Calculus I MATH 150 Syllabus
Lecture-by-Lecture
Department of Mathematics and Statistics
Hunter College
Text: *Single Variable Calculus*, 7th Edition, Early Transcendentals, with WebAssign, James Stewart , Cengage

August 6, 2012

LECTURE	SECTION	TOPIC
1	1.1-1.6	Review of Functions
2	2.1	The Tanget and Velocity Problems
3	2.2	The Limit of a Function
4	2.3	Calculating Limits Using the Limit Laws
5	2.5	Continuity
6	2.6	Limits at Infiinity, Horizontal Asymptotes
7	2.7	Derivatives and Rates of Change
7	2.8	The Derivative as a Function
8	3.1	Derivatives of Polynomials and Exponential Functions
8	3.2	The Product and Quotient Rules
9	3.3	Derivatives of Trigonometric Functions
10	Exam One	
11	3.4	The Chain Rule
12	3.5	Implicit Differentiation
12	3.6	Derivatives of Logarithm Functions
13	3.7	Rates of Change in the Natural and Social Sciences
13	3.8	Exponential Growth and Decay
14	3.9	Related Rates

14	3.10	Linear Approximation and Differentials
15	4.1	Maximum and Minimum Values
15	4.2	The Mean Value Theorem
16	4.3	How Derivatives Affect the Shape of a Graph
17	4.4	Indeterminate forms and l'Hopital's Rule
17	4.5	Summary of Curve Sketching
18	4.7	Optimization Problems
19	4.7	Optimization (more)
20	Exam Two	
21	4.9	Antiderivatives
22	5.1	Areas and Distances
23	5.2	The Definite Integral
24	5.3	The Fundamental Theorem of Calculus
25	5.4	Indefinite Integrals and the Net Change Theorem
25	5.5	The Substitution Rule
26	6.1	Areas Between Curves
27	Exam Three	
28	Review	
Final Exam		