

Math 230A – Real Analysis

Fall 2022

Instructor: Dr. Corey Shanbrom

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Office: Brighton 125

Office Hours: Mon 10-11am, Weds 2-3pm, Thurs 1-2pm, or by appointment. You should expect to attend some office hours so please schedule accordingly.

Lectures: MW 4-5:15pm, BRH 209

Prerequisites: Math 130B, or equivalent.

Text: Principles of Mathematical Analysis, by Walter Rudin, 3rd 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 14, 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. 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. Typesetting your homework in LaTeX is also encouraged.

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.

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 SSWD, 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 SacCT.

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. Online homework is not accepted late except in case of documented emergency, as all solutions are posted on the due date. Written homework is accepted late at a 25% penalty.

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 Services for Students with Disabilities (SSWD) to discuss eligibility. A current accommodation letter from SSWD 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.

Covid Info:

- Campus health and safety protocols regarding COVID-19 will be updated to match county, state, or CSU system standards. Please comply with campus requirements/protocols for vaccine certification and testing, indoor masking, physical distancing, COVID-19 symptom screening, contact tracing, and other safety measures to minimize the spread of COVID-19.
- Current campus rules can be found at:
<https://www.csus.edu/academic-affairs/academic-continuity/specific-faq.html>
- If you have [any COVID-19-related symptoms](#) or you are unvaccinated and have come into close contact with someone who has a confirmed positive COVID-19 test, please contact the Student Health Center or your medical provider. Do not come to class until you have tested negative or have received clearance from the Student Health Center.
- Illness due to COVID-19 or exposure to a confirmed positive individual that requires quarantine or isolation is a qualifying emergency and late work or make-up exams will be allowed in consultation with me.
- If you are hard of hearing or a lip reader please let me know so that I can use an appropriate mask if needed.
- If you wish to confer privately with me about your vaccination, exposure, or positive test status, you should first affirm that you are voluntarily disclosing your medical information. Any information you share with me will be treated securely and only be shared with the Student Health Center to follow established safety protocols.