

APPM 4440

Objective

The course goals are twofold: (1) to present the fundamental concepts of mathematical analysis, which is the foundation for much of applied mathematics; and (2) to develop your ability to read and write proofs. (Prerequisite is Calculus 3, APPM 2350 or MATH 2400 or equivalent and the co-requisite is APPM 3310.)

Text

Advanced Calculus, 2nd edition, by Patrick M. Fitzpatrick. We will cover most of Chapters 1–9.

Homework

To do well in this course come to the lectures and do (and understand) the homework. Ask questions! Late homework will not be accepted after the answers have been posted. While you are allowed, and encouraged, to work on homework problems with your classmates, the work you turn in must be your own. Problem sets and solutions will be posted on the Desire2Learn site <<https://learn.colorado.edu>>. See also the class web page at <<http://amath.colorado.edu/faculty/jdm/4440>>

Grading

Your course grade will be determined from the two midterms (100 points each), homework (150 points), quizzes/class participation/self-grading (50 points), and a comprehensive final exam (150 points). Approximate grade lines will be $A \geq 90\%$ $B \geq 80\%$ $C \geq 70\%$ $D \geq 60\%$. Any adjustments made to this scale will be in the students' favor.

Exams

There will be two midterm exams and a comprehensive final. The dates of the midterm exams will be announced in class at least one week ahead of time. The final exam will be Thursday Dec 17 4:30–7 p.m.

Accommodations

Disability Services: If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services, so that your needs may be addressed in a timely manner. Disability Services determines accommodations based on documented disabilities. (303-492-8671, disabilityservices.colorado.edu)

Religious Observances: Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please let me know of any conflict at least three weeks in advance.

The Rules

Academic Honesty: Students are encouraged to work in groups and discuss homework problems with each other. However, all work turned in must be your own. Violation of the CU Student Honor Code (<http://honorcode.colorado.edu>) or the College of Engineering's Academic Honesty Advising Guidelines (<http://www.colorado.edu/engineering/academics/policies/honesty>) will result in a final course grade of F. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior.

Dropping the Course: Advice from your adviser is recommended before dropping any course. Courses dropped after September 9 receive a W grade and no refunds for tuition or fees. Courses may not be dropped after October 30 without the Dean's approval.