

212 Class Schedule

Text: Stewart *Calculus Early Transcendentals*, 9th ed. Cengage.

| Class | Material | Sections |
|-------|--|-----------------|
| 1 | Exponential Growth, Hyperbolic Functions | 3.8, 3.11 |
| 2 | Fundamental Theorem, Indefinite Integrals and Net Change, Substitution | 5.3, 5.4, 5.5 |
| 3 | The Substitution Rule, Integration by Parts | 5.5, 7.1 |
| 4 | Integration by Parts | 7.1 |
| 5 | Trig Integrals | 7.2 |
| 6 | Trig Substitution | 7.3 |
| 7 | Rational Functions and Partial Fractions | 7.4 |
| 8 | Midterm 1 | |
| 9 | Strategies and Approximate Integrals | 7.5, 7.7 |
| 10 | Improper Integrals | 7.8 |
| 11 | Sequences | 11.1 |
| 12 | Series | 11.2 |
| 13 | Integral Test | 11.3 |
| 14 | Comparison Test | 11.4 |
| 15 | Alternating Series, Absolute Convergence | 11.5 |
| 16 | Ratio and Root Tests | 11.6 |
| 17 | Midterm 2 | |
| 18 | Strategies for Testing Series, Power Series | 11.7, 11.8 |
| 19 | Representing Functions as Power Series | 11.9 |
| 20 | Taylor and Maclaurin Series | 11.10 |
| 21 | Taylor and Maclaurin Series (part 2), Log | 11.10, Appendix |
| 22 | Seperable Differential Equations | 9.3 |
| 23 | Polar Coordinates | 10.3 |
| 24 | Areas and Lengths in Polar Coordinates | 10.4 |
| 25 | Midterm 3 | |
| 26 | Conic Sections | 10.5 |
| 27 | Three-Dimensional Coordinate Systems | 12.1 |
| 28 | Cylinders and Quadratic Surfaces | 12.6 |