**Algebra II Concepts 2014 – 2015**

**Chapter 5 – Polynomials and Polynomial Functions**

**Key Vocabulary:** end behavior, monomial, multiplicity, Pascal’s Triangle, polynomial function, relative maximum, relative minimum, standard form of a polynomial function, synthetic division, turning point.

**Description of Unit:** This chapter expands on students’ understandings and skills related to functions, equations, and graphs.

**Chapter 6 – Radical Functions and Rational Exponents**

**Key Vocabulary:** composite function, inverse function, nth root, principal root, radical equation, radicand, rational exponent, rationalize the denominator, square root equation, square root function.

**Description of Unit:** This chapter expands on students’ understandings and skills related to radical functions and rational exponents.

**Chapter 7 – Exponential and Logarithmic Functions**

**Key Vocabulary:** asymptote, Change of Base Formula, common logarithm, exponential equation, exponential function, exponential growth, logarithm, logarithmic equation, logarithmic function, natural logarithmic function.

**Description of Unit:** This chapter expands on students’ understandings and skills related to exponential and logarithmic functions.

**Chapter 8 – Rational Functions**

**Key Vocabulary:** combined variation, complex fraction, continuous graph, discontinuous graph, inverse variation, joint variation, point of discontinuity, rational equation, rational expression, rational function, reciprocal function.

**Description of Unit:** This chapter expands on students’ understandings and skills related to rational functions.

**Chapter 11 – Probability and Statistics**

**Key Vocabulary:** combination, conditional probability, experimental probability, measure of central tendency, mutually exclusive events, normal distribution, permutation, simulation, theoretical probability.

**Description of Unit:** This chapter expands on students’ understandings and skills related to probability and statistics.

**Chapter 12 – Matrices**

**Key Vocabulary:** determinant, dilation, equal matrices, image, matrix equation, preimage, scalar multiplication, variable matrix, zero matrix.

**Description of Unit:** This chapter expands on students’ understandings and skills related to matrices and systems of equations.