

MATH 15400 TRIGONOMETRY

List of Course Topics

IU e-TEXT: Swokowski & Cole, *Algebra & Trigonometry with Analytic Geometry*, Classic 12th Edition

Chapter 11: Topics From Analytic Geometry

- 11.1 Parabolas
- 11.2 Ellipses (omit eccentricity)
- 11.3 Hyperbolas

Chapter 9: Systems of Equations and Inequalities

- 9.1 Systems of Equations
- 9.2 Systems of Linear Equations in Two Variables

Chapter 6: The Trigonometric Functions

- 6.1 Angles
- 6.2 Trigonometric Functions of Angles
- 6.3 Trigonometric Functions of Real Numbers
- 6.4 Values of the Trigonometric Functions
- 6.5 Trigonometric Graphs
- 6.7 Applied Problems (omit harmonic motion problems)

Chapter 7: Analytic Trigonometry

- 7.1 Verifying Trigonometric Identities
- 7.2 Trigonometric Equations
- 7.3 The Addition and Subtraction Formulas
- 7.4 Multiple-Angle Formulas
- 7.6 The Inverse Trigonometric Functions (omit graphs of $y = \cot^{-1} x$, $y = \sec^{-1} x$, $y = \csc^{-1} x$)

Chapter 8: Applications of Trigonometry

- 8.1 The Law of Sines
- 8.2 The Law of Cosines