Schedule

A week-by-week breakdown of the material.

Week 1 (01/11-1/15)

Day 1 Introduction
Day 2 Sequences (11.1). Limit of sequence. Limit Laws[1]
Day 3 Sequences (11.1). Limit of sequence. Limit Laws (cont)[2]
Day 4 Sequences (cont, 11.1). Bounded Sequences[3]

Week 2 (01/18-01/22)

Day 1 Infinite Series (11.2). Introduction[4]
Day 2 Infinite Series (11.2). Geometric Series. Divergence Test[5]
Day 3 Positive Terms series (11.3)[6]
Day 4 Positive Terms series (11.3), comparison and limit comparison tests[7]

Week 3 (01/25-01/29)

Day 1 Absolute vs Conditional Convergence (11.4)[8]
Day 2 Absolute vs Conditional Convergence (11.4)[9]
Day 3 Ratio and Root tests (11.5)[10]
Day 4 Series tests review.

Week 4 (02/01-02/05)

Day 1 Power Series (11.6)[11]
Day 2 Power Series (11.6), cont[12]
Day 3 Power Series (11.6), cont[13]

[1] notes/sequences.html
[2] notes/sequences.html
[3] notes/sequences_bounded.html
[4] notes/series_intro.html
[5] notes/series_intro.html
[6] notes/series_positive.html
[7] notes/series_positive.html
[8] notes/series_conditional.html
[9] notes/series_conditional.html
[10] notes/series_root.html
[11] notes/series_power.html
[12] notes/series_power.html
[13] notes/series_power.html

Day 4 Taylor Series (11.7)[14]

Week 5 (02/08-02/12)

Day 1 Taylor Series (11.7) cont[15]
Day 2 Vectors in the Plane (13.1)[16]
Day 3 Sick day
Day 4 Sick day

Week 6 (02/15-02/19)

Day 1 Review
Day 2 **Midterm 1** (study guide[17])
Day 3 Vectors in the Plane (13.1, cont)[18]
Day 4 Vectors in the Space (13.2). Equations for lines in space.[19]

Week 7 (02/22-02/26)

Day 1 Sick day
Day 2 Dot product and angles (13.3).[20]
Day 3 Dot product and angles (cont, 13.3). Projections.[21]
Day 4 Cross product (13.4).[22]

Week 8 (03/07-03/11)

Day 1 Equations for planes (13.5).[23]
Day 2 Equations for planes (13.5), cont.[24]
Day 3 Vector-valued functions (14.1).[25]
Day 4 Calculus of vector-valued functions (14.2).[26]

[14] notes/series_taylor.html
[15] notes/series_taylor.html
[16] notes/vectors.html
[17] notes/midterm1_study_guide.html
[18] notes/vectors.html
[19] notes/vectors_space.html
[20] notes/dot_product.html
[21] notes/dot_product.html
[22] notes/cross_product.html
[23] notes/plane_equations.html
[24] notes/plane_equations.html
[25] notes/vector_valued_functions.html
[26] notes/vector_valued_calculus.html

Week 9 (03/14-03/18)

Day 1 Arc Length (14.3).[27]
Day 2 Curvature (14.4). Normal vectors.[28]
Day 3 Functions of multipe variables (15.1). Level curves.[29]
Day 4 Limits and Continuity in several variables (15.2).[30]

Week 10 (03/21-03/25)

Day 1 Limits and Continuity in several variables (15.2).[31]
Day 2 **Midterm 2** (study guide[32])
Day 3 Partial Derivatives (15.3).[33]
Day 4 Differentiability (15.4). Linear Approximation.[34]

Week 11 (03/28-04/01)

Day 1 Gradient[35]
Day 2 Directional Derivatives[36]
Day 3 Chain rule (15.6).[37]
Day 4 Optimization (15.7).[38]

Week 12 (04/04-04/08)

Day 1 Lagrange Multipliers (15.8).
Day 2 Integration in two variables (16.1).
Day 3 Integration over more general regions (16.2).
Day 4 Integrals in 3 dimensions (16.3).

Week 13 (04/11-04/15)

Day 1 Polar, Cylindrical and Spherical Coordinates (12.3, 13.7).

[27] notes/arc_length_curvature.html
[28] notes/arc_length_curvature.html
[29] notes/multiple_variables.html
[30] notes/limits_continuity.html
[31] notes/limits_continuity.html
[32] notes/midterm2_study_guide.html
[33] notes/partial_derivatives.html
[34] notes/differentiability.html
[35] notes/gradient.html
[36] notes/gradient.html
[37] notes/chain_rule.html
[38] notes/optimization.html

Day 2 Integrals in Polar, Cylindrical, Spherical coordinates (16.4).
Day 3 Change of variables (16.6).
Day 4 Catchup