

MA211 CALCULUS II (4)

Spring 2002

MWF 2:00 – 3:10pm BH04

INSTRUCTOR: DR. CHOCK Y. WONG

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Office Hours: MW 11:40am–12:50pm, T 1:00–2:00pm, TH 2:00–3:30pm, or by appointments.

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 (6th edition).
By Larson / Hoststler / Edwards. *D.C. Heath & Company.*

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 each section will be assigned to you as “on-your-own” exercises — 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 similar to these odd numbered assignments. Extra homework worksheets may be assigned to provide more comprehensive training to you whenever it is needed (for instance, a review for several related sections); these worksheets will be graded.

Quizzes and Exams: There will be weekly quizzes and most of them will be open-book. 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: 45% of the total
Mid-term EXAM: 20% of the total
FINAL EXAM: 35% of the total