

GENERAL INFORMATION FOR PHYSICS 211 COLLEGE PHYSICS CALCULUS SUPPLEMENT FALL 2007

PHYS 211 GENERAL PHYSICS I - CALCULUS SUPPLEMENT

Prerequisites: Completion of MATH 241 or MATH 251, completion of or concurrent enrollment in MATH 242 or MATH 252, and completion of or concurrent enrollment in PHYS 210. Application of calculus to topics in PHYS 210 such as work done by a variable force, hydrostatic pressure of compressible fluids and heat conduction. Required of some premedical, biology, and architecture students. Transfer: UC; CSU.

INSTRUCTOR

Prof. G. Grist

Office: 1-218

Phone: (650) 378-7301 x19145 (you may leave a message on this voice mail)

Office hours: Tu Th 11 - 12

e-mail: gristg@smccd.edu <= This is your BEST bet!

Homepage: <http://www.smccd.net/accounts/gristg/>

GENERAL INFORMATION

Semester Units: 1.0

Class Hours/Week: 1 lecture hour/week

Meeting time: Tuesday 4:10 - 5:00

Classroom: 1-218

Prerequisite(s): Completion of MATH 241 or MATH 251, completion of or concurrent enrollment in MATH 242 or MATH 252 and completion of or concurrent enrollment in PHYS 210.

COURSE CLASSIFICATION

Credit course applicable for the Associate Degree.

OVERALL AIMS

This course is aimed at premedical, biology or architecture students who plan to transfer into the University of California system. Many of UC campuses now require a year of calculus based physics for premed, biology and architecture majors. This course would provide the necessary supplement to the algebra - trigonometry based PHYS 210/220 sequence.

SPECIFIC INSTRUCTIONAL OBJECTIVES

Upon completion of this course, the student will be able to:

- a. better understand topics covered in PHYS 210;
- b. apply the principles of calculus to some specific problems in selected topics of physics.

COURSE CONTENT

The topics will be addressed at the rate of approximately one per week. The depth of coverage will be that of a calculus based college physics course covering the same material.

METHODS OF INSTRUCTION

The course will utilize lectures, guided problem solving, discussions and homework problems that illustrate and elaborate on the topics covered as the methods of instruction.

REQUIRED TEXTS AND OTHER MATERIALS

1. The current text for PHYS 210-220 (College Physics 7th ed. by Serway and Faughn)
2. Used Math by Clifford E. Swartz or Mathematical Techniques by Jordan and Smith.
3. A scientific calculator.

EVALUATION OF STUDENT PERFORMANCE

Performance will be primarily evaluated by homework and exams.