

MATH 5851 - Topics in Analysis

Summer 2026 Syllabus, Section 02, CRN 30990,

Credit hours: 4

Instructor

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Professional Qualifications:

PhD, Mathematics

Professor

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Course Description

5851. Topics in Analysis. A course in analysis aimed at developing a broad understanding of the subject. Credit will not be given for both MATH 3751 and MATH 5851. Prereq.: Permission of graduate coordinator or department chair. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Introduction to Real Analysis, 4th ed	Bartle and Sherbert	

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
5/11	Sections 2.1-2.5	Real Numbers	Real Number Exercises
5/18	Sections 3.1-3.7	Sequences	Sequence Exercises
5/25	Sections 4.1-4.3	Limits	Limit Exercises Midterm Exam
6/1	Sections 5.1-5.4	Continuity	Continuity Exercises
6/8	Sections 6.1-6.4	Differentiation	Differentiation Exercises
6/15	Sections 7.1-7.3	Integration	Integration Exercises
6/22			Final Exam

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.