

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

Week 3 (01/23-01/27)

Day 1 Trigonometric Limits⁹

Day 2 Limits at Infinity¹⁰

Day 3 Intermediate Value Theorem¹¹

Homework Due: 2.5 16, 30, 2.6 10, 24, 40

¹[notes/algebra_review.html](#)

²[notes/algebra_review.html](#)

³[notes/algebra_review.html](#)

⁴[notes/limit_concept.html](#)

⁵[notes/limit_concept.html](#)

⁶[notes/limit_laws.html](#)

⁷[notes/continuity.html](#)

⁸[notes/limit_evaluation.html](#)

⁹[notes/limit_trig.html](#)

¹⁰[notes/limit_infinity.html](#)

¹¹[notes/ivt.html](#)

Week 4 (01/30-02/03)

Day 1 Introduction to derivatives¹²

Day 2 Derivative as a function¹³

Homework Due: 2.7 8, 20, 2.8 2, 6

Day 3 Derivative rules¹⁴

Homework Due: 3.1 4, 26, 34, 28

Week 5 (02/06-02/10)

Day 1 **MIDTERM 1** (study guide¹⁵)

Day 2 Derivative as a rate of change, applications

Higher derivatives

Day 3 Derivatives for trigonometric functions

Homework Due: 3.2 16, 20, 26, 36, 66

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

¹²notes/derivatives_intro.html

¹³notes/derivatives_function.html

¹⁴notes/derivatives_rules.html

¹⁵notes/midterm1_study_guide.html

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

Week 11 (03/20-03/24)

Day 1 **MIDTERM** (study guide¹⁶)

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

¹⁶[notes/midterm2_study_guide.html](https://www.math.hawaii.edu/~dmitry/notes/midterm2_study_guide.html)