De Anza College - Preparatory Physics - Fall 2024

Welcome to Physics 50 course at De Anza College. It will be my sincere effort to make sure that you succeed in this course, while enjoying it.

Instructor - Dr. Kashi Nath

Section	PHYS-050-02 CRN: 02085
Lecture Hours	Tuesdays and Thursdays 10:30 to 12:20 pm in Room S35
Office Hours (S13)	Tues 10:00 - 10:25am & 1:00 - 1:25pm, Thurs 10:00 - 10:25am & 12:25 – 12:50pm And also by appointment
Email	nathkashi@fhda.edu - Please email me through your Canvas account for confidentiality and for maintaining records for the college.
Required Calculator:	Scientific Calculator
Advisory:	Mathematics 43 and Physics 10.

Textbook: PHYSICS 4th Edition Vol. 1 by James S. Walker

Course Objective: This is an algebra-based course in Classical Mechanics. The main objective of the course is for the students 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 students 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.

Exams: There will be three midterm exams and a comprehensive final exam. Each midterm exam will normally focus on the newest material, but not be limited to the new material only. Please do not miss any exam. Your lowest midterm exam score will be replaced with 80% of the average of the other two midterm exams if it helps you. If you miss a midterm exam, it counts as your lowest score. There is no make-up exam (midterm or final). The 120 minutes final exam will be given on Thursday, December 12, from 9:15 to 11:15 am. **(Please note - the exam starts earlier than your class timings)**

Quizzes: Regular quizzes will be given in the beginning and/or during the lecture/lab class. No makeup quizzes will be given. You get to drop your one lowest quiz score. If you miss a quiz, it counts as your lowest score that you get to drop.

Homework: Please do the provided HomeWorks on a timely fashion. Selected HomeWorks will be discussed/solved in the class. In addition, you are expected to be able to do the example problems solved in the text. Doing example problems will help you do the homework problems and will also help you achieve good grades in your exams.

Due Dates: I have organized the class with due dates, so that you can successfully complete the course objectives. Please plan ahead so you meet the due dates, but if in an unfavorable situation you cannot meet the due date, please let me know, and I will extend the due date for you. Any due date extension for a student, no more than two please, per student, will be done in the student's presence to avoid mistakes. More than two due date extensions may affect your class performance and grades. Neither Exam dates are changed nor there will be make up exams (midterm or final).

The following shows the breakdown:

Three Midterm Exams	40%	
Comprehensive Final Exam	20%,	If you miss the final exam, you get no better than a 'C'.
Quizzes and group problem solving	20%,	In the beginning and/or during the class
Homework/Home Assignments	20%	

The grading system will be:

I may adjust the curve based on the class results. However, I strive for:

A+ 98 to 100%, A 93 to 97%, A- 90 to 92%

B+ 88 to 89%, B 83 to 87%, B- 80 to 82%

C+ 78 to 79%, C 70 to 77%

D 60 to 69%, F <60%

Note: You may be able to earn extra credit points based on class performance, attendance, etc.

Please keep all graded material until the end of the semester. If you believe I have made an error on grading your assignments or in computing your average, please let me know after the class or during my office hours. I may publish some of your marks on Canvas. Your final course grade will be available on WVM Portal.

Office Hours and Other Resources:

I will hold regularly scheduled office hours. If you are unable to attend my office hours, you may make an appointment with me to discuss the course material or any thing else outside of my office hours. This is best done by asking me after the class. My job is to make sure that every student, who wants to understand the material for this course, does. Please let me know if you have any questions about the course, on the course material or about your educational goals. On the latter, if I do not have the information you seek, I can probably point you toward someone who does.

It is a good idea to form study groups and work with your classmates. Please follow the CDC guidelines. You will find that they are great resources, and you can get a very good understanding of the material when you explain it to each other.

Conduct: Please be courteous and respectful to me and to your fellow students in all communications. It is advised that please join the class on time and be there for the whole time to get the maximum benefit of the class. Cell phones, cameras, etc. are not allowed. Laptops are allowed for course materials only.

Attendance Policy: Your class attendance is very important. You are expected to be in the class at the beginning of each class and remain there till the end. You are responsible for all the information presented in the class. I may drop students with excessive absences. However, non-attendance does not guarantee your being dropped. If you need to drop the course, it is your responsibility to do so.

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.

Expectations:

What you can expect from me:

- I will treat you with dignity and respect and be flexible to support your individual needs.
- I will provide you with a clear, organized course that is designed to ensure you meet our course outcomes in a meaningful manner.
- I will provide a variety of assignments to ensure your learning needs are met.
- I will grade assignments in a timely manner to facilitate your success on future assignments.
- I will be actively present in your learning.
- I will provide a supportive and safe environment for you to share and discuss ideas with your peers.
- I will reach out to you when I sense that you need support.

What I will expect from you:

- Treat me and your peers with dignity and respect.
- Strive to be an active participant in this course.
- Maintain an open line of communication with me so I understand how to support you.
- Aim to meet due dates. Contact me if you have a concern with meeting a due date.
- Do your best to have patience with technology. There will be hiccups; expect them. We will get through them together.

What we can expect from each other:

- We won't be perfect. We are human and will make mistakes at times. We will view mistakes as an opportunity to learn and grow.
- We will all strive to contribute regularly in collaborative activities to ensure all members of the community have ample opportunity to read/listen, reflect, and respond to all ideas.

- Disagreements are part of learning and growing, but we will always treat one another with dignity and respect. If you sense a negative emotion surfacing within yourself, step away for a while; reflect on what is happening; then return and respond by focusing on the issue, not the person.

Time Commitment: You are expected to spend an average of about 3 hours per one lecture hour on the readings, homework assignments, reviewing, exam preparation and examinations. This also depends on person to person. Some students may need more, and some may need less. But the average is about three hours.

Tentative Exam dates:

Exam 1 – Thursday, October 10
Exam 2 – Thursday, October 31
Exam 3 – Thursday, November 21
Comprehensive Final Exam - Thursday, December 12, from 9:15 to 11:15 am. **(Please be advised that the final exam starts earlier than your class timings)**

Thanks, and Good Luck

Student Learning Outcome(s):

• Examine critically 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.

Office Hours:

T,TH	10:00 AM	10:25 AM	In-Person	S13