

Math 126

Chapter 6. Transcendental Functions

- 6.1 Inverse Functions and Their Derivatives
- 6.2 Natural Logarithms
- 6.3 The Exponential Function
- 6.4 a^x and $\log_a x$
- 6.5 Growth and Decay
- 6.6 L'Hopital's Rule
- 6.7 Relative Rates of Growth (Covered cursorily)
- 6.8 Inverse Trigonometric Functions
- 6.9 Derivatives of Inverse Trigonometric Functions; Integrals
- 6.10 Hyperbolic Functions
- 6.11 First Order Differential Equations

Chapter 7. Techniques of Integration

- 7.1 Basic Integration Formulas
(Responsible for, not covered in class)
- 7.2 Integration by Parts
- 7.3 Partial Fractions
- 7.4 Trigonometric Substitutions
- 7.5 Integral Tables (Same as 7.1)
- 7.6 Improper Integrals

Chapter 8. Infinite Series

- 8.3 Infinite Series
- 8.4 The Integral Test for Series of Nonnegative Terms
- 8.5 Comparison Tests for Series of Nonnegative Terms
- 8.6 The Ratio and Root Tests for Series of Nonnegative Terms
- 8.7 Alternating Series, Absolute and Conditional Convergence
- 8.8 Power Series
- 8.9 Taylor and Maclaurin Series
- 8.10 Convergence of Taylor Series; Error Estimates
- 8.11 Applications of Power Series

Chapter 9. Conic Section, Parametrized Curves, and Polar Coordinates

(If Time Permits)

- 9.1 Conic Sections and Quadratic Equations
- 9.2 Classifying Conic Sections by Eccentricity
- 9.3 Quadratic Equations and Rotations
- 9.8 Polar Equations for Conic Sections

