

Math 2D Suggested Syllabi

Text: *Calculus*, Stewart, 6th Edition/UCI Custom Edition

(Two options for syllabus are given below)

Lecture	Section	Topic
1	13.1	Course Introduction, Three-Dimensional Coordinate Systems
2	13.2	Vectors (may begin 13.3)
3	13.3, 13.4	The Dot Product, The Cross Product
4	13.5	Equations of Lines and Planes
5	13.6	Cylinders and Quadric Surfaces
6	14.1	Vector Functions and Space Curves
7	14.2, 14.3	Derivatives and Integrals of Vector Functions, Arc Length (pgs 866-867 only)
8	14.4	Motion in Space: Velocity and Acceleration (pgs 874-878 only)
9		Review
10		Midterm # 1
11	15.1	Functions of Several Variables
12	15.2	Limits and Continuity
13	15.3	Partial Derivatives
14	15.4	Tangent Planes and Linear Approximations
15	15.5	The Chain Rule
16	15.6	Directional Derivatives and the Gradient Vector
17	15.6, 15.7	Finish 15.6, Begin 15.7
18	15.7	Maximum and Minimum Values
19	15.8	Lagrange Multipliers
20		Review
21		Midterm # 2
22	16.1	Double Integrals over Rectangles
23	16.2	Iterated Integrals
24	16.3	Double Integrals over General Regions
25	16.4	Double Integrals in Polar Coordinates
26	16.6	Triple Integrals
27	16.7	Triple Integrals in Cylindrical Coordinates
28	16.8	Triple Integrals in Spherical Coordinates
29		Review
		Final Exam

*For quarters with 30 lecture days, it is recommended to insert an extra day between days 26 and 27 to allow for more time in covering these topics.

Lecture	Section	Topic
1	13.1	Course Introduction, Three-Dimensional Coordinate Systems
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3	13.3, 13.4	The Dot Product, The Cross Product
4	13.5	Equations of Lines and Planes
5	13.6	Cylinders and Quadric Surfaces
6	15.1	Functions of Several Variables
7	15.2	Limits and Continuity (formal def. may be skipped)
8	15.3	Partial Derivatives
9		Review
10		Midterm # 1
11	15.4	Tangent Planes and Linear Approximations
12	15.5	The Chain Rule
13	14.1	Vector Functions and Space Curves
14	14.2, 14.3	Derivatives and Integrals of Vector Functions, Arc Length (pgs 866-867 only)
15	14.4, 15.6	Motion in Space: Velocity and Acceleration (pgs 874-878 only), Begin 15.6
16	15.6	Directional Derivatives and the Gradient Vector
17	15.7	Maximum and Minimum Values
18	15.7, 15.8	Finish 15.7, Begin 15.8
19	15.8	Lagrange Multipliers
20		Review
21		Midterm # 2
22	16.1	Double Integrals over Rectangles
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24	16.3	Double Integrals over General Regions
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29		Review
		Final Exam

*For quarters with 30 lecture days, it is recommended to insert an extra day between days 12 and 13 to allow for more time in covering this topic.