

Multidimensional Calculus

Math 2057-2, Spring 2011

Louisiana State University

Monday, Wednesday, and Friday from 12:40 to 1:30

Room 127 of Tureaud Hall

Instructor: Prof. Stephen Shipman

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Office hours: Monday 9:30 to 11:30, Thursday 1:30 to 3:30 or by appointment

Course web site: http://www.math.lsu.edu/~shipman/courses_11A-2057.html

Textbook: Multivariable Calculus Early Transcendentals, by Jon Rogawski

Prerequisite:

The prerequisite for this course is Math 1552, the second semester of calculus, including parametric equations, conic sections, and the geometry and calculus of vectors.

Course Content:

The course will cover chapters 14-17 of the textbook. More information on the content can be found at <https://www.math.lsu.edu/dept/courses/2057>. The main topics are

Ch. 14: Differential calculus of functions of several variables.

Ch. 15: Integral calculus of functions of several variables.

Ch. 16: Line integrals and surface integrals of functions and vector fields.

Ch. 17: Fundamental theorems of multidimensional calculus.

Exams:

Exam 1: Friday, Feb. 11 on Chapter 14

Exam 2: Friday, Mar. 11 on Chapter 15

Exam 3: Friday, Apr. 8 on Chapter 16

Final exam: Saturday, May 14, from 12:30 to 2:30

The final exam will be comprehensive but will focus on Chapter 17.

Evaluation:

Evaluation of performance in the course is based on scores on the exams as follows:

Three in-class exams: 20% each

Final exam: 40%

Grading scale: A—at least 90%; B—at least 80%; C—at least 70%; D—at least 60%.

Ethical Conduct:

Students must abide by the LSU Code of Student Conduct:

[http://appl003.lsu.edu/slas/dos.nsf/\\$Content/Code+of+Conduct?OpenDocument](http://appl003.lsu.edu/slas/dos.nsf/$Content/Code+of+Conduct?OpenDocument)