

Calendar for Calculus III, Fall 2009

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Course topics by week

Week	Dates	Section	Topics
1	9/8–9/10	10.1	Three-dimensional Coordinate Systems
		10.2	Vectors (TR only)
2	9/14–9/17	10.2	Vectors
		10.3	The Dot Product
		10.4	The Cross Product
3	9/21–9/24	10.5	Equations of Lines and Planes
		10.6	Cylinders and Quadric Surfaces
4	9/28–10/1	10.7	Vector functions and space curves
		10.8	Arc length and Curvature
		10.9	Motion in Space: Velocity and Acceleration
5	10/5–10/8	11.1	Functions of Several Variables
		11.2	Limits and Continuity
		11.3	Partial Derivatives
6	10/12–10/15	11.4	Tangent Planes and Linear Approximation
		Midterm	
7	10/19–10/22	11.5	The Chain Rule
		11.6	Directional Derivatives and the Gradient Vector
8	10/26–10/29	11.7	Maximum and Minimum Values
		11.8	Lagrange Multipliers
9	11/2–11/5	12.1	Double Integrals over Rectangles
		12.2	Double Integrals over General Regions
		12.3	Double Integrals in Polar Coordinates
10	11/9–11/12	12.5	Triple Integrals
		12.6	Triple Integrals in Cylindrical Coordinates
		12.7	Triple Integrals in Spherical Coordinates
11	11/16–11/19	13.1	Vector Fields
		13.2	Line Integrals
		13.3	The Fundamental Theorem of Line Integrals

Week	Dates	Section	Topics
12	11/23–11/25	13.4	Green's Theorem
		13.5	Curl and Divergence
13	11/30–12/3	13.6	Parametric Surfaces and their Areas
		13.7	Surface Integrals
14	12/7–12/10	13.8	Stokes's Theorem
		13.9	The Divergence Theorem
15	12/14–12/15	Review	

For final exam days and times by class meeting time, please see the [registrar's exam page](#).