DE ANZA COLEGE – PHYSICS 4B – WINTER 2020

Instructor: Eduardo Luna
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Office: S55A
Office Hours: MTTH 1:30 – 2:20PM, W 10:30 – 11:20AM, F 8:30 – 9:20AM
Lecture Hours: M-F 9:30-10:20AM (Room S35)
Lab Hours: TTH 10:30-1:20PM (Room S11)
Final Exam Date: Tuesday, March 24 from 9:15 – 11:15AM
Text: Physics for Scientists and Engineers (Vol. 2), 9th Edition, Serway/Jewett
Required: Casio FX-300MS, TI – 30XIIS, TI-30Xa, or equivalent
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 28. 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 a calculus-based course in Classical Electromagnetism. The main objective of the course is for the student to understand the laws, theories and principles of Classical Electromagnetism in order to be able to understand and describe the electromagnetic interaction for different systems. The foundation laws of Classical Electromagnetism are Maxwell's Equations. Thus, we can equivalently state that the main objective is for the student to learn and understand Maxwell's Equations from a conceptual and practical viewpoint.

ATTENDANCE
You are expected to be in class at the beginning of each class for the rest of the quarter. An attendance sign-in sheet will be passed at the beginning of class. **If you miss signing the attendance sheet <u>five or more lectures</u> you will be dropped from the class.** If you stop attending the class it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid receiving an "F" in the course. *Signing the attendance sheet for another student will result in both students receiving an 'F' AND being dropped from the class and forwarding the incident to the college disciplinary officer.*

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. Math & Science Tutorial Center.

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**

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the correct answer to the problem. Answers to homework even problems are posted on the class 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"

DISRUPTIVE BEHAVIOR POLICY
Any DISRUPTIVE BEHAVIOR during class will NOT be tolerated. If a student is in any way disruptive during the class, the student will be given a warning. If the problem continues, the student will be asked to leave the class and a formal disciplinary report will be filed with the college disciplinary officer. The incident will be recorded in your college record and will be sent with your transcripts to any university/college requesting student records.

ELECTRONIC DEVICE POLICY
WITH THE EXCEPTION OF SPECIFIED CALCULATORS, THE USE OF CELL PHONES, LAPTOPS, OR OTHER ELECTRONIC DEVICES IS NOT PERMITTED DURING CLASS!!! NOTE-TAKING ELECTRONIC DEVICES ARE PERMITTED WITH INSTRUCTOR'S PRIOR PERMISSION.

Failure to comply with policy will result in professor collecting electronic device and forwarding your name to the division dean and college disciplinary officer for disciplinary action and having the incident recorded in your college records which will result in adverse consequences in your education.

QUIZZES
There will be a quiz every Friday at the end of class. The quizzes will generally be based on homework problems and lecture material from the corresponding week. Therefore, it is to your advantage to attend every lecture and have **ALL** the homework completed. If you miss a quiz you will get a **ZERO** for that quiz. **NO MAKE-UP QUIZZES!** Lowest quiz score will be dropped at end of quarter.

EXAMS
There will be three 50 minute in-class exams and a comprehensive lecture 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. Only one of the listed calculators can be used during the exam. 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. At end of quarter I will take the average of the lowest and highest exam score and replace the lowest with the average. You must take ALL 3 exams in order to replace the lowest exam score with the average!

Note: If there is a dispute in the grading of any 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	17%
Exam 1	17%
Exam 2	17%
Exam 3	17%
Final Exam	17%

Grades will be determined as follows:

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

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 electricity and magnetism.
*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.