

SYLLABUS

MA211 CALCULUS II (4)

Spring 1998

MWF 11:00 - 11:50pm, & TBA H39-A

INSTRUCTOR: DR. CHOCK Y. WONG

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

Office Hours: MW 1:00-2:00, TH 2:00-3:00pm.

Course Description: Continuation of CALCULUS I. More techniques of integration and applications of the integral, differentiation and integration of transcendental functions (logarithmic, exponential, and inverse trigonometric functions), and theories of sequences and series will be studied.

Prerequisites: Calculus I (MA210 or equivalent).

Text Book: CALCULUS Of A Single Variable (5th edition).

By Larson / Hoststler / Edwards. *D.C. Heath & Company.* ISBN 0-669-35250-0.

Topics: Chapter 5, 6, 7, 8, and 10 will be covered. Main topics are:

- (1) The transcendental functions: Their derivatives and integrals. (Ch.5)
- (2) Applications of the integral: Area, volume, and work problems. (Ch.6)
- (3) More techniques of integration; L'Hospital's rule. (Ch.7)
- (4) Infinite series: Convergence, Taylor series, Power series. (Ch.8)
- (5) Parametric equations, polar coordinates. (Ch.10)

Homework: Certain amount of odd numbered exercises from the textbook will be assigned for each section — although they need not be turn in, you should work them through so that you can grasp the material in that section. Most quiz problems and some exam problems will be chosen from those odd numbered assignments. Extra homework worksheet may be passed out to provide more comprehensive trainings to you if there is a need (for instance, a review for several related sections). There will be computer LAB work as well.

Quizzes and Exams:

There will be one quiz every week. An one-hour mid-term exam to cover Ch.5, Ch.6, and §§7.1-7.4 will be given @ Week 9, and an accumulated Final Exam at the end of the semester.

Grading:

- HW & QUIZZES: 48% of the total
- Mid-term EXAM: 18% of the total
- FINAL EXAM: 34% of the total