Math 115 Outline - Spring 2008

(*Calculus, Early Transcendentals,* by James Stewart 6th Edition)

Week	Date	Section	Topic
1	1/23	1.1	Four Ways to Represent a Function
		1.2	Mathematical Models
		1.3	New Functions From Old Functions
		1.4	Graphing Calculators
2	1/28	1.5	Exponential Functions
		1.6	Inverse Functions & Logarithms
		2.1	Tangent and Velocity Problems
		2.2	Limits
3	2/4	2.3	Limit Laws
		2.4	Definition of a Limit
		2.5	Continuity
4	2/11	2.6	Limits at Infinity
		2.7	Derivatives and Rates of Change
		2.8	Derivative of a Function
5	2/18	3.1	Derivatives of Polynomials & Exponential Functions
		3.2	Product and Quotient Rules
			Review for Exam I
6	2/25		Review for Exam I
	2/26		Exam I, 6-8 PM
		3.3	Derivatives of Trigonometric Functions
7	3/3	3.4	The Chain Rule

Week	Date	Section	Topic
		3.5	Implicit Differentiation
		3.6	Derivatives of Logarithmic Functions
	3/10	No Class	Spring Break
8	3/17	3.7	Rates of Change in the Natural and Social Sciences
		3.8	Exponential Growth and Decay
		3.9	Related Rates
9	3/24	3.10	Linear Approximations and Differentials
		4.1	Maximum and Minimum Values
		4.2	Mean Value Theorem
10	3/31	4.3	How Derivatives Affect the Shape of a Graph
		4.4	L'Hospital's Rule
			Review for Exam 2
11	4/7		Review for Exam 2
	4/8		Exam 2, 6-8 PM
		4.5	Summary of Curve Sketching
12	4/15	4.7	Optimization Problems
		4.9	Antiderivatives
		5.1	Areas and Distance
13	4/21	5.2	The Definite Integral
		5.3	Fundamental Theorem
		5.4	Indefinite Integrals and the Net Change Theorem
14	4/28	5.5	The Substitution Rule
			Review for final exam