Name: Date:

Honors Algebra 2 2016-2017 Syllabus

**Chapter 5 – Quadratic Equations & Functions**

Section 1 – Modeling Data with Quadratic Functions

Section 2 – Properties of Parabolas

Section 3 – Transforming Parabolas

Section 4 – Factoring Quadratic Expressions

Section 5 – Quadratic Equations

Section 6 – Complex Numbers

Section 7 – Completing the Square

Section 8 – The Quadratic Formula

**Chapter 6 – Polynomials & Polynomial Functions**

Section 1 – Polynomials Functions

Section 2 – Polynomial & Linear Factors

Section 4 – Solving Polynomial Equations

Section 7 – Permutations and Combinations

**Chapter 7 – Radical Functions & Rational Exponents**

Section 1 – Radical Expressions

Section 2 – Multiplying & Dividing Radical Expressions

Section 3 – Binomial Radical Expressions

Section 4 – Rational Exponents

Section 5 – Solving Square Roots & Other Radical Equations

Section 6 – Function Operations

Section 7 – Inverse Relations & Functions

Section 8 – Graphing Square Root & Other Radical Functions

**Chapter 8 – Exponential & Logarithmic Functions**

Section 1 – Exploring Exponential Models

Section 2 – Properties of Exponential Functions

Section 3 – Logarithmic Functions of Inverses

Section 4 – Properties of Logarithms

Section 5 – Exponential & Logarithmic Functions

Section 6 – Natural Logarithms

**Chapter 9 – Quadratic Rational Functions**

Section 4 – Rational Expressions

Section 5 – Adding & Subtracting Rational Expressions

Section 6 – Solving Rational Expressions

Section 2 – The Reciprocal Function Family

Section 3 – Rational Functions & Their Graphs

**Chapter** **10 – Quadratic Relations**

Section 3 – Circles

**Chapter 13 – Periodic Functions and Trigonometry**

Section 1 – Exploring Periodic Data

Extra – Special Right Triangles

Section 2 – Angles and the Unit Circles

Section 3 – Radian Measure

Section 4 – The Sine Function

Section 5 – The Cosine Function

Section 6 – The Tangent Function

Section 7 – Translating Sine & Cosine Functions

Section 8 – Reciprocal Trigonometric Functions

**Chapter 14 – Trigonometric Identities & Equations**

Section 1 – Trigonometric Identities

Section 2 – Solving Trigonometric Equations using Inverses

Section 3 – Right Triangles & Trigonometric Ratios

Section 4 – Area & the Law of Sines

Section 5 – The Law of Cosines

Section 6 – Angle Identities

**Pre-Calculus Concepts**

1 – Interval Notation

2 – Odd, Even, and Neither Functions

3 – Piecewise Functions

**\*Keep this for the whole entire year for BONUS! \*Subject to change**