

MATH 112: INTRODUCTION TO ANALYSIS

Instructor: John Lind
Office: Library 390
Office Hours: M 1:00–2:30, W 1:00–2:30, Th 3:00–4:30; also by appointment
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Class meeting: MWF 12:00–12:50 Library 204 [S01]
MWF 2:40–3:30 Library 389 [S05]

This course is an introduction to mathematical analysis. We will study sets, the field axioms, the real numbers, the complex numbers, functions, limits, continuity, differentiability, the Riemann integral, sequences, and series, all with mathematical precision. I will emphasize rigor and will focus on the methods of writing proofs. Even more than learning the mathematical content, the goal of this course is to develop strong mathematical reasoning and writing skills. I will encourage you to read the course notes slowly and carefully for comprehension. At the end of this course, you should understand the basic methods of mathematical analysis, and be ready to take a variety of more advanced mathematics courses.

Text. “Math 112: Introduction to Analysis,” Irena Swanson. Available in the bookstore and on reserve at the library.

Assignments, Exams. There will be homework assignments due Tuesdays and Fridays, two midterm exams, and a final exam.

Tutoring. There is a drop-in math tutoring center open Sundays through Thursdays, 7:00pm–9:00pm, in Library 389.

I expect you to comport yourself with honor, as derived from respect for the academic program, your peers and your instructors. Collaboration is an important part of the mathematical life, and I encourage you to talk to your peers and work on problems together. Your homework is a reflection of your own understanding of the material and should be written entirely by you, in your own words, with proper attribution of your collaborators at the beginning. I consider copied homework to be an honor principle violation.