DEPARTMENT OF MATHEMATICS
SYLLABUS

Course # & Name: MAT 125A: Real Analysis

Recommended Text(s) & Price: Kenneth Ross "Elementary Analysis: The Theory of Calculus." (Springer-Verlag; $34.70)

Prepared by: R. Vershynin, D. Fuchs, A. Krener, A. Thompson, B. Temple (Updated by Eric Rains)

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Lecture(s)	Sections	Comments/Topics
	Chapter 3	**Continuity**
3	17	Continuous functions
2	18	Properties of continuous functions
3	19	Uniform continuity
2	20	Limits of functions
	Chapter 4	**Sequences and Series**
2	23	Power series
2	24	Uniform convergence
2	25	Differentiation of power series
	Chapter 5	
2	28	Derivatives
2	29	Mean Value Theorem
2	30	Taylor's Theorem
	Metric Spaces	
3	21	Metric Spaces and Continuity
2	22	Metric Spaces and connectedness

Additional Notes:

Total number of lectures = 25.

Optional if time allows:
- 2 lectures, Section 27, Weierstrass Approximation
- 2 lectures, Section 30, L'Hopital's Rule

This syllabus recommends covering metric spaces at the end of the quarter, but they can be covered earlier if preferred.