic 5	Energy	2
Topic 6	Momentum, Impulse, and Collisions	2
Topic 7	Rotational Motion and Gravitation	2
Topic 8	Rotational Equilibrium and Dynamics	2

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

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.

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.

STUDENT LEARNING OUTCOME(S):

• Critically examine new, previously unencountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of mechanics.

• Gain 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.

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.
• Gain 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:

S13 TH 4:30 PM - 5:20 PM