

CALCULUS II - MTH 112 - SPRING 2008

Course Goals: To develop an understanding of the concepts of calculus (particularly the integral and infinite series) and strengthen mathematical problem solving skills.

Course Content: Rigorous treatment of the integral, Fundamental Theorems of Calculus, area between curves, volumes of revolution, transcendental functions (logarithmic, exponential, inverse trigonometric), indeterminate forms (L'Hospital's Rule), techniques of integration (substitution, parts, trigonometric integrals, trig-substitution, partial fractions), numerical integration and error estimates, improper integrals, sequences, series and power series.

Text: *Single Variable Calculus* by James Stewart, Thomson Brooks/Cole Publishing Co. 6th edition (2008). We will cover material in chapters 5, 6, 7, 8 and 12.

Attendance: You are expected to attend all class periods.

Honor Code: Tests are to be your own work. You may consult with other students and the TAs on any homework assignment -- but the work you turn in should be your own work. Deviation from these rules will be regarded as a violation of the Honor Code.

Daily Homework: Homework will be assigned in each class period, and questions on each assignment will be answered during the following class period. There will be several special assignments to turn in for a grade. To succeed in the course it is crucial to keep up to date with the homework assignments.

Quizzes: There will be short weekly quizzes given each Friday, beginning January 25, 2007.

Make-ups: As a general rule, failure to appear for a test or quiz will result in a grade of 0 for the missed test or quiz. In rare circumstances a make-up will be given; in no case will a make-up test be given unless arrangements have been made before the regularly scheduled test time. Dates of tests will be announced the week before the test.

Final Exam: You will take the "Math Block Exam" for Math 112 on Tuesday, May 6, 2008, 9 AM to noon.

Calculators: Calculators or computers may NOT be used on any quiz, test or on the final exam.

Computer: We will make use of Maple software in the class and on some of the homework.

Final Grade: Your final grade will be based on the total points you have accumulated on the three tests, the computer assignments, and the final exam.

Test 1	100
Test 2	100
Test 3	100
Graded Homework Assignments and Quizzes.....	100
Final Exam	300
 TOTAL POINTS	 700

Instructor: Dr. Ellen Kirkman

Office: 358 Manchester

Phone: 758-5351 (secretary 758-5354)

E-mail address: kirkman@wfu.edu

Office Hours: Monday, Wednesday, Friday: 2 - 4 PM
(in addition, by appointment)