

**Course Schedule and Assignments**

<b>Week of</b>	<b>Section</b>	<b>Topic</b>
<b>July 2<sup>nd</sup></b>	12.1 – 12.2	Functions/Graphs of Two Variables
	12.3	Contour Diagrams
	12.4 – 12.5	Linear Functions / Functions of 3 Variables
	13.3 – 13.4	Review of Vectors
<b>July 9<sup>th</sup></b>	14.1 – 14.2	Partial Derivatives and Computing Partial Derivatives
	14.3	Local Linearity and the Differential
	14.4 – 14.5	Directional Derivatives in Planes/Space
	14.6	The Chain Rule
<b>July 16<sup>th</sup></b>	14.7	Second Order Partial Derivatives
	15.1 – 15.3	Extrema and Optimization
	<b>12.1 – 14.7</b>	<b>EXAM I</b>
	16.1 – 16.2	Integrals of Functions of 2 Variables
<b>July 23<sup>rd</sup></b>	16.3	Triple Integrals
	16.4 – 16.5	Double Integrals in Polar/Spherical Coordinates
	17.1	Parameterized Curves
	17.2 – 17.3	Motion Problems / Vector Fields
<b>July 30<sup>th</sup></b>	18.1	Line Integrals
	18.2	Line Integrals of Parameterized Curves
	<b>15.1 – 17.3</b>	<b>EXAM II</b>
		<b>NO CLASS</b>
<b>August 6<sup>th</sup></b>	18.3	Gradient and Path-Independent Fields
	18.4 & 19.1	Path Dependent Fields / Green's Theorem / Flux Integrals
	19.2	Flux Integrals : Graphs, Cylinders and Spheres
	20.1	Divergence of a Vector Field
<b>August 13<sup>th</sup></b>	20.2 – 20.3	Divergence Theorem / Curl of a Vector Field
	20.4	Stokes' Theorem
	Review	Review
	<b>18.1 – 20.4</b>	<b>EXAM III</b>

**Homework Problem List**

<b>Section</b>	<b>Problems</b>	<b>Section</b>	<b>Problems</b>
12.1	1, 2, 4, 6, 8, 10, 11, 17, 22, 27, 31	16.2	1,4,5,6,10,14,17,18,23,26,29,35,36,39,41
12.2	1 – 11, 19	16.3	1, 5-23 odd, 30 – 36 even
12.3	1, 4, 7, 11, 17, 20	16.4	1, 4, 8, 10, 14, 15, 17, 20, 23
12.4	1, 3, 4, 6, 9, 11, 12, 14, 17, 19, 21	16.5	2, 4, 6, 9, 10, 11, 14, 22, 28, 29a
12.5	1, 3, 5, 7, 9, 13, 15-18, 21, 23	17.1	3,7,11,12, 13-23 odd, 27,31,32,36,47,54
13.3	2, 3, 8, 11,13,15,17, 21, 23, 25, 29	17.2	2, 3, 5, 8, 9, 12, 14, 23, 30, 33
13.4	2, 5, 8, 10, 12, 14, 16, 21	17.3	1 – 8, 13, 16
14.1	1, 4, 5, 9, 17	18.1	1 – 8, 10, 12, 15, 21, 23
14.2	1,3,6,8,11,14,16,19,23,26,27,29,34	18.2	3, 4, 6, 8, 11, 12, 14
14.3	1, 3, 7, 8, 10, 11, 13, 14, 16	18.3	2 – 5, 7 – 13, 16, 28, 29
14.4	1, 3, 5, 15, 23, 30, 31, 35, 52	18.4	1, 3-7, 9-11, 15, 20
14.5	1, 2, 9, 11, 13, 17, 19, 29	19.1	1 – 13 odd, 16, 22, 25
14.6	1, 2, 3, 7, 9, 11, 13, 15, 16, 20, 32	19.2	1, 3, 13, 15
14.7	1,4,6,7,10,11,14,16,18,19, 21, 23, 26, 30	20.1	1 – 9 odd, 13, 21
15.1	1, 2, 5, 7, 9, 13, 21	20.2	2, 3, 5, 14
15.3	2, 10, 14, 18, 22	20.3	1 – 4, 7, 9, 11, 14, 17
16.1	1, 3, 4, 10, 13, 15, 20, 27	20.4	1, 3, 7, 11, 28