Schedule

A week-by-week breakdown of the material.

Week 1 (01/09-01/13)

- **Day 1** Review of Calc 1¹
- **Day 2** Review of Calc 1 (cont)²
- **Day 3** Area between graphs $(6.1)^3$

Week 2 (01/16-01/20)

- **Day 1** Volumes and Mean Value Theorem for integrals (6.2)⁴
- **Day 2** Volumes of revolution $(6.3)^5$

Homework 1 Due: 6.1 14, 20, 26, 34

Day 3 Shell method $(6.4)^6$

Week 3 (01/23-01/27)

Day 1 The exponential function $(7.1)^7$

Homework 2 Due: 6.2 10, 56, 6.3 24, 40

Day 2 The exponential function (cont) $(7.1)^8$

Homework 3 Due: 6.4 8, 40, 44, 46

Day 3 Inverse functions $(7.2)^9$

Week 4 (01/30-02/03)

Day 1 Inverse functions (cont) $(7.2)^{10}$

¹notes/calc1_review.html

²notes/calc1_review.html

³notes/area graphs.html

⁴notes/volumes.html

⁵notes/volumes revolution.html

⁶notes/volumes_shell.html

⁷notes/exponential.html

⁸notes/exponential.html

⁹notes/inverse_functions.html

¹⁰notes/inverse_functions.html

Day 2 Logarithms $(7.3)^{11}$

Homework 4 Due: 7.1 26, 48, 7.2 4, 40

Day 3 Logarithms (cont) $(7.3)^{12}$

Homework 5 Due: 7.3 22, 34, 54, 98

Week 5 (02/06-02/10)

Day 1 MIDTERM 1 (study guide¹³)

Day 2 Sick day

Day 3 Exponential Growth and Decay $(7.4)^{14}$ Compound Interest $(7.5)^{15}$

Week 6 (02/13-02/17)

Day 1 L'Hospital's Rule $(7.7)^{16}$ Comparative growth of functions $(7.7)^{17}$

Day 2 Comparative growth of functions $(7.7)^{18}$ Homework 6 Due: 7.4 14, 24, 7.5 6, 8

Day 3 Inverse Trigonometric Functions (7.8)¹⁹ Homework 7 Due: 7.7 26, 46, 56, 58

Week 7 (02/20-02/24)

Day 1 Hyperbolic Functions $(7.9)^{20}$ Integration by parts $(8.1)^{21}$

Day 2 Integration by parts (8.1 cont)²²

¹¹notes/logarithms.html

¹²notes/logarithms.html

¹³notes/midterm1 study guide.html

¹⁴notes/exponential_growth.html

¹⁵notes/compound interest.html

¹⁶notes/lhopital.html

¹⁷notes/growth.html

¹⁸notes/growth.html

¹⁹notes/inverse_trig.html

²⁰notes/hyperbolic.html

²¹notes/integration_parts.html

²²notes/integration parts.html

Day 3 Integration by parts $(8.1 \text{ cont})^{23}$

Homework 8 Due: 7.8 22, 38, 60, 7.9 8, 44

Week 8 (02/27-03/03)

Day 1 BREAK

Day 2 BREAK

Day 3 BREAK

Week 9 (03/06-03/10)

Day 1 Trigonometric Integrals (8.2)²⁴

Day 2 (at conference)

Day 3 (at conference)

Week 10 (03/13-03/17)

Day 1 Trigonometric Substitution (8.3)²⁵

Homework 9 Due: 8.1 10, 14, 36, 38, 52

Day 2 Trigonometric Substitution (8.3)²⁶

Day 3 Review

Homework 10 Due: 8.2 14, 16, 8.3 6, 8

Week 11 (03/20-03/24)

Day 1 MIDTERM (study guide²⁷)

Day 2 Method of Partial Fractions (8.5)²⁸

Day 3 Method of Partial Fractions $(8.5)^{29}$

Week 12 (03/27-03/31)

Day 1 Improper Integrals (8.6)³⁰

Homework 11 Due: 8.5 4, 8, 16, 30

²³notes/integration_parts.html

²⁴notes/integrals_trig.html

²⁵notes/integrals_trig_subst.html

²⁶notes/integrals_trig_subst.html

²⁷notes/midterm2 study guide.html

²⁸notes/integrals partial.html

²⁹notes/integrals_partial.html

³⁰notes/integrals_improper.html

Day 2 Improper Integrals (8.6)³¹

Day 3 Improper Integrals $(8.6)^{32}$

Week 13 (04/03-04/07)

Day 1 Numerical Integration (8.8)³³

Homework 12 Due: 8.6 12, 16, 26, 38

Day 2 Numerical Integration (8.8)³⁴

Taylor Polynomials (9.4)³⁵

Day 3 Taylor Polynomials (9.4)³⁶

Week 14 (04/10-04/14)

Day 1 Arc Length (9.1)³⁷

Homework 13 Due: 8.8 10, 12, 14, 18

Day 2 Parametric Equations $(12.1)^{38}$

Arc Length and Area (12.2)

Homework 14 Due: 9.4 6, 24, 36, 48, 52

Day 3 Review (final study guide³⁹)

Homework 15 Due: 9.1 6, 10, 34, 36

³¹notes/integrals_improper.html

³²notes/integrals_improper.html

³³notes/integrals numerical.html

³⁴notes/integrals_numerical.html

³⁵notes/taylor.html

³⁶notes/taylor.html

³⁷notes/arc length.html

³⁸notes/parametric.html

³⁹notes/midterm3_study_guide.html