

Spring 2010

Math 251 Tentative Schedule

Week	Date	Topic
1	18-Jan	Holiday
	19-Jan	Introduction, 0.1 Polynomials and rational functions
	20-Jan	0.1 Polynomials and Rational Functions
	21-Jan	0.2 Graphing Calculators and Computer Algebra Systems
2	25-Jan	0.3 Inverse Functions
	26-Jan	0.4 Trigonometric and Inverse Trig Functions
	27-Jan	0.5 Exponential and Logarithmic functions
	28-Jan	0.6 Transformations of Functions
3	1-Feb	TBA
	2-Feb	Test 1
	3-Feb	1.1 A Brief Preview of Calculus
	4-Feb	1.2 The concept of Limit
4	8-Feb	1.3 Computation of Limits
	9-Feb	1.4 Continuity and its consequences
	10-Feb	TBA
	11-Feb	1.5 Limits Involving Infinity
5	15-Feb	Holiday
	16-Feb	1.6 Formal Definition of the Limit
	17-Feb	TBA
	18-Feb	Review
6	22-Feb	Test 2
	23-Feb	2.1 Tangent Lines and Velocity
	24-Feb	2.2 The Derivative
	25-Feb	2.3 Computation of Derivatives: the Power Rule
7	1-Mar	2.4 The product and quotient rules
	2-Mar	2.5 the Chain Rule
	3-Mar	TBA
	4-Mar	2.6 Derivatives of Trigonometric Functions
8	8-Mar	2.7 Derivatives of Exponential and Logarithmic Functions
	9-Mar	2.8 Implicit Differentiation
	10-Mar	Flex Day - No Classes
	11-Mar	Flex Day - No Classes
9	15-Mar	2.9 The Mean Value Theorem
	16-Mar	TBA
	17-Mar	Review
	18-Mar	Test 3
10	22-Mar	3.1 Linear Approximations and Newton's Method
	23-Mar	3.2 Indeterminate forms and L'Hopital's rule
	24-Mar	3.3 maximum and Minimum Values
	25-Mar	TBA
11	29-Mar	3.4 Increasing and Decreasing Functions
	30-Mar	3.5 Concavity and the Second Derivative Test

	31-Mar	3.6 Overview of Curve Sketching
	1-Apr	3.7 Optimization
	5-Apr	Spring Break
	6-Apr	Spring Break
	7-Apr	Spring Break
	8-Apr	Spring Break
12	12-Apr	3.7 More Optimization
	13-Apr	3.8 Related Rates
	14-Apr	3.9 Rates of Change in Economics and the Sciences
	15-Apr	TBA
13	19-Apr	Review
	20-Apr	Test 4
	21-Apr	4.1 Antiderivatives
	22-Apr	4.2 Sums and Sigma Notation
14	26-Apr	4.3 Area
	27-Apr	4.4 The Definite Integral
	28-Apr	4.5 The Fundamental Theorem of Calculus
	29-Apr	TBA
15	3-May	4.6 Integration by Substitution
	4-May	4.7 Numerical Integration
	5-May	4.8 The Natural Logarithm
	6-May	TBA
16	10-May	Review
	11-May	Test 5
	12-May	TBA
	13-May	TBA
17	17-May	TBA
	18-May	Review
	19-May	Review
	20-May	Review
		Final Exam Monday May 24th 11:10 - 1:40