

Math 173-003 Calculus 2, Spring 2008

Time : M~F 9:00~9:50

Location : Hertz 118

Credit Hours: 5

Text : Thomas's Calculus Early Transcendentals 11th edition by Weir, Hass and Giordano, Addison-Wesley Publishing Company

Instructor : Jae-Chun Kim

Office : Bouillon 123

Office Phone : 963-2268

Office Hours :

M~Th : 10:00~10:50 or by appointment

e-mail : kimjae@cwu.edu

Calculator : A graphing calculator is required for the course.

Prerequisite : MATH 172

Course Description:

Theory, techniques and applications of differentiation and integration of the elementary functions.

Course Objective:

At the completion of this course, all students are expected to be able to:

- Compute the distance given information about velocity;
- Write (not necessarily compute) a definite integral as a limit of Riemann Sums;
- Use the Fundamental Theorem of Calculus to evaluate definite integrals;
- Use the Fundamental Theorem of Calculus to evaluate an area (accumulation) function;
- Compute antiderivatives corresponding to basic differentiation formulas;
- Use integration techniques such as substitution, parts, partial fractions and trig substitution to find indefinite and definite integrals;
- Compute improper integrals;
- Set up integrals that represent quantities, such as,
 - Length of a curve;
 - Volume and/or the surface area of a solid of revolution;
 - Center of mass of a one-and/or two-dimensional object;
 - Solve simple linear first order differential equations;
 - Work to complete a task.

Course Requirements:

1. Attending all classes. If however, a student has to miss a class, it will be his/her responsibility to catch up on the material before the next class meeting.

2. Completing all homework problems.
3. Participating in all quizzes and tests. If a student misses a test because of illness, the instructor must be informed without delay. Only in such cases will there be a make-up test. Problems chosen for the tests will generally be of a similar difficulty level as the assigned homework problems. There will be no retest given
4. Participating in the comprehensive final examination.

Instructional Method:

Most sessions of the course are lectures and problem solving. The class will begin with discussing previously assigned homework problems followed by lectures over the day's subject. The time remaining will be used to answer and discuss questions.

Course Outline

This outline is tentative. There may be some changes depending on our performance and other situations.

Week 1~3 : Chapter 5

Week 4~5: Chapter 6

Week 6 : Chapter 7

Week 7~9: Chapter 8

Week 10 : Chapter 9

Final Exam : 6/6(Friday) 8:00~10:00

Grading Policy : 2 tests(200 pts), Homework/Quiz(200pts), Final(200pts)

93~ : A

90~92 : A-

87~89 : B+

83~86 : B

80~82 : B-

77~79 : C+

73~76 : C

70~72 : C-

67~69 : D+

63~66 : D

60~62 : D-

~59 : F

This syllabus is subject to modifications upon the decision of the instructor.