

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

Day 3 Derivative rules¹⁴

Homework 5 Due: 3.1 4, 26, 34, 38

Week 5 (02/06-02/10)

Day 1 **MIDTERM 1** (study guide¹⁵)

Day 2 Sick day

Day 3 Derivative rules¹⁶

Higher derivatives¹⁷

Week 6 (02/13-02/17)

Day 1 Derivatives for trigonometric functions¹⁸

Homework 6 Due: 3.2 16, 20, 26, 36, 66

Day 2 Chain rule¹⁹

Implicit differentiation²⁰

Day 3 Related rates²¹

Homework 7 Due: 3.3 4, 18, 32, 3.5 12, 14

¹²[notes/derivatives_intro.html](#)

¹³[notes/derivatives_function.html](#)

¹⁴[notes/derivatives_rules.html](#)

¹⁵[notes/midterm1_study_guide.html](#)

¹⁶[notes/derivatives_rules.html](#)

¹⁷[notes/derivatives_higher.html](#)

¹⁸[notes/derivatives_trig.html](#)

¹⁹[notes/chain_rule.html](#)

²⁰[notes/implicit_differentiation.html](#)

²¹[notes/related_rates.html](#)

Week 7 (02/20-02/24)

Day 1 Linear Approximation and applications²²

Extreme values²³

Homework 8 Due: 3.6 18, 28, 42, 3.7 12, 70

Day 2 Extreme values²⁴

Homework 9 Due: 3.8 6, 10, 38, 3.9 14, 16

Day 3 Mean value theorem, monotonicity²⁵

Week 8 (02/27-03/03)

Day 1 BREAK

Day 2 BREAK

Day 3 BREAK

Week 9 (03/06-03/10)

Day 1 Mean value theorem, monotonicity (cont)²⁶

Homework 10 Due: 4.1 14, 46, 52, 4.2 18, 30

Day 2 (At conference)

Day 3 (At conference)

Week 10 (03/13-03/17)

Day 1 Graph sketching²⁷

Homework 11 Due: 4.3 20, 26, 38, 46 Day 2

Graph sketching²⁸

Day 3 Applied optimization²⁹

Homework 12 Due: 4.4 6, 24, 4.5 16, 32

²²[notes/linear_approx.html](#)

²³[notes/extreme_values.html](#)

²⁴[notes/extreme_values.html](#)

²⁵[notes/mean_value_theorem.html](#)

²⁶[notes/mean_value_theorem.html](#)

²⁷[notes/graph_sketching.html](#)

²⁸[notes/graph_sketching.html](#)

²⁹[notes/applied_optimization.html](#)

Week 11 (03/20-03/24)

Day 1 MIDTERM (study guide³⁰)

Day 2 Applied optimization (cont)³¹

Day 3 Newton's method³²

Antiderivatives

Week 12 (03/27-03/31)

Day 1 Introduction to computing areas

Homework 13 Due: 4.6 2, 4, 8, 20, 52

Day 2 The definite integral

Day 3 Fundamental theorem of Calculus

Week 13 (04/03-04/07)

Day 1 Fundamental theorem of Calculus (cont)

Day 2 The substitution method

Day 3 Area between curves

Week 14 (04/10-04/14)

Day 1 Area between curves (cont)

Day 2 TBD

Day 3 TBD

³⁰[notes/midterm2_study_guide.html](https://www.math.hawaii.edu/~dmitry/notes/midterm2_study_guide.html)

³¹[notes/applied_optimization.html](https://www.math.hawaii.edu/~dmitry/notes/applied_optimization.html)

³²[notes/newton.html](https://www.math.hawaii.edu/~dmitry/notes/newton.html)