MATH 2443, Calculus and Analytic Geometry IV
Representative Week-by-Week Outline of Topics

Week	Topic	Section†
1	Functions of several variables Limits and continuity	14.1 14.2
2	Partial derivatives Tangent planes and linear approximations	14.3 14.4
3	Chain rule Directional derivatives and gradients	14.5 14.6
4	Maximum and minimum values Lagrange multipliers	14.7 14.8
5	Review, Exam 1 Double integrals over rectangles	 15.1
6	Iterated integrals Double integrals over general regions	15.2 15.3
7	Double integrals in polar coordinates Triple integrals	15.4 15.7
8	Triple integrals (cont) Triple integrals in cylindrical coordinates	15.7 15.8
9	Triple integrals in spherical coordinates Review, Exam 2	15.9
10	Vector fields Line integrals	16.1 16.2
11	Fundamental theorem for line integrals Green's theorem	16.3 16.4
12	Curl and divergence Parametric surfaces and their areas	16.5 16.6
13	Surface integrals Stokes' theorem	16.7 16.8
14	Stokes' theorem (cont.) Review, Exam 3	16.8
15	The divergence theorem Review	16.9
16	Final exam (as per University's official schedule)††	

†Sections refer to the designated course text *Calculus 7/e* by James Stewart.

††Evening classes have their final exams on the last regular class meeting of the last week of classes.