Math 4547: Real Analysis I

Lecturer: **Professor Alex Margolis**

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Spring 2025

1 January 6, 2025

Professor Margolis introduced the course and discussed the syllabus. The course will cover the following topics:

- Foundations of the real number system
- Topology of the real numbers
- Sequences and series
- Continuity
- Differentiation
- Integration
- Sequences and series of functions
- Uniform convergence
- Power series
- Fourier series
- Metric spaces

Definition 1

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2 January 8, 2025