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** Sequences (cont, 11.1). Bounded Sequences. (cont)⁴
- **Day 2** Infinite Series (11.2). Introduction.⁵
- **Day 3** Infinite Series (11.2). Geometric Series. Divergence Test.⁶
- **Day 4** Positive Terms series (11.3).

Week 3 (01/25-01/29)

- **Day 1** Absolute vs Conditional Convergence (11.4).
- Day 2 Ratio and Root tests (11.5).
- **Day 3** Power Series (11.6).
- Day 4 Power Series (cont, 11.6).

Week 4 (02/01-02/05)

- **Day 1** Taylor Series (11.7).
- **Day 2** Chapter 11 Review/Catchup.
- **Day 3** Vectors in the Plane (13.1).
- **Day 4** Vectors in the Plane (13.1, cont).

Week 5 (02/08-02/12)

Day 1 Vectors in the Space (13.2). Equations for lines in space.

¹notes/sequences.html

²notes/sequences.html

³notes/sequences_bounded.html

⁴notes/sequences_bounded.html

⁵notes/series_intro.html

⁶notes/series_intro.html

- **Day 2** Dot product and angles (13.3).
- **Day 3** Dot product and angles (cont, 13.3). Projections.
- Day 4 Midterm 1

Week 6 (02/15-02/19)

- **Day 1** Cross product (13.4).
- **Day 2** Equations for planes (13.5).
- **Day 3** Equations for planes (cont, 13.5).
- **Day 4** Polar, Cylindrical and Spherical Coordinates (12.3, 13.7).

Week 7 (02/22-02/26)

- **Day 1** Vector-valued functions (14.1).
- **Day 2** Limits, derivatives, integrals for vector-valued functions (14.2). Derivative as tangent vector.
- **Day 3** Arc Length (14.3).
- **Day 4** Curvature (14.4). Normal vectors.

Week 8 (03/07-03/11)

- **Day 1** Functions of several variables (15.1). Level curves.
- **Day 2** Limits and Continuity in several variables (15.2).
- **Day 3** Partial Derivatives (15.3).
- **Day 4** Differentiability (15.4). Linear Approximation.

Week 9 (03/14-03/18)

- **Day 1** Gradient, Directional derivatives (15.5).
- **Day 2** Gradient, Directional derivatives (15.5, cont).
- Day 3 Review.
- Day 4 Midterm 2

Week 10 (03/21-03/25)

- **Day 1** Chain rule (15.6).
- **Day 2** Optimization (15.7).
- Day 3 Optimization (cont, 15.7).
- Day 4 Lagrange Multipliers (15.8).

Week 11 (03/28-04/01)

- **Day 1** Integration in two variables (16.1).
- **Day 2** Integration over more general regions (16.2).
- **Day 3** Integration over more general regions (cont, 16.2).
- **Day 4** Integrals in 3 dimensions (16.3).

Week 12 (04/04-04/08)

- **Day 1** Integrals in Polar, Cylindrical, Spherical coordinates (16.4).
- Day 2 Change of variables (16.6).
- **Day 3** Change of variables (cont, 16.6).
- Day 4 Catchup

Week 13 (04/11-04/15)

- Day 1 Catchup
- Day 2 Catchup
- Day 3 Catchup
- Day 4 Catchup