

DE ANZA COLLEGE – PHYSICS 4B – WINTER 2010

Instructor: Eduardo Luna
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Office: S55A
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Office Hours: MF 9:30-10:30AM, TWTH 12:10-12:40AM & 2:30 – 3:00PM
Lecture Hours: M-F 8:30 – 9:20AM (S34)
Lab Hours: TTH 9:30 – 12:10PM (S11)
Final Exam Date: Tuesday, March 23 from 7 – 9:00AM
Text: University Physics, 12th Edition, Young and Freedman
Prerequisites: Physics 4A and Mathematics 1B with C or higher. Student must also be enrolled in Mathematics 1C or already have completed it.

Note: Last day to drop a class with a “W” is Friday, February 26. 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 the second semester of Science and Engineering Physics. It is a calculus-based course in introductory Classical Electromagnetism. Topics include electrostatics, electric fields and potential, DC and AC circuits, magnetic fields, electromagnetic induction, and Maxwell's Equations. We will cover chapters 21 - 32.

The main objectives of the course is to help the student develop an understanding of the principles and laws of electricity and magnetism, especially Maxwell's Equations, and apply them to solve a wide variety of problems involving electricity and magnetism.

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 However, *it is your responsibility* to ensure being dropped or withdrawn from the course in order to avoid an “F” in the course if you stop attending lecture or lab.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 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 and lecture material). 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 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:

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