DE ANZA COLLEGE PHYSICS 2A SPRING-2009

Instructor: Eduardo Luna Email: lunaeduardo@fhda.edu http://faculty.deanza.fhda.edu/lunaeduardo Homepage: Office: S55A Office Phone: 408-864-8666 Office Hours: M 9:30 - 11:20AM, TWTH 12:10 - 12:40PM, F 8:00 - 9:20AM Lecture Hours: MTWTh 8:30-9:20AM (Room S35) TTH 9:30-12:10PM (Room S17) Lab Hours: Final Exam Date: Friday, June 26 from 7:00 – 9:00AM Fundamental of Physics 8th Edition; Halliday, Resnick, and Walker Text: Mathematics 1A (may be taken concurrently) **Prerequisites:**

Note: Last day to drop a class with a "W" is Friday, May 29. 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 guarter.

OBJECTIVE

This is a non-calculus-based course in Classical (Newtonian) Mechanics. Classical Mechanics is divided into two parts:

- a) Kinematics The description of the motion of an object without regard to the cause.
- b) Dynamics The description of the motion of an object with regard to the forces that cause the motion. We will be using Newton's Laws of Motion to accomplish this.

Our main objective in Classical Mechanics will be to use Newton's Laws of Motion to analyze the kinematics and dynamics of systems moving in:

- a) Translational(Linear) Motion
- b) Rotational (Circular)Motion
- c) Oscillatory Motion

In our study of <u>kinematics</u> we will learn how to analyze the motion of a particle in 1-D and 2-D. In our study of <u>dynamics</u> we will study Newton's Laws of Motion, Work and Kinetic Energy, Conservation of Energy and Potential Energy, Linear and Angular momentum, and Gravitation. If time permits, we will also study oscillations.

ATTENDANCE

You are expected to be here at the beginning of each class, every day, for the rest of the quarter. If you miss more than four 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 However, it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid an "F" in the course if you stop attending lecture or lab.

HOMEWORK

Homework will be assigned on a regular basis and it will be due by 9:20AM in my office on Fridays or it can be turned in at the end of class on Thursdays. Only two problems of the homework set will be graded. It is **YOUR** responsibility to have the homework completed by the following day after it is assigned. It is essential to your success in this course that you put a solid effort into the homework. 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.

EXAMS

There will be three one-hour in-class exams and a comprehensive final. 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. I will let you know before the exam if you can use calculators. 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. Of the three one-hour in-class exams I will take the average of the lowest and highest score and replace the lowest with the average. You must take all three exams for me to replace the lowest exam score by the average of the lowest and highest!

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:

Homework	15%
Lab	20%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Final Exam	20%

Grades will be determined as follows: