

Spring 2010 Math 253 Tentative Schedule

Week	Date	Topic
1	18-Jan	<i>Holiday, No Classes</i>
	19-Jan	9.1 Plane Curves and Parametric Equations
	20-Jan	9.2 Calculus and Parametric Equations
	21-Jan	9.3 Arc Length and Surface Area in Parametric Equations
2	25-Jan	9.4, 9.5 Polar Coordinates
	26-Jan	9.6, 9.7 Conic Sections
	27-Jan	Review
	28-Jan	Exam #1
3	1-Feb	10.1 Vectors in the Plane
	2-Feb	10.2 Vectors in Space
	3-Feb	10.3 The Dot Product
	4-Feb	10.3 The Dot Product
4	8-Feb	10.4 The Cross Product
	9-Feb	10.5 Lines and Planes in Space
	10-Feb	10.6 Surfaces in Space
	11-Feb	Review
5	15-Feb	<i>No Classes</i>
	16-Feb	Exam #2
	17-Feb	11.1 Vector-Valued Functions
	18-Feb	11.2 The Calculus of Vector-Valued Functions
6	22-Feb	11.3 Motion in Space
	23-Feb	11.4 Curvature
	24-Feb	11.5 Tangent and Normal Vectors
	25-Feb	11.5 Tangent and Normal Vectors
7	1-Mar	11.6 Parametric Surfaces
	2-Mar	Review
	3-Mar	Exam #3
	4-Mar	12.1 Functions of Several Variables
8	8-Mar	12.2 Limits and Continuity
	9-Mar	12.3 Partial Derivatives
	10-Mar	<i>Flex Day, No Classes</i>
	11-Mar	<i>Flex Day, No Classes</i>
9	15-Mar	12.4 Tangent Planes and Linear Approximations
	16-Mar	12.5 The Chain Rule
	17-Mar	12.6 The Gradient and Directional Derivatives
	18-Mar	12.6 The Gradient and Directional Derivatives
10	22-Mar	12.7 Extrema of Functions of Several Variables
	23-Mar	12.8 Constrained Optimization and Lagrange Multipliers
	24-Mar	12.8 Constrained Optimization and Lagrange Multipliers
	25-Mar	Review
11	29-Mar	Exam #4
	30-Mar	13.1 Double Integrals
	31-Mar	13.2 Area, Volume, and Center of Mass
	1-Apr	13.3 Double Integrals in Polar Coordinates

x	5-Apr	<i>Spring Break, No Classes</i>
	6-Apr	<i>Spring Break, No Classes</i>
	7-Apr	<i>Spring Break, No Classes</i>
	8-Apr	<i>Spring Break, No Classes</i>
12	12-Apr	13.4 Surface Area
	13-Apr	13.5 Triple Integrals
	14-Apr	13.6 Cylindrical Coordinates
	15-Apr	13.7 Spherical Coordinates
13	19-Apr	13.8 Change of Variables in Multiple Integrals
	20-Apr	13.8 Change of Variables in Multiple Integrals
	21-Apr	Review
	22-Apr	Exam #5
14	26-Apr	14.1 Vector Fields
	27-Apr	14.2 Line Integrals
	28-Apr	14.3 Independence of Path and Conservative Vector Fields
	29-Apr	14.4 Green's Theorem
15	3-May	14.5 Curl and Divergence
	4-May	14.6 Surface Integrals
	5-May	14.7 The Divergence Theorem
	6-May	14.8 Stokes' Theorem
16	10-May	14.9 Applications of Vector Calculus
	11-May	14.9 Applications of Vector Calculus
	12-May	Review
	13-May	Exam #6
17	17-May	Review
	18-May	Review
	19-May	Review
	20-May	Review
18	26-May Final Exam	

18-Jan-10