Schedule

A week-by-week breakdown of the material.

Week 1 (01/09-01/13)

- **Day 1** Review of Precalculus¹
- **Day 2** Review of Precalculus (cont)²
- **Day 3** Review of Precalculus (inequalities)³ The concept of limit⁴

Week 2 (01/16-01/20)

- **Day 1** The concept of limit⁵
 Limit laws⁶
- **Day 2** Continuity⁷
- **Day 3** Evaluating Limits⁸

 Trigonometric Limits⁹

Week 3 (01/23-01/27)

- Day 1 Limits at Infinity, Intemediate Value Theorem
- Day 2 Introduction to derivatives
- **Day 3** Derivative as a function

Week 4 (01/30-02/03)

- **Day 1** Derivative rules
- **Day 2** Derivative rules (cont)
- **Day 3** Derivative as a rate of change, applications

¹notes/algebra_review.html

²notes/algebra_review.html

³notes/algebra_review.html

⁴notes/limit_concept.html

⁵notes/limit concept.html

⁶notes/limit laws.html

⁷notes/continuity.html

⁸notes/limit_evaluation.html

⁹notes/limit_trig.html

Week 5 (02/06-02/10)

- Day 1 MIDTERM 1 (study guide¹⁰)
- Day 2 Higher derivatives
- **Day 3** Derivatives for trigonometric functions

Week 6 (02/13-02/17)

- Day 1 Chain rule and Implicit differentiation
- Day 2 Related rates
- Day 3 Linear Approximation and applications

Week 7 (02/20-02/24)

- **Day 1** Extreme values
- Day 2 Mean value theorem, monotonicity
- **Day 3** Graph sketching

Week 8 (02/27-03/03)

- Day 1 BREAK
- Day 2 BREAK
- Day 3 BREAK

Week 9 (03/06-03/10)

- **Day 1** Graph sketching
- **Day 2** (At conference)
- Day 3 (At conference)

Week 10 (03/13-03/17)

- Day 1 Applied optimization
- **Day 2** Newton's method
- **Day 3** Review

 $^{^{10}}$ notes/midterm1_study_guide.html

Week 11 (03/20-03/24)

- **Day 1 MIDTERM** (study guide¹¹)
- **Day 2** Antiderivatives
- **Day 3** Introduction to computing areas

Week 12 (03/27-03/31)

- Day 1 The definite integral
- Day 2 Fundamental theorem of Calculus
- **Day 3** Fundamental theorem of Calculus (cont)

Week 13 (04/03-04/07)

- Day 1 The substitution method
- Day 2 Area between curves
- Day 3 Area between curves (cont)

Week 14 (04/10-04/14)

Day 1 TBD

Day 2 TBD

Day 3 TBD

¹¹notes/midterm2_study_guide.html