## COURSE OUTLINE AND SUGGESTED SCHEDULE:

Last updated: August 24, 2014

This schedule is an approximation and subject to change.

Week of	
25 Aug	2.1 The Idea of Limits
	2.2 Definitions of Limits
	2.3 Techniques for Computing Limits
1 Sep	Labor Day Holiday
	2.4 Infinite Limits
	2.5 Limits at Infinity
8 Sep	2.5 Limits at Infinity
	2.6 Continuity
	2.7 Precise Definitions of Limits
15 Sep	2.7 Precise Definitions of Limits
	3.1 Introducing the Derivative
	Review
	Exam 1
22 Sep	3.2 Rules of Differentiation
	3.3 The Product and Quotient Rule
	3.4 Derivatives of Trigonometric Functions
29 Sep	3.5 Derivatives as Rates of Change
	3.6 The Chain Rule
	3.7 Implicit Differentiation
6 Oct	3.7 Implicit Differentiation
	3.8 Derivatives of Logarithmic and Exponential Functions
	Review
13 Oct	3.9 Derivatives of Inverse Trigonometric Functions
	Review
	MIDTERM EXAM – WEDNESDAY, 6:30-8p
	3.10 Related Rates
20 Oct	Fall Break
	3.10 Related Rates
	4.1 Maxima and Minima
	4.2 What Derivatives Tell Us
27 Oct	4.2 What Derivatives Tell Us
	4.3 Graphing Functions
	4.4 Optimization of Functions
3 Nov	4.4 Optimization of Functions
	4.5 Linear Approximation and Differentials
	Exam 2

10 Nov 4.6 Mean Value Theorem
4.7 L'Hôpital's Rule
4.8 Antiderivatives
17 Nov 5.1 Approximating Areas Under Curves
5.2 Definite Integrals
24 Nov 5.3 Fundamental Theorem of Calculus
1 Dec 5.3 Fundamental Theorem of Calculus
Exam 3
5.4 Working with Integrals
5.5 Substitution Rule

 $8 \ {\rm Dec} \qquad 5.5 \ {\rm Substitution} \ {\rm Rule}$ 

Review

15 Dec FINAL EXAM – MONDAY, 6-8p