

Calculus I MATH 150 Syllabus
 Lecture-by-Lecture
 Department of Mathematics and Statistics
 Hunter College
 TEXT: Single Variable Calculus, 2nd Edition
 Briggs, Cochran, Gillett
 Pearson

Sections 1.1-1.3 , Review of Functions is prerequisite for the course. While there are no lectures on chapter 1, there are problems in MyMathLab for student review.

LECTURE	SECTION	TOPIC
1	2.1	The Idea of Limits
1	2.2	Definition of Limits
2	2.3	Techniques for Computing Limits
3	2.4	Infinite Limits
3	2.5	Limits at Infinity
4	2.6	Continuity
5	2.7	Precise Definition of Limits

NOTE: Only cover the most elementary epsilon-delta examples. E.g. linear functions on page 96 and homework problems at the level of # 19,20 and 23.

6	3.1	Introducing the Derivative
6	3.2	Working with the Derivatives
7	3.3	Rules of Differentiation
7	3.4	The Product and Quotient Rules
8	3.5	Derivatives of Trigonometric Functions
9	EXAM ONE	
10	3.6	Derivatives as Rates of Change
10	3.7	The Chain Rule
11	3.8	Implicit Differentiation
11	3.9	Related Rates
12	4.1	Maxima and Minima
13	4.6	Mean Value Theorem
14	4.2	What Derivatives Tell Us
15	4.3	Graphing Functions
16	4.4	Optimization Problems
17	EXAM TWO	
18	4.5	Linear Approximation and Differentials
19	4.9	Antiderivatives
20	5.1	Approximating Areas under Curves
21	5.2	Definite Integrals

21	5.3	Fundamental Theorem of Calculus
22	5.4	Working with Integrals
22	5.5	Substitution Rule
23	6.1	Velocity and Net Change
24	6.2	Regions Between Curves
25	7.2	The Natural Logarithmic and Exponential Functions
25	7.4	Exponential Models
26	EXAM III	