## CALCULUS I (4) MA210

Spring 2000

TR 11:00 - 12:20 & T 1:00 - 1:50 HH37/33DR. CHOCK Y. WONG INSTRUCTOR:

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

Office Hours: M 2:00-3:00, W 1:00-2:30, TH 12:30-1:50pm.

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

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

Text Book: Larson/Hoststler/Edwards: CALCULUS Of A Single Variable (5th edition).

**Topics:** Chapters 1 to 4 and selected sections from Chapter 6 will be covered.

- (1) Limits and continuity. (Ch.1)
- (2) Differentiation. (Ch.2)
- (3) The Mean Value Theorem and applications of differentiation.
- (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: There will be two sets of homework assignments for each subtopic (containing more than one section in general) of the course:

- (1) Selected odd numbered exercises from the text book, for "basic training" purpose, you may work through those problems (on your own, need not turn in) to make sure you have grasped the basic material of the subtopic;
- (2) Handout wooksheets that will give you 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 work may receive grading penalty (up to 20% reduction for one-day late). It is extremely important to turn in homework on

There may be some computer Lab assignments as well, which should 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:

10 quizzes (9 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. NO make-up quiz will be allowed (to discourage any absence of class).

## Grading:

HOMEWORK: 30% of the total

QUIZZES: 17% of the total

Mid-term EXAM: 18% of the total

FINAL EXAM: 35% of the total