Schedule

A week-by-week breakdown of the material.

Week 1 (09/07-9/11)

- **Day 1** Review of Calc 1¹
- **Day 2** Review of Calc 1 (cont)²
- **Day 3** Review of Calc 1 (cont 2)³ Area between graphs (6.1)⁴
- **Day 4** Volumes and Mean Value Theorem for integrals (6.2)⁵

Week 2 (09/14-09/18)

- **Day 1** Volumes and Mean Value Theorem for integrals $(6.2 \text{ cont})^6$ Volumes of revolution $(6.3)^7$
- **Day 2** Shell method (6.4)
- **Day 3** The exponential function (7.1)
- **Day 4** The exponential function (cont) (7.1)

Week 3 (09/21-09/25)

- **Day 1** Inverse functions (7.2)
- Day 2 Logarithms (7.3)
- Day 3 Logarithms (cont) (7.3)
- Day 4 Defining logarithm as an integral

¹notes/calc1_review.html

²notes/calc1_review.html

³notes/calc1_review.html

⁴notes/area_graphs.html

⁵notes/volumes.html

⁶notes/volumes.html

⁷notes/volumes revolution.html

Week 4 (09/28-10/02)

- Day 1 Defining exponential as inverse of logarithm
- **Day 2** Exponential Growth and Decay (7.4)
- Day 3 Compound Interest (7.5)
- Day 4 L'Hospital's Rule (7.7)

Week 5 (10/05-10/09)

- Day 1 Review / Catchup
- Day 2 MIDTERM
- **Day 3** Comparative growth of functions (7.7)
- **Day 4** Inverse Trigonometric Functions (7.8)

Week 6 (10/12-10/16)

- **Day 1** Hyperbolic Functions (7.9)
- **Day 2** Integration by parts (8.1)
- **Day 3** Trigonometric Integrals (8.2)
- **Day 4** Trigonometric Substitution (8.3)

Week 7 (10/19-10/23)

- Day 1 Fall Break
- **Day 2** Method of Partial Fractions (8.5)
- **Day 3** Improper Integrals (8.6)
- **Day 4** Improper Integrals (cont) (8.6)

Week 8 (10/26-10/30)

- Day 1 Special functions: Gamma
- Day 2 Special functions: Beta?
- **Day 3** Numerical Integration (8.8)
- **Day 4** Taylor Polynomials (9.4)

Week 9 (11/02-11/06)

- Day 1 Arc Length (9.1)
- **Day 2** Parametric Equations (12.1)
- **Day 3** Arc Length and Area (12.2)
- Day 4 Review

Week 10 (11/09-11/13)

- Day 1 MIDTERM
- **Day 2** Polar Coordinates (12.3)
- Day 3 Area and Arc Length in polar coordinates (12.4)
- **Day 4** Conic sections (12.5)

Week 11 (11/16-11/20)

- **Day 1** Conic sections (cont) (12.5)
- 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