

Math 3220 §1 Foundations of Analysis II January 4, 2013

MTWF 11:50 - 12:40 in JWB 308.

Instructor: A. Treibergs, JWB 224, 581 8350.
Office Hours: 10:45-11:45 MWF (tent.) & by appt.
E-mail: treiberg@math.utah.edu
Homepage: <http://www.math.utah.edu/~treiberg/M3224.html>

Text: Joseph L. Taylor, "Foundations of Analysis," American Mathematical Society, Providence, 2012.

Grader:

Prerequisites

Math 3210 or consent of instructor.

Grading

Homework: To be assigned weekly.

Homework, due Fridays, will be collected in class. Papers turned into the grader's mailbox in the Math mail room (JWB 228) by 3:00 PM Fridays before the grader leaves will be regarded as being turned in on time. Homework that is late but not more than one week late will receive half credit. Homework that is more than one week late will receive no credit at all.

Exams: We vote in class whether exams are closed book, open book or cheat sheet. "Cheat sheet" means on exams you will be allowed to bring in a "cheat sheet," a single 8.5" x 11" page of notes. The exams will otherwise be closed book: no calculators, laptops, text messengers, other notes or books will be allowed.

Midterms: There will be three in-class one-hour midterm exams on Wednesdays Jan. 30, Feb. 27 and Apr. 3.

Final Exam: Th., May 2, 10:30 - 12:30. Half of the final will be devoted to material covered after the third midterm exam. The other half will be comprehensive. Students must take the final to pass the course.

Course grade: Best two of three midterms 40% + homework 30% + final 30%.

Withdrawals: Last day to drop a class is Jan. 16. Last day to add a class is Jan. 22. Until Mar. 1 you can withdraw from the class with no approval at all. After that date you must petition your dean's office to be allowed to withdraw.

ADA: The Americans with Disability Act requires that reasonable accommodations be provided for students with cognitive, systemic, learning and psychiatric disabilities. Please contact me at the beginning of the quarter to discuss any such accommodations you may require for this course.

* * *

Objectives: To refine our skill at proof and facility with computation, to gain an appreciation for abstraction from the concepts of topology and metric spaces, and to learn the theory behind multidimensional calculus.

Topics: We shall try to cover the following chapters

- Chapter 7. Convergence in Euclidean Space
- Chapter 8. Functions on Euclidean Space
- Chapter 9. Differentiation in Several Variables
- Chapter 10. Integration in Several Variables