$\mathbf{MA210} \quad \mathbf{CALCULUS} \ \mathbf{I} \quad (4)$

Spring 1998 MWF 10:00 - 10:50am & TBA HH17 INSTRUCTOR: DR. CHOCK Y. WONG

Office: Henry Hall 018 (Phone: 739-4682)

Office Hours: MWF 1100 1000 1-2pm, T 2-3pm.

Course Description: This is the first part of a three-semester sequence of elementary calculus. Major topics are limits and continuity, differentiation and integration of algebraic functions and trigonometric functions, and some applications.

Prerequisites: Precalculus (MA110 or equivalent), or placement test.

Text Book: <u>CALCULUS Of A Single Variable</u> (5th edition). By Larson / Hoststler / Edwards. D.C. Heath & Company. ISBN 0-669-35250-2.

Topics: Chapters 1 to 4 and part of Chapter 6 will be covered.

- (1) Limits and continuity. (Ch.1)
- (2) Differentiation. (Ch.2)
- (3) The Mean Value Theorem and applications of differentiation. (Ch.3)
- (4) Definite and indefinite integration. (Ch.4)
- (5) Applications of the integral in geometry: Areas, volumes, and arc lengths. $(\S\S6.1-6.4)$

Homework: For each subtopic of the course, you will be given a homework worksheet, which consists of two parts: In Part 1, you may see some odd numbered problems from the textbook being suggested, and you may work through those problems to make sure you have grasped the basic material of the subtopic (of course, they are "on your own" and need not turn in); In Part 2, you will see some deeper problems which require better understanding of the material and more skills to complete, and will be graded by the instructor. The due day of a worksheet is usually Wednesday of the following week. Late homework may receive grading penalty (Up to 20% reduction per class meeting). There will be some computer Lab work and assignments as well, which must be done on time in the MATH LAB (HH020), and a tutor's (on duty in MATH LAB) signature must be present on your paper.

Quizzes and Exams:

9 quizzes (8 best ones will be counted), one mid-term exam (to cover Ch.1 & Ch.2, @ Week 8) and an accumulated Final Exam will be given. Please remember that attendance is extremely important for this course, and NO make-up quiz will be allowed (to discourage any absence of class).

Grading:

HOMEWORK: 33% of the total QUIZZES: 17% of the total Mid-term EXAM: 17% of the total FINAL EXAM: 33% of the total