

## Undergraduate Applied Analysis I — APPM 4440 — Fall 2014

Dr. Anne Dougherty, Anne.Dougherty@colorado.edu

Webpage: <http://amath.colorado.edu/courses/4440>

**Course Goals:** 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 corequisite is APPM 3310.)

**Text:** Advanced Calculus, 2<sup>nd</sup> edition, by Patrick M. Fitzpatrick. We will cover most of Chapters 1 – 9, plus a few additional topics as time permits.

**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.

**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

$$A- \geq 90\% \quad B- \geq 80\% \quad C- \geq 70\% \quad D \geq 60\%$$

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 Sunday, Dec 14, 7:30 pm to 10:00 pm.

**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.

**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. In this class, please let your instructor know of any conflict at least two weeks in advance.

**Academic Honesty:** Students are encouraged to work in groups and discuss problems with each other.

**However, all work turned in must be your own.** Violation of the CU Student Honor Code

(<http://www.colorado.edu/academics/honorcode>)

or the College of Engineering's Academic Honesty Advising Guidelines

(<http://engineering.colorado.edu/students/advising.htm>) will result in a final course grade of F.

**Dropping the Course** Advice from your adviser is recommended before dropping any course. After October 31, 2014, dropping the course is possible only with a petition approved by the Dean's office.