CHAMINADE UNIVERSITY OF HONOLULU

PHYSICS 151 **COLLEGE PHYSICS - CLASS AND LAB**

First Summer Semester, 1999 Instructor: Dr. David Cooke

SYLLABUS

1. OBJECTIVE OF COURSE:

PHY151 is a general, non-calculus introduction to physics. Satisfactorily completion of the course will mean that students have had a good preparation for physics at the level required some science majors and for entry into many professional and career areas (including pre-med and pre-dentisty).

Students are expected to take the responsibility for reading the text themselves. Each chapter should be read quickly just prior to the class presentation of the material - in order to gain a familiarity with the main ideas that are in each chapter, and to develop an idea of the words and principles that are to be discussed in class. This first reading could consist of a ten minute skim. Then, as the material is currently being discussed, each section should be read more carefully, to make sure that the details of the work are understood, as well as the discussions and examples presented by the author.

2. TEXT: COLLEGE PHYSICS, by Serway & Faughn (4th Edition).

3. CONTENT OF COURSE:

The material presented in the course is drawn from chapters 1-14 of the text - covering mechanics, thermodynamics, and vibrations and waves. Approximately one chapter per class will be studied, and a short quiz will be held to test knowledge of each chapter.

4. HOMEWORK:

Homework will be assigned from the problems at the back of each chapter. There will be a check to verify that the homework has been done, although the work will not be graded. Instead, worked solutions to the homework problems will be posted so that students may compare their own work with the "official" solutions. Additional reviews will be held as required to help students to understand the class work, and to help develop their problem solving skills.

4. EVALUATION:

Grades are based on homework, quizzes, exams, etc, to the extent presented here:

Attendance:	5%
Homework:	5%
Quizzes:	30%
Prelim. Exams	30%
Final Exam	30%
TOTAL	100%

It is important to understand the grade definitions which guide the assigning of students grades at the end of the semester. As defined in the Chaminade undergraduate catalog, the grading criteria are:

A -- Outstanding scholarship and an unusual degree of intellectual initiative.
B -- Superior work done in a consistent and intellectual manner.
C -- Average grade indicating a competent grasp of thesubject matter.
D -- Inferior work of the lowest passing grade, is not satisfactory for fulfillment of prerequisite coursework.
F -- Failure to grasp even the minimum subject matter; no credit given.
I -- Did not complete a small prtion of the work or final examination due to circumstances beyond the student's control. The issuance of an "I" grade is not automatic. Prior to reporting of grades a contract must be made between the student and the instructor for the completion of the course.

We will consider running a double-track system in which quizzes and exams contain two different levels of question. Quizzes and exams contain challenging "A" grade questions (worth 10 points), as well as more straight-forward "B" grade questions (worth 8 points). This is done to allow students who have a very good grasp of the course work to demonstrate that knowledge in the exams and to receive an "A" grade. This system has been employed successfully, as indicated by the fact that students have voted to continue the system into the following PHY152 class in the two years in which the dual track system has been employed.

Students who would otherwise not comfortably handle the more challenging "A" grade questions because they are not able to gain the appropriate depth of understanding need not fear that they will necessarily achieve poor grades. By performing well in the 8 point questions they can still have a chance of gaining a "B" grade at the end of the semester.

5. EXAMINATIONS:

Quizzes will be conducted on completion of each chapter's work. There will be two preliminary exams, the first tentatively scheduled to be held on Friday, May 31st, and the second on Friday, June 14th. The final exam will be held at during class time on Friday, June 25th.