Math 424, Honors Real Analysis, Fall 2021
MWF 11:00-11:50 in 3217 Everitt
M. Burak Erdogan

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Office Hours: TBA

Textbook: M. Rosenlicht, Introduction to Analysis, Dover.

Course Syllabus: (see https://math.illinois.edu/resources/department-resources/syllabus-math-424)

Continuity, compactness and completeness underlie much of modern mathematics and its applications. The course develops these concepts in the metric space setting, after which the fundamentals of calculus are rigorously established.

Chapter 1 - omit
Chapter 2 - The real number system (2 hours)
Chapter 3 - Metric spaces (9 hours)
Chapter 4 - Continuous functions (6 hours)
Chapter 5 - Differentiation (4 hours) - Riemann integration (8 hours)
Chapter 7 - Interchange of limit operations (6 hours)

Leeway, quizzes, and exams: 8 hours

Course Webpage: I will maintain a course webpage in Compass 2g. Lecture notes, homework assignments, reading assignments, and grades will be posted there. In addition, there will be a piazza discussion page for the course.

Homework Assignments: I will post weekly homework assignments in compass, and they will be due in compass by 11pm a week later. I will drop the worst two homework grades. Absolutely no late assignments. You are encouraged to discuss the homework problems with each other but should write the solutions by your own words.

Exams: There will be two 50 minutes midterm exams and a 3 hours final exam. Date and times to be determined later.

Grading: Weekly homework assignments (25%), a midterm exams (20% each), and a final (35%). Please do not request an alteration for yourself in these percentages. No make-up exams.
The letter grades will be assigned according to the scale:
90 - 100: A-, A, A+
80 - 90: B-, B, B+
70 - 80: C-, C, C+
60 - 70: D-, D, D+
Below 60: F.