Schedule

A week-by-week breakdown of the material.

Week 1 (01/09-01/13)

Day 1 Review of Precalculus[1]

Day 2 Review of Precalculus (cont)[2]

Day 3 Review of Precalculus (inequalities)[3]

The concept of limit[4]

Week 2 (01/16-01/20)

Day 1 The concept of limit[5]

Limit laws[6]

Day 2 Continuity[7]

Day 3 Evaluating Limits[8]

Week 3 (01/23-01/27)

Day 1 Trigonometric Limits[9]

Day 2 Limits at Infinity[10]

Day 3 Intermediate Value Theorem[11]

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 derivatives[12]

Day 2 Derivative as a function[13]

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

Day 3 Derivative rules[14]

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

Week 5 (02/06-02/10)

Day 1 **MIDTERM 1** (study guide[15])

Day 2 Sick day

Day 3 Derivative rules[16]

Higher derivatives[17]

Week 6 (02/13-02/17)

Day 1 Derivatives for trigonometric functions[18]

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

Day 2 Chain rule[19]

Implicit differentiation[20]

Day 3 Related rates[21]

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 applications[22]

Extreme values[23]

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

Day 2 Extreme values[24]

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

Day 3 Mean value theorem, monotonicity[25]

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 sketching[27]

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

Graph sketching[28]

Day 3 Applied optimization[29]

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 guide[30])
Day 2 Applied optimization (cont)[31]
Day 3 Newton's method[32]

Week 12 (03/27-03/31)

Day 1 Antiderivatives[33]

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

Day 2 Introduction to computing areas[34]

Day 3 The definite integral[35]

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

Week 13 (04/03-04/07)

Day 1 The definite integral (cont)[36]

Day 2 Fundamental Theorem of Calculus[37]

Day 3 Fundamental Theorem of Calculus, part 2[38]

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

Week 14 (04/10-04/14)

Day 1 The substitution method[39]

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

Day 2 Area between curves

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

Day 3 Review (final study guide[40])

[30] notes/midterm2_study_guide.html
[31] notes/applied_optimization.html
[32] notes/newton.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
[40] notes/midterm3_study_guide.html