Physics 4A Winter 2020

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Office hours: Monday 2:30pm -3:20 pm, Tuesday 10:30-11:20 am, Wednesday 11:30 am -12:20 pm, Thursday – 10:30-11:20am, Friday 11:30am – 12:20 pm, and by appointment.
Final Exam: Tuesday, March 24th, 1:45-3:35 pm
Text: Physics for Nerds and Geeks: by Serway, 9th edition or whatever you want to use
Prerequisites: One year high school physics (C or better) or passing physics 50. Completion of Math 1A and concurrent enrollment in Math 1B.

The goal of this course is to cover the three conservation laws of classical mechanics: energy, momentum, and angular momentum. This includes the necessary details to successfully manipulate those laws: kinematics, vectors, problem solving techniques, mathematical techniques, and various definitions including Newton's universal law of gravitation and then a little about oscillations at the end of the course. In our text, this amounts to covering chapters 1 through 15, but skipping chapter 14 though because fluids are covered in 4C at De Anza College.

NO make-up exams will be given without the ***PRIOR*** **consent** from the instructor (not just a prior notification to the instructor). Use the office phone number given above if you can't see me at school. If I'm not in my office, there is an answering machine at that number available for you to leave a message day or night (the phone may have to ring many times to answer). You must make arrangements to make-up the exam as soon as possible; if you wait too long (i.e., two or three days) to take your make-up exam, it is too late and you will not pass the class. One of the two exams can be made up but making up both exams is not allowed. Both exams are not allowed to be made up; only a make up exam on exam1 or exam 2 is allowed.

No questions are allowed on the day of an exam regarding exam material. This does not apply to quizzes, just exams and the final. Any other type of questions on exam day are, of course, fine .

If you miss more than five lectures you may find yourself dropped from the class.

To pass the class you *must* take the final exam (in both lab and lecture) and all other exams.

A grade of zero points will be assigned to any work done if a student has been found cheating.

An "incomplete" will only be assigned as a final course grade when a *serious* illness or some other severe problem is encountered by the student.

It is the responsibility of the student, not the instructor, to ensure being dropped or withdrawn from the course.

No exam score will be thrown out.

Cheat sheets or note cards will be not allowed during exams or quizzes. The exams will not require detailed memorization of many equations.

Your total exam score will be computed on the basis of a "weighted" average. Your highest exam score of the two exams given will be **doubled** and then added to the lower score. That sum will then be divided by three and will be your average midterm exam score.

No grades will be posted.

Grading mistakes, or protests for exams and quizzes will *only* be considered when a written cover letter is submitted to your instructor with the exam or quiz in question. Your appeal will be considered, and the resultant decision will be final. No protests will be considered orally, this even includes simple addition errors.

Your lowest lecture quiz score will be dropped.

Lab attendance is mandatory. A student with more than one unexcused absence will be dropped from the class.

You will be graded on the *union* of the information provided in the lecture and from the assigned text readings. The grades will be given on the traditional percentages:

A: 92-100%;
A-: 90-91%
B+: 88-89%
B: 82-87%;
B-: 80-81%
C+: 78-79%
C: 60-77%;
D: 50-60%;
F: lower than 50%.
Overall class scores may be curved to fit this pattern.

The grade distribution is as follows:

Lab 10%

Homework/Quizzes 10%

Exams (2 exams) 40% total

Final (comprehensive) 40%

Student Learning Outcome(s):

*Critically examine 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.
*Gain confidence in taking precise and accurate scientific measurements, with their uncertainties, and then with calculations from them, analyze their meaning as relative, in an experimental context, to the verification and support of physics theories.