

MATH 242 SEQUENCE OF TOPICS

From *Calculus*, 3rd Edition, by Briggs & Cochran

§	TOPIC	ASSIGNMENT
13.1	Vectors in the Plane	6, 15, 17, 27, 28, 31, 35, 39, 41, 45, 47, 51, 53–63 odd, 69, 71, 76, 87
13.2	Vectors in Three Dimensions	7, 11, 19, 21, 23–37 odd, 41, 47, 51, 53, 55, 61, 65, 69, 74, 77
13.3	Dot Products	3, 9, 15, 19–29 odd, 37, 39, 41, 45, 47, 49, 52, 53, 55, 60, 63, 65, 69, 77
13.4	Cross Products	5, 11, 15, 19, 23, 25, 27, 31, 35, 43, 47, 49, 51, 59, 66
13.5	Lines & Planes in Space	9, 13, 17–23 odd, 27–39 odd, 45, 47, 49, 53, 57, 63, 67, 73, 75, 91
13.6	Cylinders & Quadric Surfaces	7, 11, 15, 19, 23, 27, 31, 35, 39, 43, 47, 51, 55, 57, 62
14.1	Vector-Valued Functions	9–21 odd, 31, 33, 35, 39, 41, 43, 47, 55, 57
14.2	Calculus of Vector-Valued Functions	9–31 odd, 35, 41, 47, 49, 55, 57, 61, 63, 67, 69, 73, 74, 77, 81, 85
14.3	Motion in Space	7, 11–19 odd, 29, 31, 35, 39, 50, 75, 76, 77
14.4	Length of Curves	9, 11, 15, 17, 19, 23, 33–41 odd, 46, 51
14.5	Curvature & Normal Vectors	11, 13, 17, 19, 23–33 odd, 68, 69
15.1	Graphs & Level Curves	3, 7, 15–23 odd, 28, 29, 33, 35, 39, 41, 43, 51, 52, 53, 55, 63a, 65a, 66a, 79, 80
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15.3	Partial Derivatives	5, 11–37 odd, 41, 43, 52, 55, 57, 60, 71, 73, 77, 78, 83, 96
15.4	The Chain Rule	7–13 odd, 17, 19, 23–29 odd, 35, 37, 39, 45, 51, 55, 59, 61, 67
15.5	Directional Derivatives & the Gradient	7, 9, 15, 17, 20, 21–39 odd, 49, 51, 55, 57, 61, 63, 65, 71, 85c
15.6	Tangent Planes & Linear Approximation	2, 9, 15–21 odd, 25–37 odd, 41, 43, 47, 55, 57, 59
15.7	Maximum/Minimum Problems	13–21 odd, 25–39 odd, 43–53 odd, 59, 63, 65
15.8	Lagrange Multipliers	7, 11, 15, 19, 23, 27, 31, 33
16.1	Double Integrals Over Rectangles	7, 11, 13, 15, 19, 23, 25, 27, 31, 33, 37–45 odd
16.2	Double Integrals Over General Regions	9, 13–23 odd, 27–41 odd, 45, 49, 53–63 odd, 67, 71–77 odd, 85, 87, 89
16.3	Double Integrals in Polar Coordinates	11–37 odd, 43–49 odd, 57
16.4	Triple Integrals	7–29 odd, 33, 39–49 odd, 61, 67
16.5	Triple Integrals in Curvilinear Coordinates	3, 4, 15–23 odd, 27–35 odd, 41–53 odd, 59, 66, 67
17.1	Vector Fields	9, 11, 15, 24, 25–43 odd, 49–52 all

§	Topic	Assignment
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17.3	Conservative Vector Fields	9–29 odd, 33–41 odd, 45, 47, 49, 53, 55, 67
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17.5	Divergence & Curl	9–15 odd, 19, 23–35 odd, 41, 45, 47
17.6	Surface Integrals	9–27 odd, 31, 37, 43, 45, 53
17.7	Stokes' Theorem	5, 7, 11–17 odd, 21, 31
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