

# Math 230A – Real Analysis

## Fall 2025

**Instructor:** Dr. Corey Shanbrom

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**Office:** Brighton 125

**Office Hours:** Mon 2-3, Wed 12-1, Fri 1-2 or by appointment. *You should expect to attend some office hours weekly so please schedule accordingly.*

**Lectures:** MW 4-5:15pm, ALP 231

**Prerequisites:** Math 130B, or equivalent.

**Text:** Principles of Mathematical Analysis, by Walter Rudin, 3<sup>rd</sup> ed. You should expect to spend large amounts of time reading this book slowly and carefully, while taking notes, working computations, and recording questions. We will cover Chapters 1-4.

**Grading:** Two midterms worth 25% each and one final worth 50%. Letter grades will be determined by a curve at the instructor's discretion.

**Exams:** Midterm dates will be announced at least one week in advance. The comprehensive final exam will be held Wednesday, December 10, 3-5pm. Make-up exams allowed only with prior permission or in case of documented emergency. No notes, books, electronic devices, or bathroom breaks will be permitted during any exam.

**Homework:** Homework will typically be assigned, collected, and returned weekly. Assignments will be posted to Canvas. The purpose is for you to receive feedback on your writing and solutions. Not all assigned problems will receive feedback. Working with classmates is encouraged, but you should write up your own solutions.

While homework will not affect your course grade, working these problems is the best way for you to prepare for the course exams, and eventually, the comprehensive exams. It also helps me communicate my values and expectations. You are encouraged to redo and resubmit problems as many times as needed.

**Catalog Description:** Metric topology; the theory of the derivative; measure theory.

**Remarks:** If you have a disability and require accommodations, you need to provide disability documentation to [DAC](#), Lassen Hall 1008, and discuss your needs with me as soon as possible.

Cheating of any type will result in disciplinary action and an automatic fail. If you are unsure what constitutes cheating, please see Sac State's Academic Honesty Policy; I have provided a link on Canvas.

*This syllabus is subject to change.*

**University Policy Manual Course Syllabus Policy, Policy File Number ACA-170,  
Section VII Syllabi Required Elements:**

**A.** Real Analysis. Math 230A. 3 units. Course Description: “Metric topology; the theory of the derivative; measure theory.” Department of Mathematics and Statistics. College of Natural Sciences and Mathematics.

**B.** Attendance is not required, except for exams and the first week of classes.

**C.** This course adheres to the [Academic Honesty Policy](#).

**D.** This course adheres to the [Hornet Honor Code](#).

**E.** 1. Sacramento State is committed to ensuring an accessible learning environment where course or instructional content are usable by all students and faculty. If you believe that you require disability-related academic adjustments for this class, please immediately contact Disabilities Access Center (DAC) to discuss eligibility. A current accommodation letter from DAC is required before any modifications, above and beyond what is otherwise available for all other students in this class will be provided. 2. Your physical and mental health are important to your success as a college student. Student Health and Counseling Services (SHCS) in The WELL offers medical, counseling, and wellness services to help you get and stay healthy during your time at Sac State. SHCS offers: Primary Care medical services, including sexual and reproductive healthcare, transgender care, and immunizations; urgent care for acute illness, injuries, and urgent counseling needs; pharmacy for prescriptions and over-the-counter products; mental health counseling, including individual sessions, group counseling, support groups, mindfulness training, and peer counseling; athletic training for sports injury rehabilitation; wellness services, including nutrition counseling, peerled health education and wellness workshops, and free safer sex supplies; violence and sexual assault support services. Most services are covered by the Health Services fee and available at no additional cost. 3. If you are experiencing challenges with food, housing, financial or other unique circumstances that are impacting your education, help is just a phone call or email away. The CARES office provides case management support for any enrolled student.

**F.** You are welcome but not required to use technology in the classroom that assists with note-taking or problem solving. Please do not record me or your classmates in any form without permission. Please refrain from using technology for non-academic purposes (games, social media) as it is distracting to your classmates.