

SYLLABUS FOR MTH 251

Study Guide	Text	Topic
Lesson 0	Ch. 1	Functions
Lesson 1	§2.1	Idea of Limits
Lesson 2	§2.2	Definitions of Limits
Lesson 3	§2.3	Techniques for Computing Limits
Lesson 4	§2.4	Infinite Limits
Lesson 5	§2.5	Limits at Infinity
Lesson 6	§2.6	Continuity
Lesson 7	§3.1, 3.2	Introducing and Working with Derivatives
Lesson 8	§3.3	Rules of Differentiation
Lesson 9	§3.4	The Product and Quotient Rules
Lesson 10	§3.5	Derivatives of Trigonometric Functions
		Catch-up/Review
Lesson 11	§3.6	Derivatives as Rates of Change
Lesson 12	§3.7	The Chain Rule
Lesson 13	§3.8	Implicit Differentiation
Lesson 14	§3.9	Derivatives of Logarithmic and Exponential Functions
Lesson 15	§3.10	Derivatives of Inverse Trigonometric Functions
Lesson 16	§3.11	Related Rates
Lesson 17	§4.1	Maxima and Minima
Lesson 18	§4.2	What Derivatives Tell Us
Lesson 19	§4.3	Graphing Functions
		Catch-up/Review
Lesson 20	§4.4	Optimization Problems
Lesson 21	§4.5	Linear Approximations and Differentials
Lesson 22	§4.6	Mean Value Theorem
Lesson 23 [†]	§4.7	L'Hôpital's Rule
		Catch-up/Review

[†]Optional