## **Course Syllabus**

**Instructor:** Frank Cascarano

**Office & Office Hours:** 4404 – see my web site for hours

**STEM Center Hours:** Additional help available at the STEM Center **Phone & email:** 650/949-7784 cascaranofrank@foothill.edu

Class Website: www.foothill.edu/~cascarano

## **Required Text & Materials:**

1. <u>Physics for Scientists and Engineers</u>, 9<sup>th</sup> Edition, Serway / Jewett (ISBN-10: 1133947271) or equivalent (any calculus-based university physics text should work)

2. Scientific Calculator

In class work:

Course Objectives: You will be expected to have gained a thorough understanding of the material presented to

you by attending all lectures, participating, reading assigned material, working homework problems, and asking lots of questions. In addition, I hope you come away from the class with an appreciation of physics and the inclination to question the world around you.

**Course Content:** Chapters 23 - 33 in <u>Physics for Scientists and Engineers</u>

**Course Grade:** Your final grade will be based on the total number of points you receive for the following:

<u>Item</u>	<u>Points</u>
Worksheets	25
Laboratory	75
Exam #1	100
Exam #2	100
Exam #3	100
Exam #4	100
Final Exam	225

Total Points 725

Make-up policy: There are NO make-ups. If you arrange it ahead of time I may give you an alternate test. A missed quiz or exam results in a zero for that test. Your lowest exam score will be replaced with your final exam score, if it helps you. Absence from the final exam will be treated individually, but typically results in an F grade.

I may adjust the curve based on the class results. However, I strive for:

A+: >98% A: 93-97% A-: 90-92% B+: 88-89% B: 83-87% B-: 80-82%

C+: 78-79% C: 70-77% D: 60-69% F: <60%

**Attendance:** You are responsible for everything that takes place in class including new assignments,

assignment changes, and schedule changes. Regular attendance is highly recommended.

You will be doing a lot of in class worksheets and problems. This work will be done in small groups. Help each other, question each other, teach each other and you will all be better because of it. I do not grade on a curve, so helping your classmate will not hurt you. Working problems is one of the best ways to learn the material in a physics course. Do the homework religiously and don't get behind! Work with other students and see your

instructor frequently - don't be afraid to ask for help.

**Exams:** 

Several one-hour exams will be given throughout the course. A comprehensive final exam will be given at the end of the course. Your lowest exam score will be replaced with your final exam score if it helps your overall grade.

**Learning Outcomes:** 

: Upon completion of the course, students should be able to solve problems involving forces, fields and potentials created by stationary and moving charges, and basic electrical circuits.

Via lab experiments, students will have an understanding of the background science, error analysis, and how to perform experiments.

Laboratory:

Laboratories will be a continuation of material covered in lecture. They are hands on, exploratory exercises, done in small groups. See your lab instructor for details, but grades may be based on participation, quizzes, results, and written reports. Note: you must pass the laboratory to pass the class. You must be present to collect your own data, even if you have taken the lab previously.

**Cheating:** 

According to the college rules, cheating will result in severe punishment. If you cheat on an assignment you will receive a score of zero on that assignment (no substituting). If you cheat on a second assignment you will receive an "F" grade for the class. For this, cheating means: (1) providing to other students answers or partial answers to quiz and exam questions, (2) obtaining from other students answers or partial answers to quiz and exam questions, and (3) obtaining information or direct answers from unauthorized materials during quizzes and exams. Students who need help in understanding quiz and exam questions should consult with me to avoid the appearance of cheating. Please note that you are encouraged to work with your fellow students on homework assignments and labs and you may use any materials you need to do the homework and labs.

## **Conduct:**

- 1. Come to class on time, having read the required materials
- 2. Do not disturb the class with talking or other disruptive behavior
- 3. Participate in class discussions and ask questions when you do not understand something
- 4. Laugh at my jokes
- 5. Work together on homework and individually on quizzes and exams
- 6. Turn off cell phones during class

**Disability Statement:** Any student who feels he or she may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. I will work with the Disability Resource Center to coordinate reasonable accommodations for students with documented disabilities.

I will make myself available as much as possible for those that need extra help. I know that you can all be successful in this course if you attend lectures, are alert and participate during lectures, work homework problems, take good notes, work additional problems, see your instructor if you need extra help, and work more problems. I am looking forward to a great quarter!