## MATH 417: Advanced Calculus I

**Instructor:** Henry Kvinge

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Office Hours: Monday 1:00-2:00, Wednesdays 11:00-11:50 Weber Hall 208

Website: https://hkvinge.github.io/math417fall2018.html

Textbook: Patrick M. Fitzpatrick, Advanced Calculus, Second Edition

Lecture: MWF 12:00pm-12:50pm, Engineering B 105

**Course Content**: Topology of Euclidean spaces, limits, derivatives and integrals on Euclidean spaces. Implicit functions and the implicit function theorem.

**Exams**: There will be three midterm exams (see below for dates). Makeup exams will not be offered. If you have an unavoidable conflict with an exam date, or an emergency of some sort, you must let me know as early as possible in order to make appropriate arrangements.

**Homework**: Expressing your ideas clearly is a vital skill in mathematics. Your homework should be clearly written in <u>full sentences</u> and in paragraph form (*ETEX* is encouraged, but not required). This is especially true in the proofs you submit. Due to time constraints, only a few select problems will be graded. Messy or illegible homework will not be graded. Late homework is NOT accepted. Your lowest homework score will be dropped.

It is vitally important that you do the homework. It is impossible to learn advanced math without struggling with problems.

**Grading**: Your course grade will be based on the following:

Homework 25%

Midterm exams 45%

Final Exam (December 12th) 30%

Disabilities: Colorado State University is committed to providing reasonable accommodations for all persons with disabilities. Students with disabilities who need accommodations must first contact Resources for Disabled Students before requesting accommodations for this class. Resources for Disabled Students (RDS; http://www.rds.colostate.edu) is located in room 100 of the General Services Building. Their phone is (970) 491-6385 (V/TDD). Students who need accommodations in this course must contact the instructor in a timely manner (at least one week before examinations) to discuss needed accommodations.

Academic Integrity: This course will adhere to the CSU Academic Integrity Policy as found on the Student Responsibilities page of the CSU General Catalog and in the Student Conduct Code. By handing in homework and exams you certify that this is your own work. You are encouraged to discuss homework solution strategies with fellow students, but the final write-up must be your own. Misrepresenting someone else's work as your own (plagiarism; this includes submitting work from a Solutions Manual or an on-line homework web site as your own), possessing or using unauthorized reference information in any form that could be helpful while taking an exam (for example a calculator not explicitly permitted), or doing assigned problems with the aid of a computer algebra system that has not explicitly been permitted are examples of cheating. At a minimum, violations will result in a grading penalty in this course and a report to the Student Resolution Center.