

The University of Detroit Mercy
Syllabus and Course Outline

"We are what we repeatedly do. Excellence, then, is not an act but a habit." Aristotle

Course: Math 112: Mathematical Analysis II

Time and Place: 2:00 P.M T TH E200

Credit Hrs: 3

Prerequisites: Math 111

Instructor: Dr. Lazaros D. Kikas

Office: E248

Office Hrs: 1-2p.m MWF 4-5p.m T TH or by Appointment.

Telephone: 3-3379 Email: kikasld@udmercy.edu

Text: Brief Calculus: An Applied Approach (6th Edition) by Larson and Edwards

Course Content: We will cover in this course the basics of calculus. We will look at the derivative and its applications. In Chapter 5 we will investigate the definite integral. Throughout the course we will visualize these concepts through application.

Course Outcomes: After taking this course the student should be able to:

1. Work with functions and their graphs.
2. Be able to determine limits of functions both algebraically and graphically.
3. Be able to model various problems in business with functions.
4. Determine the domain and range of functions and models.
5. Work with the derivatives of functions, determine the derivative of a function, and apply the idea of the derivative to various application problems.
6. Work with the integral, and find the integral of various functions.

Course Topics: The topics of this course are based on the first five to six chapters of our text.

Grade: Your grade will be determined by the following:

∞ 3 Tests (1hr and 10 min) 100 pts each

∞ Final Comprehensive Exam 200 pts

∞ Worksheets 70 pts

∞ Total Points: 570 pts

Homework Policy: Homework will be assigned on a regular basis but will not be collected. It is the student's responsibility to do the homework every day and to be prepared for class. Worksheets will be given for students to work out. These worksheets will be graded. Worksheets are meant to be learning tool for the student. You are allowed to work in groups on the worksheets, but you must write up your own work sheet. NO COPYING!!! Be sure to write up your assignments neatly. Please do not be sloppy. Remember when you hand in a worksheet make sure that it is something that you feel proud of.

Attendance policy: It is not my policy to take attendance. However, frequent absences, for whatever reason, usually results in the inability of the student to keep up with the class. Every effort should be made to be punctual and present for all class sessions. Students are personally responsible for any work missed. Make up exams will only be given to students who have a documented excuse. Everyone must take the final exam.

Calculator Policy: You are allowed the use of a scientific calculator for this course. However, calculators that perform symbolic computations are NOT ALLOWED.

Important Notes

1. If you miss an exam you must contact me as soon as possible to schedule a makeup. Make up exams will only be granted to those that can document a valid excuse.
2. Everyone MUST TAKE the FINAL EXAM.
3. If you miss class, it is your responsibility to make up the work missed.
4. Please turn cell phones OFF during both lectures and exams.

Important Dates

1. January 17 No classes.
2. January 18 Last day to add a class.
3. February 4 Last day to drop without a grade of W.
4. March 7-12 Spring Break
5. April 1 Last Day to Withdraw from a course.

Examinations: Exam dates will be announced one week in advance.

Final Exam: Date and Time will be announced.

Personal Note: Calculus is an exciting subject. It is used in engineering and in both the physical and social sciences. Have fun with the course. Do as much as you can and study hard. I will do my best to help you over the rough spots.