

DATE	LECTURE TOPIC
	<i>ASSIGNMENT DUE</i>
M 1.8	1.1: Review of Calculus 1 & 2
T 1.9	2.1: Basic set theory
W 1.10	2.2: Vectors
R 1.11	<i>Mathematica</i> demo: introduction (Ch. 1) 1, 3, 5, 7, 9, 11-12, 14, 15, 19, 20, 23, 24, 28, 31, 33, 35-36, 41
M 1.15	<i>No class - MLK Jr. Day</i>
T 1.16	2.3: Dot product
W 1.17	2.4: Matrices and matrix operations (Ch. 2) 1, 3, 5, 7, 9, 11, 12, 14-18, 23, 24, 28
R 1.18	2.5: Determinants <i>Lab 1</i>
M 1.22	2.6: Cross products
T 1.23	<i>Mathematica</i> demo: vectors and matrices
W 1.24	2.7: Equations of lines and planes
R 1.25	2.8: Coordinate systems (Ch. 2) 30, 32, 34-37, 39, 40, 45-48, 50, 52, 53
M 1.29	2.9: Topology of \mathbb{R}^n (Ch. 2) 55, 58, 62, 64, 66, 69-71
T 1.30	3.1: Functions from $\mathbb{R}^n \rightarrow \mathbb{R}^m$ <i>Lab 2</i>
W 1.31	3.2: Graphs of functions $\mathbb{R}^n \rightarrow \mathbb{R}^m$
R 2.1	3.2: More on graphs (Ch. 2) 72-74, 77-81, 83-85, 88-91
M 2.5	3.3: Conic sections
T 2.6	3.5: Limits (Ch. 3) 2, 5-6, 8, 11, 14, 17-18, 21, 23, 27-35, 37-38, 41-43, 49, 51, 53, 57, 59-60
W 2.7	3.5-3.6: Limits and continuity (Ch. 3) 62-64, 66, 68, 70, 72, 74-76
R 2.8	Review for Exam 1 (Ch. 3) 96, 98-100, 102, 105, 107, 110, 113, 116, 119, 121, 125
M 2.12	EXAM 1: covers Chapters 2 & 3
T 2.13	4.1: The total derivative <i>Lab 3</i>
W 2.14	4.2: Partial derivatives
R 2.15	4.3: Linear approximation
M 2.19	4.4: Chain rule
T 2.20	4.5: Directional derivatives and gradients
W 2.21	<i>Mathematica</i> demo: differentiation (Ch. 4) 1, 3-4, 7, 9, 12-13, 15, 17, 20-21, 24, 26, 33-34, 38-39, 42-43, 46
R 2.22	5.1: Motion in higher dimensions I (Ch. 4) 49-51, 55, 58, 61, 63, 65, 69, 71, 73

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M 2.26	5.2: Motion in higher dimensions II
T 2.27	5.2: Components of acceleration <i>(Ch. 4) 78-79, 82-83, 86, 89-91, 93, 95, 97, 100-102, 105, 107-108, 115, 117-118</i>
W 2.28	5.3: Re-parameterizing curves
R 3.1	5.3: Arc length parametrization <i>Lab 4</i>
3.5-3.8	<i>No class - Spring Break</i>
M 3.11	5.4: Curvature
T 3.12	Review of Chapter 5 <i>(Ch. 5) 2-3, 5-6, 9-10, 12, 14, 16, 18-20, 23-24, 26</i>
W 3.13	6.1: Local extrema
R 3.14	6.1: Classifying local extrema <i>(Ch. 5) 31, 33-34, 37, 40-42, 44-45, 48-49, 51-52</i>
M 3.18	6.2: Absolute extrema <i>Lab 5</i>
T 3.19	6.3: Lagrange's method <i>(Ch. 6) 1, 3, 5-6, 8, 10-13, 17-18</i>
W 3.20	Review for Exam 2 <i>(Ch. 6) 19, 23-26, 30, 37</i>
R 3.21	EXAM 2: covers Chapters 4-6
M 3.25	7.1: Introducing double integrals
T 3.26	7.2: Double integrals <i>Lab 6</i>
W 3.27	<i>No class - Mid-semester Recess</i>
R 3.28	<i>No class - Mid-semester Recess</i>
M 4.1	7.3: Fubini's Theorem
T 4.2	7.4: Triple integrals <i>(Ch. 7) 3-6, 8-10, 14-16, 19-20, 23-24, 26</i>
W 4.3	7.4: Triple integrals
R 4.4	<i>Mathematica demo: integration</i> <i>(Ch. 7) 27-28, 30, 32-33, 36, 40, 42</i>
M 4.8	7.5: Change of variables with Jacobians I <i>Lab 7</i>
T 4.9	7.5: Change of variables with Jacobians II <i>(Ch. 7) 44, 46-47, 50, 55-56, 58, 62, 64</i>
W 4.10	7.6: Area and volume
R 4.11	8.1: Vector fields and flows <i>(Ch. 7) 69-70, 72-73, 78-79, 82-83</i>
M 4.15	8.2: Gradient, divergence and curl
T 4.16	8.3: Paths and parametrization <i>(Ch. 7) 88, 90-91, 93-94, 97-98, 101-102</i>
W 4.17	8.4: Line integrals <i>Lab 8</i>
R 4.18	8.5: Green's Theorem <i>(Ch. 8) 1, 3, 6, 8-9, 14-16, 19-20, 22-24, 27, 29-30, 32, 34, 39, 43, 47-49</i>

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M 4.22	8.6: Conservativity and path independence
T 4.23	Review for Exam 3 <i>(Ch. 8) 53-54, 57-58, 63-65, 68-69, 71, 73, 76, 79, 84</i>
W 4.24	EXAM 3: covers Chapters 7 and 8
R 4.25	Review for Final Exam <i>(Ch. 8) 88, 91-92, 97, 101, 103-104, 110</i>
	<i>Lab 9</i>
R 5.2	FINAL EXAM: cumulative (8:00-9:40 AM in STR 108)