

Schedule

A week-by-week breakdown of the material.

Week 1 (09/04-09/08)

Day 1 Review of Precalculus¹

Day 2 Review of Precalculus (cont)²

Day 3 The concept of limit³

Week 2 (09/11-09/15)

Day 1 Limit laws⁴

Day 2 Continuity⁵

Homework Due: 2.1 6, 8, 2.2 2, 22

Day 3 Evaluating Limits⁶

Week 3 (09/18-09/22)

Day 1 Trigonometric Limits⁷

Homework Due: 2.3 12, 14, 2.4 4, 12, 52

Day 2 Trigonometric Limits⁸

Day 3 Limits at Infinity⁹

Intermediate Value Theorem¹⁰

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

¹[notes/algebra_review.html](#)

²[notes/algebra_review.html](#)

³[notes/limit_concept.html](#)

⁴[notes/limit_laws.html](#)

⁵[notes/continuity.html](#)

⁶[notes/limit_evaluation.html](#)

⁷[notes/limit_trig.html](#)

⁸[notes/limit_trig.html](#)

⁹[notes/limit_infinity.html](#)

¹⁰[notes/ivt.html](#)

Week 4 (09/25-09/29)

Day 1 Intermediate Value Theorem¹¹

Day 2 Introduction to derivatives¹²

Day 3 Derivative as a function¹³

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

Week 5 (10/02-10/06)

Day 1 Review

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

Day 2 **MIDTERM 1** (study guide¹⁴)

Day 3 Derivative as a function¹⁵

Derivative rules¹⁶

Week 6 (10/09-10/13)

Day 1 Derivative rules (cont)¹⁷

Higher derivatives¹⁸

Day 2 Derivatives for trigonometric functions¹⁹

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

Day 3 Chain rule²⁰

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

¹¹[notes/ivt.html](#)

¹²[notes/derivatives_intro.html](#)

¹³[notes/derivatives_function.html](#)

¹⁴[notes/midterm1_study_guide.html](#)

¹⁵[notes/derivatives_function.html](#)

¹⁶[notes/derivatives_rules.html](#)

¹⁷[notes/derivatives_rules.html](#)

¹⁸[notes/derivatives_higher.html](#)

¹⁹[notes/derivatives_trig.html](#)

²⁰[notes/chain_rule.html](#)

Week 7 (10/16-10/20)

Day 1 Implicit differentiation²¹

Related rates²²

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

Day 2 Linear Approximation and applications²³

Extreme values²⁴

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

Day 3 Mean value theorem, monotonicity²⁵

Week 8 (10/23-10/27)

Day 1 BREAK

Day 2 Mean value theorem, monotonicity (cont)²⁶

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

Day 3 Graph sketching²⁷

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

Week 9 (10/30-11/03)

Day 1 Graph sketching²⁸

Day 2 Applied optimization²⁹

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

Day 3 Applied optimization (cont)³⁰

²¹[notes/implicit_differentiation.html](#)

²²[notes/related_rates.html](#)

²³[notes/linear_approx.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](#)

³⁰[notes/applied_optimization.html](#)

Week 10 (11/06-11/10)

Day 1 Newton's method³¹

Day 2 Review

Day 3 **MIDTERM** (study guide³²)

Week 11 (11/13-11/17)

Day 1 Antiderivatives³³

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

Day 2 Introduction to computing areas³⁴

Day 3 The definite integral³⁵

Homework 14 Due: 4.7 2, 16 4.8 14, 22, 50

Week 12 (11/20-11/24)

Day 1 The definite integral (cont)³⁶

Day 2 THANKSGIVING

Day 3 THANKSGIVING

Week 13 (11/27-12/01)

Day 1 Fundamental Theorem of Calculus³⁷

Day 2 Fundamental Theorem of Calculus, part 2³⁸

Homework 15 Due: 5.2 4, 14, 18, 40

Day 3 The substitution method³⁹

Homework 16 Due: 5.3 10, 20, 38, 46

³¹[notes/newton.html](#)

³²[notes/midterm2_study_guide.html](#)

³³[notes/antiderivatives.html](#)

³⁴[notes/computing_areas.html](#)

³⁵[notes/definite_integral.html](#)

³⁶[notes/definite_integral.html](#)

³⁷[notes/fundamental_theorem_calculus.html](#)

³⁸[notes/fundamental_theorem_calculus.html](#)

³⁹[notes/substitution.html](#)

Week 14 (12/04-12/08)

Day 1 Area between curves

Homework 17 Due: 5.4 24, 28, 34, 36

Day 2 Review/Catchup

Day 3 Review (final study guide⁴⁰)

Homework 18 due: 5.6 14, 16, 38, 60, 72

⁴⁰[notes/midterm3_study_guide.html](#)