MATH2433 - Calculus and Analytic Geometry III

Indicative weekly outline of topics (subject to change)

Week	Tuesday		Thursday	
1	25 Aug	12.1 Three-dimensional co-ordinates	27 Aug	12.2 Vectors
2	1 Sep	12.3 Vector dot product	3 Sep	12.4 Vector cross product
3	8 Sep	12.5 Equations of lines and planes	10 Sep	12.5 Equations of lines and planes
4	15 Sep	10.1 Curves defined by parametric equations	17 Sep	10.2 Calculus with parametric curves
5	22 Sep	10.3 Polar co-ordinates	24 Sep	10.4 Areas and lengths in polar co-ordinates
6	29 Sep	12.6 Cylinders and quadric surfaces	1 Oct	13.1 Vector functions and space curves
7	6 Oct	Review	8 Oct	**Midterm 1**
8	13 Oct	13.2 Derivatives and integrals of vector functions	15 Oct	13.4 Velocity and acceleration
9	20 Oct	13.3 Arc length and curvature	22 Oct	11.1 Sequences
10	27 Oct	11.2 Series	29 Oct	11.3 Integral tests
11	3 Nov	11.4 Comparison tests	5 Nov	11.5 Alternating series
12	10 Nov	Review	12 Nov	**Midterm 2**
13	17 Nov	11.6 Root and ratio tests	19 Nov	11.7 Strategy for testing series
14	24 Nov	11.8 Power series	26 Nov	**Thanksgiving break**
15	1 Dec	11.9 Functions as power series	3 Dec	11.10 Taylor and Maclaurin series
16	8 Dec	11.10 Taylor and Maclaurin series	10 Dec	Review

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