MATH 2433, Calculus and Analytic Geometry III
Representative Week-by-Week Outline of Topics

Week	Topic	Section†
1	Sequences Series	12.1 12.2
2	Integral test Comparison tests	12.3 12.4
3	Alternating series Root and ratio tests	12.5 12.6
4	Strategy for testing series Power series	12.7 12.8
5	Review, Exam 1 Functions as power series	 12.9
6	Functions as power series (cont.) Taylor and Maclaurin series	12.9 12.10
7	Curves defined by parametric equations Calculus with parametric curves	11.1 11.2
8	Polar coordinates Areas and lengths in polar coordinates	11.3 11.4
9	Areas and lengths in polar coordiantes (cont.) Review, Exam 2	11.4
10	Three-dimensional coordinate systems Vectors	13.1 13.2
11	Vector dot product Vector cross product	13.3 13.4
12	Equations of lines and planes Equations of lines and planes (cont.)	13.5 13.5
13	Cylinders and quadric surfaces Vector functions and space curves	13.6 14.1
14	Derivatives and integrals of vector functions Review, Exam 3	14.2
15	Arc length (and, optionally, curvature) Velocity and acceleration	14.3 14.4
16	Final exam (as per University's official schedule)††	

†Sections refer to the designated course text *Calculus 6/e* by James Stewart.

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