

Physics 50 Winter 2016

Section	PHYS-D050.-63	CRN: 33739
Lecture Instructor	Lana Sheridan	
Email	sheridanlana@fhda.edu	
Office	S13	
Office Hours	Tues 11:30am-12:30pm; Thurs 2:30-3:30pm; Fri 2:30-3pm	
Lecture Hours	Mon-Thurs 10:30-11:20 am	
Lecture Room	S35	
Textbook	Physics, 4th ed, James S. Walker	
Prerequisites	Advisory: Mathematics 49B and Physics 10	
Final Exam Date	Thursday, Mar 24, 9:15-11:15 a.m.	

1 Topics

This course introduces Newtonian Classical Mechanics without calculus. Students should leave this course with an understanding of how to make mathematical models of systems of interest and then apply basic Newtonian principles to discover how these systems behave. This sort of quantitative reasoning is useful not only for understanding the physical world we see around us, but also in any technical field including engineering and computer science. We will cover kinematics, which is motion of objects in 1 and 2 dimensions with some knowledge of their accelerations and other quantities, but without regard to forces acting on them. This will include projectile motion, circular motion, and relative motion. We will also cover dynamics, which determines the motion of objects by reasoning about forces acting on them, using Newton's laws, study different types of forces, and introduce work, energy, and power.

2 Attendance

In order to comply with federal guidelines De Anza College requires students to attend class and class attendance records to be kept. A student may miss a few classes for medical or personal reasons, however, unexplained absence of more than 2 consecutive days or frequent absence will result in a student being dropped from the course, and unexcused missed quizzes cannot be made up. Late arrivals count as absences at my discretion.

3 Homework

From time to time there will be worksheets set for homework that will count towards your grade.

The homework set from the book will not be collected or count towards your grade, however, it is very important to do this homework as part of your study! This will make concrete the ideas discussed in the lectures by allowing you to apply them immediately. I will try to set almost exclusively problems that have answers in the back of the textbook. If you have difficulty with the homework you can come to office hours, ask me just before or after a lecture, work together with other students, or go to the Math and Science Tutorial Center (Student Success Center). Doing these problems will help you prepare for the tests and quizzes.

The set problems should not be viewed as the only problems you can do: you are strongly encouraged to look through all of the problems at the end of each chapter and consider how each should be approached. **You should read the textbook and make notes from it.**

4 Quizzes

Each week there will be at least 1 quiz on the material covered in the lectures. The quiz questions will usually be based on homework questions or problems discussed in class. Make sure you do the homework, so you can do well on the quizzes!

5 Tests

There will be two midterm tests set in class time, in addition to the final exam. In order to do well on the tests, read the textbook, and do the homework problems.

Note: If there is any dispute about marking, I will consider it only within two school days of the paper being returned to you. Grades for the final exam are final and not subject to dispute.

6 Cheating

In the case that a student is found to be cheating on a piece of work or test, the grade for that will be zero.

7 Evaluation

quizzes & HW	30%
midterms	40% (20% each)
final	30%

Projected Grading Scheme:

88% → 100%	= A
76% → 87%	= B
65% → 75%	= C
54% → 64%	= D
0% → 53%	= F