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 cont)⁶
- **Day 2** Volumes of revolution $(6.3)^7$
- **Day 3** Volumes of revolution (6.3 cont)⁸
- **Day 4** Shell method $(6.4)^9$

Week 3 (09/21-09/25)

- **Day 1** The exponential function $(7.1)^{10}$
- **Day 2** Inverse functions $(7.2)^{11}$
- Day 3 Logarithms (7.3)
- Day 4 Logarithms (cont) (7.3)

Week 4 (09/28-10/02)

- **Day 1** Defining logarithm as an integral
- $\textbf{Day 2} \ \ \textbf{Defining exponential as inverse of logarithm}$

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

⁸notes/volumes revolution.html

⁹notes/volumes shell.html

¹⁰notes/exponential.html

¹¹notes/inverse_functions.html

- **Day 3** Exponential Growth and Decay (7.4)
- Day 4 Compound Interest (7.5)

Week 5 (10/05-10/09)

- Day 1 Review / Catchup
- Day 2 MIDTERM
- Day 3 L'Hospital's Rule (7.7)
- **Day 4** Comparative growth of functions (7.7)

Week 6 (10/12-10/16)

- **Day 1** Inverse Trigonometric Functions (7.8)
- **Day 2** Hyperbolic Functions (7.9)
- **Day 3** Integration by parts (8.1)
- **Day 4** Trigonometric Integrals (8.2)

Week 7 (10/19-10/23)

- Day 1 Fall Break
- **Day 2** Trigonometric Substitution (8.3)
- **Day 3** Method of Partial Fractions (8.5)
- **Day 4** Improper Integrals (8.6)

Week 8 (10/26-10/30)

- **Day 1** Improper Integrals (cont) (8.6)
- $\boldsymbol{Day}~\boldsymbol{2}$ Special functions: Gamma
- Day 3 Special functions: Beta?
- **Day 4** Numerical Integration (8.8)

Week 9 (11/02-11/06)

- **Day 1** Taylor Polynomials (9.4)
- Day 2 Arc Length (9.1)
- Day 3 Parametric Equations (12.1)
- Day 4 Review

Week 10 (11/09-11/13)

- Day 1 MIDTERM
- Day 2 Arc Length and Area (12.2)
- **Day 3** Polar Coordinates (12.3)
- Day 4 Area and Arc Length in polar coordinates (12.4)

Week 11 (11/16-11/20)

- **Day 1** Conic sections (12.5)
- Day 2 Conic sections (cont) (12.5)
- 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