

Schedule

A week-by-week breakdown of the material.

Week 1 (01/08-01/12)

Day 1 Sequences (11.1). Limit of sequence. Limit Laws¹

Day 2 Review of Calc 1, Calc2²

Day 3 Review of Calc 1, Calc2

Week 2 (01/15-01/19)

Day 1 Catchup

Day 2 Infinite Series (11.2)³

HW 1 Due: 11.1 16, 26, 48, 70

Day 3 Positive Terms series (11.3)⁴

Week 3 (01/22-01/26)

Day 1 Absolute vs Conditional Convergence (11.4)⁵

HW 2 Due: 11.2 12, 14, 18, 30, 34

Day 2 Ratio and Root tests (11.5)⁶

Series tests review.

HW 3 Due: 11.3 8, 10, 24, 40

Day 3 Power Series (11.6)⁷

HW 4 Due: 11.4 12, 22, 26, 30

¹[notes/sequences.html](#)

²[notes/calc_review.html](#)

³[notes/series_intro.html](#)

⁴[notes/series_positive.html](#)

⁵[notes/series_conditional.html](#)

⁶[notes/series_root.html](#)

⁷[notes/series_power.html](#)

Week 4 (01/29-02/02)

Day 1 Taylor Series (11.7)⁸

Day 2 Taylor Series (11.7) cont⁹

HW 5 Due: 11.5 6, 10, 16, 24, 40

Day 3 Review

Week 5 (02/05-02/09)

Day 1 Midterm 1 (chapter 11, study guide¹⁰)

Day 2 Vectors in the Plane (13.1)¹¹

HW 6 Due: 11.6 6, 10, 16, 20, 40

Day 3 Vectors in the Space (13.2). Equations for lines in space.¹²

HW 7 Due: 11.7 8, 12, 32, 38

Week 6 (02/12-02/16)

Day 1 Dot product and angles (13.3).¹³

HW 8 Due: 13.1 12, 14, 20, 34, 46

Day 2 Cross product (13.4).¹⁴

HW 9 Due: 13.2 14, 20, 26, 30, 35, 52

Day 3 Equations for planes (13.5).¹⁵

HW 10 Due: 13.3 10, 18, 30, 38, 50

Week 7 (02/19-02/23)

Day 1 Vector-valued functions (14.1).¹⁶

HW 11 Due: 13.4 14, 20, 30, 34, 44

⁸[notes/series_taylor.html](#)

⁹[notes/series_taylor.html](#)

¹⁰[notes/midterm1_study_guide.html](#)

¹¹[notes/vectors.html](#)

¹²[notes/vectors_space.html](#)

¹³[notes/dot_product.html](#)

¹⁴[notes/cross_product.html](#)

¹⁵[notes/plane_equations.html](#)

¹⁶[notes/vector_valued_functions.html](#)

Day 2 Calculus of vector-valued functions (14.2).¹⁷

HW 12 Due: 13.5 8, 18, 22, 28, 34

Day 3 Conference

Week 8 (02/26-03/02)

BREAK

Week 9 (03/05-03/09)

Day 1 Arc Length (14.3).¹⁸

Day 2 Curvature (14.4). Normal vectors.¹⁹

Day 3 Review

Week 10 (03/12-03/16)

Day 1 Midterm 2 (chapters 13, 14, study guide²⁰)

Day 2 Functions of multiple variables (15.1). Level curves.²¹

Day 3 Limits and Continuity in several variables (15.2).²²

Week 11 (03/19-03/23)

Day 1 Partial Derivatives (15.3).²³

Day 2 Differentiability (15.4). Linear Approximation.²⁴

Day 3 Gradient. Directional derivatives (15.5)²⁵

¹⁷[notes/vector_valued_calculus.html](#)

¹⁸[notes/arc_length_curvature.html](#)

¹⁹[notes/arc_length_curvature.html](#)

²⁰[notes/midterm2_study_guide.html](#)

²¹[notes/multiple_variables.html](#)

²²[notes/limits_continuity.html](#)

²³[notes/partial_derivatives.html](#)

²⁴[notes/differentiability.html](#)

²⁵[notes/gradient.html](#)

Week 12 (03/26-03/30)

Day 1 Chain rule (15.6).²⁶

Day 2 Optimization (15.7).²⁷

Day 3 Lagrange Multipliers (15.8).²⁸

Week 13 (04/02-04/06)

Day 1 Integration in two variables (16.1).²⁹

Day 2 Integration over more general regions (16.2).³⁰

Day 3 Integrals in Polar Coordinates (16.4).³¹

Week 14 (04/09-04/13)

Day 1 Change of variables (16.6).³²

Day 2 Review

Day 3 Catchup

²⁶[notes/chain_rule.html](#)

²⁷[notes/optimization.html](#)

²⁸[notes/lagrange_mults.html](#)

²⁹[notes/multiple_integrals.html](#)

³⁰[notes/integrals_general.html](#)

³¹[notes/integrals_polar.html](#)

³²[notes/integrals_change_variables.html](#)