

## DE ANZA COLLEGE – PHYSICS 50 – SUMMER 2011

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**Instructor:** Eduardo Luna  
**Email:** [lunaeduardo@fhda.edu](mailto:lunaeduardo@fhda.edu)  
**Homepage:** <http://faculty.deanza.fhda.edu/lunaeduardo>  
**Office:** S55A  
**Office Phone:** 408-864-8666  
**Office Hours:** No office hrs during summer  
**Lecture Hours:** TWTH 10AM – 12:25PM (S34)  
**Final Exam Date:** Thursday, August 5 from 10AM – 12:25PM  
**Text:** PHYSICS 4<sup>th</sup> Edition Vol. 1 by James S. Walker  
**Prerequisites:** Advisory: Mathematics 49B and Physics 10.

**Note: Last day to drop a class with a “W” is Thursday, July 22. Students who do not drop by this date will be given the appropriate grade for their achievement in the class at the end of the quarter.**

### **OBJECTIVE**

This is an algebra-based course in Classical Mechanics. The main objective of the course is for you to understand the laws/theories and principles of Classical Mechanics (especially Newton's Laws of Motion) in order to be able to describe the motion of a system so that we can better understand the physical world around us. 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 and other formulations of such laws (Work and Kinetic Energy Theorem, Conservation Energy, Linear and Angular Momentum). Law of gravity will also be discussed.

### **ATTENDANCE**

You are expected to be here at the beginning of each class for the rest of the quarter. If you miss three or more lectures you may find yourself dropped from the class. However, it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid an “F” in the course if you stop attending lecture.

### **HOMEWORK**

Homework will be assigned on a regular basis but will NOT be collected. However, it is your responsibility to have the homework completed before the following lecture. It is essential to your success in this course that you put a solid effort into the homework. This is how you will learn physics and succeed in the class. (The quizzes you will be taking will generally be based on the homework problems assigned). If you are having difficulties with the class/homework, here are some things that I recommend to help you succeed in the class:

1. Ask for help during class and attend office hours.
2. Work together and discuss problems with other students in the class
3. Use the college's resources (available free for students)

- a) math and science tutorial center
- b) EOPS
- c) Student Success and Retention Program

On the homework, quizzes, as well as on the exams, you need to show all your work in complete detail in order to receive full credit. Your solutions should show your step-by-step process and logic that was used to obtain the answer. **No credit will be given if no work is shown even if you obtain the correct answer to the problem.** Answers to homework even problems will be posted on my homepage.

### **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"

*This statement implies that if a student intentionally copies another students work or a 'solution manual' the student will be subject to disciplinary action.*

### **QUIZZES**

There will be a quiz (mini- test) on Thursdays the last 30 min. of class. The problems on the quizzes will be based on that week's homework problem set and lecture material. Therefore, it is to your advantage to attend every lecture and have **ALL** the homework completed on a daily basis before the quizzes. The quiz format may be work-out problems, multiple-choice, conceptual, or a combination of the three. The lowest quiz score will be dropped.

Note: If there is a dispute in the grading of any exam homework, quiz, or exam 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:

Quiz1	15%
Quiz2	15%
Quiz3	15%
Quiz4	15%
Quiz5	15%
Final Exam	25%

Grades will be determined as follows:

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