
M408D (54690/95/00)

Sequences, Series, and Multivariable Calculus, Fall 2010

Lecture: TTh 12:30-2, CPE 2.214

Recitation sections:

MW 2-3, RLM 6.122 (54690)

MW 3-4, RLM 5.120 (54695)

MW 4-5, RLM 5.104 (54700)

Instructor: Ravi Srinivasan

Email: rav@math.utexas.edu

Office: RLM 11.174

Office hours: TTh 2-3

Class website: <http://www.ma.utexas.edu/users/rav/M408D/>

TA: John Orr

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Office: RLM 11.146

Office hours: MW 12:30-2

Text: ``Calculus (6th ed.),'' by James Stewart (ISBN 0495011606)

Topics: See <http://www.ma.utexas.edu/academics/courses/syllabi/M408D.php>

Prerequisites and degree relevance:

A grade of C- or better in M408C or M408L or the equivalent. 408D may not be counted by students with credit for Mathematics 403L, 408S, 408M. Both of M408C and M408D (or the equivalent sequences M408K, M408L, M408M; M408N, M408S, M408M) are required for mathematics majors, and mathematics majors are required to make grades of C- or better in these courses.

Course description and content:

M408C, M408D is the standard first-year calculus sequence. It is directed at students in the natural and social sciences and at engineering students. The emphasis in this course is on problem solving, not on the presentation of theoretical considerations. While the course necessarily includes some discussion of theoretical notions, its primary objective is not the production of theorem-provers. M408D contains a treatment of infinite series, and an introduction to vectors and vector calculus in 2-space and 3-space, including parametric equations, partial derivatives, gradients and multiple integrals.

Notice:

The University of Texas provides appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-6441 TTY. If you plan on using accommodations, you need to notify your instructors early in the semester.

Important dates:

Mon., Aug. 30, 2010 -- Last day of official add/drop period

Fri., Sep. 10, 2010 -- Last day to drop a course for possible refund

Wed., Sep. 22, 2010 -- Last day to drop a class without possible academic penalty

Wed., Oct. 20, 2010 -- Last day to withdraw/drop a class with Dean's approval, change status to or from pass/fail or credit/no credit basis

Grading:

Grades will be determined from homework, quizzes, midterms, and the final exam (see below). The standard grading system on a 100 point scale will be used:

A: 90-100

B: 80-89

C: 70-79

D: 65-69

F: < 65

If necessary, final grades will be curved (only upwards) to achieve an appropriate class average.

1. Homework (HW): 15%

Homework assignments will be posted online weekly via the Quest system. Answers are to be submitted online and will be automatically graded. Late homework will *not* be accepted. The three lowest HW scores will be dropped.

You are encouraged to discuss and work together on problems, both in and out of recitation sections. Learn to derive the correct answer instead of guessing in order to better prepare for quizzes and exams. Do not restrict yourself to HW problems, use them as a basis for trying questions from the book as well.

2. Quizzes: 15%

Short quizzes will be given in recitation section every two weeks (see below for tentative dates). The lowest quiz score will be dropped. The purpose of the quizzes is to prepare you for the exams by requiring you to solve problems efficiently under time pressure.

3. Midterms: 40%

There will be two 50-minute midterms given in recitation section on the following dates (subject to change):

3a. Midterm #1: 20%
Monday, Oct. 04, 2010

3b. Midterm #2 (not comprehensive): 20%
Monday, Nov. 08, 2010

4. Final exam (comprehensive): 30%

Monday, December 13, 9-12 (officially assigned date/time), location TBA

Exam policy:

A valid photo ID must be available to be checked at all exams. Calculators and books are not permitted during quizzes, midterms, and the final exam.

Make-up exams *will not* be given so please remember the appropriate exam dates. In extraordinary circumstances *ONLY*, the final exam score will compensate for a missing midterm exam. This includes illness, observance of a religious holiday, or a university-related absence (e.g., away game) with 2 weeks advance notice. Proper documentation (such as a doctor's note) is required in all cases.

Tentative course calendar (subject to change):

--Week 01--

Topics: Review, 7.8

08/26

--Week 02--

Topics: 8.8, 12.1, 12.2

08/31

09/02

--Week 03--

Topics: 12.3, 12.4, 12.5

09/07

Quiz #1 (Wednesday, 09/08)

09/09

--Week 04--

Topics: 12.6, 12.7, 12.8

09/14

09/16

--Week 05--

Topics: 12.9, 12.10, 12.11

09/21

Quiz #2 (Wednesday, 09/22)

09/23

--Week 06--

Topics: 11.1, 11.2, 11.3

09/28

09/30

--Week 07--

Topics: 11.4, 11.5, 13.1

MIDTERM #1 (Monday, 10/04)

10/05

10/07

--Week 08--

Topics: 13.2, 13.3, 13.4

10/12

Quiz #3 (Wednesday, 10/13)

10/14

--Week 09--

Topics: 13.5, 13.6, 14.1

10/19

10/21

--Week 10--

Topics: 14.2, 14.3, 14.4

10/26

Quiz #4 (Wednesday, 10/27)

10/28

--Week 11--

Topics: 15.1, 15.2, 15.3

11/02

11/04

--Week 12--

Topics: 15.4, 15.5, 15.6

MIDTERM #2 (Monday, 11/08)

11/09

11/11

--Week 13--

Topics: 15.7, 15.8, 16.1

11/16

Quiz #5 (Wednesday, 11/17)

11/18

--Week 14--

Topics: 16.2, 16.3

11/23

--Thanksgiving break--

--Week 15--

Topics: 16.4, 16.5, 16.9 (time-permitting)

11/30

Quiz #6 (Wednesday, 12/01)

12/02

FINAL EXAM (Monday, 12/13)
