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 Due: 2.7 8, 20, 2.8 2, 6

Day 3 Derivative rules[14]

Homework Due: 3.1 4, 26, 34, 28

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

Day 2 Chain rule[19]

Implicit differentiation[20]

Day 3 Related rates

Linear Approximation and applications

Homework 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

Week 7 (02/20-02/24)

Day 1 Extreme values

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

Day 2 Mean value theorem, monotonicity

Homework Due: 3.8 6, 10, 38, 3.9 TBA

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

Week 11 (03/20-03/24)

Day 1 **MIDTERM** (study guide[21])
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)

[21] notes/midterm2_study_guide.html

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