Multivariable Calculus
Math 113 A & B, Fall 2012, Tentative schedule

Day Number	Date of Lecture	Reading in Text
1	8/29	12.1, 12.2: Three Dimension Coordinates and Vectors
2	8/31	12.3: Dot Products
3	9/3	12.3: Dot Products
4	9/5	12.4: Cross Products; Problems
5	9/7	12.4: Cross Products (cont'd);
6	9/10	12.5: Equations of Lines and Planes
7	9/12	Problems; 12.5 (cont'd)
8	9/14	12.5 (cont'd), problems
9	9/17	13.1, 13.2 : Vector Functions, Space Curves; Derivatives of Vector Functions
10	9/19	Problems; 13.3, 13.4: Arc Length; Motion in Space
11	9/21	13.3,13.4 (cont'd)
12	9/24	14.1, 14.2: Functions of Several Variables; Limits and Continuity
13	9/26	Problems; 14.3 (up to partial differential equations, p. 932): Partial Derivatives
14	9/28	14.3 (cont'd)
15	10/1	14.4: Tangent Planes and Linear Approximations
16	10/3	Midterm review
17	10/5	First midterm
	10/8	Midterm recess
18	10/10	14.5 The Chain Rule
19	10/12	14.6: The Directional Derivative and Gradient
20	10/15	14.6 (cont'd)
21	10/17	Problems; 14.7: Maxima and Minima
22	10/19	14.7 (cont'd)
23	10/22	14.7 (con't)
24	10/24	Problems; 14.7 (cont'd)
25	10/26	14.7 (cont'd), 14.8*: Lagrange multipliers
26	10/29	14.8* (cont'd)
27	10/31	Problems; 15.1: Double Integrals over Rectangles
28	11/2	15.2: Iterated Integrals
29	11/5	15.2 (cont'd)
30	11/7	Midterm review
31	11/9	Second midterm
32	11/12	15.3 Double Integrals over General Regions
33	11/14	Problems; 15.3: (cont'd)
34	11/16	15.4: Double Integrals in Polar Coordinates
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Day Number	Date of Lecture	Reading in Text
35	11/19	15.5: Applications of Double Integrals
	11/21–11/25	Thanksgiving recess
36	11/26	15.7: Triple Integrals
37	11/28	Problems; 15.8: Triple Integrals in Cylindrical Coordinates
38	11/30	15.8 (cont'd)
39	12/3	15.9: Triple Integrals in Spherical Coordinates;
40	12/5	15.10*: Change of Variables in Multiple Integrals
41	12/7	Final review

Note: The sections marked with an "*" are optional and we might skip them if we fall behind.