

Math 2D Suggested Syllabus

Text: *Calculus: Early Transcendentals*, Stewart, 8th Edition/UCI Custom Edition

Lecture	Section	Topic
1	10.1	Curves Defined by Parametric Equations
2	10.1, 10.2	Curves Defined by Parametric Equations
3	10.2	Calculus with Parametric Curves
4	10.3	Polar Coordinates
5	12.1	Three-Dimensional Coordinate Systems
6	12.2	Vectors
7	12.3	The Dot Product
8	12.4	The Cross Product
9	12.5	Equations of Lines and Planes
10	12.6	Cylinders and Quadric Surfaces
11		Review and Catch Up
12		Midterm #1
13	13.1	Vector Functions and Space Curves
14	13.2	Derivatives and Integrals of Vector Functions
15	13.3	Arc Length and Curvature (If time allows)
16	14.1	Functions of Several Variables
17	14.2	Limits and Continuity
18	14.3	Partial Derivatives
19	14.4	Tangent Planes and Linear Approximation
20		Review and Catch Up
21		Midterm #2
22	14.5	The Chain Rule
23	14.6	Directional Derivatives and Gradient Vector
24	14.7	Maximum and Minimum Values
25	14.8	Lagrange Multipliers
26	15.1	Double Integrals over Rectangles
27	15.2	Double Integrals over General Regions
28	15.3	Double Integrals in Polar Coordinates
29		Review and Catch Up