

Schedule

A week-by-week breakdown of the material.

Week 1 (09/07-9/11)

- Day 1** Review of Calc 1¹
- Day 2** Area between graphs (6.1)
- Day 3** Mean Value Theorem for integrals (6.2)
- Day 4** Volumes of revolution (6.3)

Week 2 (09/14-09/18)

- Day 1** Shell method (6.4)
- Day 2** The exponential function (7.1)
- Day 3** The exponential function (cont) (7.1)
- Day 4** Inverse functions (7.2)

Week 3 (09/21-09/25)

- Day 1** Logarithms (7.3)
- Day 2** Logarithms (cont) (7.3)
- Day 3** Defining logarithm as an integral
- Day 4** Defining exponential as inverse of logarithm

Week 4 (09/28-10/02)

- Day 1** Exponential Growth and Decay (7.4)
- Day 2** Compound Interest (7.5)
- Day 3** L'Hospital's Rule (7.7)
- Day 4** Comparative growth of functions (7.7)

Week 5 (10/05-10/09)

- Day 1** Review / Catchup
- Day 2** **MIDTERM**
- Day 3** Inverse Trigonometric Functions (7.8)
- Day 4** Hyperbolic Functions (7.9)

¹[notes/calc1_review.html](https://www.math.uwaterloo.ca/~dgg7257/notes/calc1_review.html)

Week 6 (10/12-10/16)

Day 1 Integration by parts (8.1)

Day 2 Trigonometric Integrals (8.2)

Day 3 Trigonometric Substitution (8.3)

Day 4 Method of Partial Fractions (8.5)

Week 7 (10/19-10/23)

Day 1 Fall Break

Day 2 Improper Integrals (8.6)

Day 3 Improper Integrals (cont) (8.6)

Day 4 Special functions: Gamma

Week 8 (10/26-10/30)

Day 1 Special functions: Beta?

Day 2 Numerical Integration (8.8)

Day 3 Taylor Polynomials (9.4)

Day 4 Arc Length (9.1)

Week 9 (11/02-11/06)

Day 1 Parametric Equations (12.1)

Day 2 Arc Length and Area (12.2)

Day 3 Polar Coordinates (12.3)

Day 4 Review

Week 10 (11/09-11/13)

Day 1 **MIDTERM**

Day 2 Area and Arch Length in polar coordinates (12.4)

Day 3 Conic sections (12.5)

Day 4 Conic sections (cont) (12.5)

Week 11 (11/16-11/20)

Day 1 TBA

Day 2 TBA

Day 3 TBA

Day 4 TBA

Week 12 (11/23-11/27)

Day 1 TBA

Day 2 THANKSGIVING

Day 3 THANKSGIVING

Day 4 THANKSGIVING

Week 13 (12/01-12/04)

Day 1 TBA

Day 2 TBA

Day 3 TBA

Day 4 TBA

Week 14 (12/07-12/11)

Day 1 TBA

Day 2 TBA

Day 3 TBA

Day 4 TBA