

## Syllabus

Jan. 18	Computer Intro	
20	1.1/1.2 (11.2/11.3) Vectors & Dot Product	
23	1.2/1.3 (11.3/11.4) Dot and Cross Product	<i>Quiz 1</i>
25	1.4 (11.5) Lines	
27	1.4 (11.5) Planes	
30	2.1 (12.1) Vector Functions (using Mma)	<i>Quiz 2</i>
Feb. 1	2.1 (12.2) Derivatives, Integrals, Tangents & Normals	
3	2.4/2.3 (12.4) Tangents & Normals, Motion, Acceleration	
6	2.2 (12.3) Directed Distance, Smooth Curves	<i>Quiz 3</i>
Feb. 8	3.1 (13.1) Functions of Several Variables	<i>Assignment 1</i>
10	3.2 (13.2) Limits & Continuity	
13	3.3 (13.3) Partial Derivatives	
15	<i>Review</i>	
16	<b>Exam I</b>	
17	3.4 (13.4) Chain Rule	
20	3.5 (13.5) Directional Derivatives & Gradients	<i>Quiz 4</i>
22	3.6 (13.6) Tangent Planes & Normal Lines	
24	3.7 (13.8) Maxima, Minima & Saddle Points	
27	3.7 (13.8) Maxima, Minima & Saddle Points	<i>Quiz 5</i>
Mar. 1	3.8 (13.9) Lagrange Multipliers	
3	3.8 (13.9) Lagrange Multipliers	
6	4.1 (14.1) Double Integrals	<i>Quiz 6</i>
8	4.1 (14.1) Double Integrals	<i>Assignment 2</i>
10	4.2 (14.2) Areas, Moments, Centers	
13–17	<b>Midsemester Break</b>	
20	4.3 (14.3) Double Integrals in Polar Form	
22	<i>Review</i>	
23	<b>Exam II</b>	
24	4.4 (14.4) Triple Integrals, Volume, Guidelines	
27	4.5/4.6 (14.5/14.6) Mass & Moments in 3D, Cylindrical Coordinates	<i>Quiz 7</i>
29	4.6 (14.6) Triple Integrals in Spherical Coordinates	
31	4.7 (14.7) Substitutions in Multiple Integrals	
Apr. 3	4.7 (14.7) Substitutions, Intro to Vector Analysis	<i>Quiz 8</i>
5	5.1 (15.1) Vector Fields	<i>Assignment 3</i>
7	5.2 (15.2) Line Integrals (functions)	
10	5.2 (15.2) Line Integrals (vector fields)	<i>Quiz 9</i>
12	5.3 (15.3) Green's Theorem	
14	<i>Easter Break</i>	
17	<i>Easter Break</i>	
19	<i>Review</i>	
20	<b>Exam III</b>	
21	5.4 (15.4) Surface Integrals	
24	5.4 (15.4) Surface Integrals	<i>Quiz 10</i>
26	5.4 (15.4) Flux Integrals (+ Stokes')	<i>Assignment 4</i>
28	5.5 (15.5) Stokes' Theorem	
May 1	5.6 (15.6) Divergence Theorem	
3	<i>Review</i>	
5	<i>Study Day</i>	
May 9	Tuesday, 1:45 P.M., <b>Final Exam</b>	