

CP ALGEBRA II SCOPE AND SEQUENCE

Semester 1

Unit 1: Expressions, Equations, and Inequalities (September)

(Algebraic Expressions, Solving Equations, Solving Inequalities, Absolute Value Equations)

Unit 2: Functions, Equations, and Graphs (September-October)

(Relations, Linear Functions, Absolute Value Functions, Two-Variable Inequalities)

Unit 3: Linear Systems (October)

(Solve by Graphing, Substitution, Elimination, Systems of Inequalities, Three Variable Systems)

Unit 4: Quadratic Functions & Equations (November)

(Graphing, Modeling, Factoring, Completing the Square, The Quadratic Formula)

Unit 4-2: Complex Numbers (November-December)

(Complex Number Operations, Quadratic Systems)

Unit 5: Polynomials (December-January)

(Polynomial Functions, Factoring, Polynomial Division, The Fundamental Theorem of Algebra)

Semester 2

Unit 6: Rational Functions & Radical Exponents (January-February)

(Binomial Expansion, Roots, Radical Expressions, Exponents, Solving Equations, Inverses)

Unit 7: Exponential & Logarithmic Functions (February)

(Exponential Functions, Properties of Logarithms, Logarithmic Equations, Natural Logarithms)

Unit 8: Rational Functions (March)

(Inverse Variation, Rational Graphs, Rational Expressions, Solving Rational Equations)

Unit 9: Sequences & Series (March)

(Patterns, Arithmetic/Geometric Sequences, Arithmetic/Geometric Series)

Unit 10: Conic Sections (April)

(Parabolas, Circles, Ellipses, Hyperbolas, Translating Conic Sections)

Unit 11: Probability (May)

(Permutations, Combinations, Probability of Multiple Events, Conditional Probability)

Unit 12: Matrices (May)

(Matrix Operations, Determinants, Inverses)