This is a one semester course which earns ½ math credit. This class is the second half of our Algebra 2 sequence. Successful completion of this course allows students to take Pre Calculus. College-bound students are strongly encouraged to take Pre Calculus.

Units:

6. FUNCTIONS
   - 6.1. Multiple Representations of Functions
   - 6.2. Comparing Functions
   - 6.3. Piecewise Functions (Quiz A)
   - 6.4. Transforming Functions
   - 6.5. Operations with Functions
   - 6.6. Functions and Their Inverses (Quiz B)
   - 6.7. Modeling Real-World Data TEST

7. PROBABILITY
   - 7.1. Permutations & Combinations
   - 7.2. Theoretical & Experimental Probability
   - 7.3. Independent & Dependent Events (Quiz A)
   - 7.4. Two-Way Tables
   - 7.5. Compound Events (Quiz B) TEST

8. DATA ANALYSIS & STATISTICS
   - 8.1. Measures of Central Tendency & Variation
   - 8.2. Data Gathering
   - 8.3. Surveys, Experiments & Observational Studies
   - 8.4. Significance of Experimental Results (Quiz A)
   - 8.5. Sampling Distributions
   - 8.6. Fitting to a Normal Distribution
   - 8.7. Analyzing Decisions (Quiz B) TEST

9. SEQUENCES & SERIES
   - 9.1. Introduction to Sequences & Series
   - 9.2. Series & Summation Notation
   - 9.3. Arithmetic Sequences & Series (Quiz A)
   - 9.4. Geometric Sequences & Series
   - 9.5. Math. Induction & Infinite Geometric Series (Quiz B) TEST

10. TRIGONOMETRIC FUNCTIONS
   - 10.1. Right Angle Trigonometry
   - 10.2. Angles of Rotation
   - 10.3. The Unit Circle
   - 10.4. Inverses of Trigonometric Functions (Quiz A)
   - 10.5. The Law of Sines
   - 10.6. The Law of Cosines (Quiz B) TEST

11. TRIGONOMETRIC GRAPHS & IDENTITIES
   - 11.1. Graphs of Sine and Cosine
   - 11.2. Graphs of Other Trigonometric Functions

- 11.3. Fundamental Trigonometric Identities (Quiz A)
- 11.4. Sum & Difference Identities
- 11.5. Double-Angle & Half-Angle Identities
- 11.6. Solving Trigonometric Equations (Quiz B) TEST

12. CONIC SECTIONS
    - 12.1. Introduction to Conic Sections
    - 12.2. Circles
    - 12.3. Ellipses
    - 12.4. Hyperbolas (Quiz A)
    - 12.5. Parabolas
    - 12.6. Identifying Conic Sections
    - 12.7. Solving Nonlinear Systems (Quiz B) TEST