

Syllabus

Math 2263: Multivariable Calculus

Instructor: Erin Manlove
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Lecture: M-F 9:05-11:00, ApH 226

Office Hours: 11:00-12:00 M-F, location to be determined

Text: *Calculus: Early Transcendentals*, 6th Ed Vol 2, by James Stewart, ISBN 9780495466475
(available in the university book store)

Course Website: math.umn.edu/~emanlove/math2263

Focus: In this course, we expand basic calculus ideas to three-dimensional situations. This allows us to apply to more practical settings the familiar ideas of differentiation and integration. Our aim is to build up to a three-dimensional analog for the Fundamental Theorem of Calculus.

Expected audience: To be in this course, you must have earned a grade of C- or higher in Math 1272, 1372, or 1572 (or equivalent). If you are not sure that you belong in this course, speak with me immediately.

Grading: There will be a cumulative final exam and four midterm exams. The final will constitute one third of the course grade, and each midterm will be worth one ninth. The rest of the grade will come from homework and quizzes.

Final Exam	300 points
Midterms	4 x 100 points
Quizzes	100 points
<u>Homework</u>	<u>100 points</u>
Total	900 points

To determine course grades, I will start with the following gradelines:

- A 810-900 points
- B 720-809 points
- C 630-719 points
- D 540-629 points
- F 0-539 points

I will extend these ranges downward if necessary to get a range of grades for the class. That is, if you earn 720 of the possible points, you are guaranteed at least a B- in the course. However, if very few people score above 800, then you might get a higher grade. I will provide gradelines for each exam to give students an idea of where they stand throughout the semester.

Exams: The exam schedule is listed below. It is crucial that you take every exam. Absence on an exam day will result in an exam score of zero. If extenuating circumstances arise which prevent you from taking an exam, speak with me as soon as possible. Scientific calculators are allowed on exams. However, all work must be written out so that it could be understood without a calculator.

1st Midterm: Wednesday, June 30
2nd Midterm: Wednesday, July 14
3rd Midterm: Friday, July 24
4th Midterm: Tuesday, August 4
Final Exam: Friday, August 6

Homework:

Homework problems will be selected from *Calculus: Early Transcendentals*, 6th Ed Vol 2, by James Stewart. The purpose of regular homework assignments is to give students practice figuring out math problems in a low-stress environment. Students are encouraged to work together, ask questions in office hours, or get outside help on the homework, but each student must write out his or her own assignment in order to get credit. Each homework set is due two days after it is assigned. No late homework will be accepted. All assigned problems will be checked for completion, and several problems from each assignment will be graded for correctness. Of the 37 homework assignments, the lowest four scores for each student will not contribute to the final grade.

Quizzes: Quizzes will be given during class according to the schedule. The purpose of the quizzes is to give students practice solving problems in a time-sensitive environment similar to a testing situation. Quizzes are completed individually during the specified time. Of the nine quizzes, the lowest quiz score for each student will not contribute to the final grade.

Resource materials: In addition to Stewart's text, I suggest looking at these two open-source online texts for extra review. There are many other free online sources for multivariable calculus. If you find an especially helpful one, let me know!

Calculus, Whitman College
<http://www.whitman.edu/mathematics/multivariable/>

Paul's Online Math Notes
<http://tutorial.math.lamar.edu/Classes/CalcIII/CalcIII.aspx>

Course Conduct: I expect the highest standards of conduct from my students. Any behavior in violation of the Student Conduct Code will be treated with the utmost seriousness. Additionally, students are expected to be engaged in the material. Come to class prepared to ask and answer questions!