DE ANZA COLLEGE
PHYSICS 4A
FALL 2008

Instructor: Eduardo Luna
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Office Hours: MTTH 1:30-2:20PM, W 1:00-1:30PM, F 9:30-11:00AM
Lecture Hours: M-F 8:30-9:20AM (S34)
Lab Hours: MTW 9:30-12:10PM (Room S11)
Final Exam Date: Thursday, December 11 from 7:00 – 9:00AM
Text: University Physics, 12th Edition, Young & Freedman
Prerequisites: High School Physics or Equivalent; Completion of Math 1A and concurrent enrollment in Math 1B.

Note: Last day to drop a class with a "W" is Friday, November 14. 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 calculus-based course will cover 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.

Our main objective in Classical Mechanics will be to analyze the kinematics and dynamics of systems moving in:

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

In our study of kinematics we will learn how to analyze the motion of a particle in 1-D and 2-D. In our analysis of motion and its causes (Dynamics) we will study Newton's Laws of Motion, Work and Kinetic Energy, Conservation of Energy and Potential Energy, Linear and Angular momentum, Gravitation, and Oscillations.

ATTENDANCE

You are expected to be here at the beginning of each class, every day, for the rest of the quarter. If any preparation is required ahead of time, such as reading the chapter or working out problems, you are expected to have done it before you get to class. 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 However, it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid an "F" in the course if you stop attending lecture or lab.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 but will not be collected. Although the homework is not collected, it is **YOUR** responsibility to have it 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

If time permits part of Thursday's lecture will be set aside for a homework discussion session. We (teacher and students) will work out homework problems that students may have difficulty solving or I may work out additional problems that are relevant to the topics being studied that week. 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.

QUIZZES

There will be a quiz every Friday at the end of class. The quizzes will generally represent that week's homework problems and lecture material. Therefore, it is to your advantage to attend every lecture and have **ALL** the homework completed.

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:

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

Grades will be determined as follows:

87% --->100% = A
75 %---> 86% = B
63% ---> 74% = C
52% ---> 62% = D
0 ---> 51% = F