

CRAIGMONT HIGH SCHOOL ALGEBRA II/ALGEBRA II HONORS

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Text: *Prentice Hall Mathematics, Algebra 2.*

Goals:

1. To prepare students for more advanced mathematical courses.
2. To provide logical, problem solving techniques that can be used in life after high school.
3. To prepare students for college entrance examinations.
4. To provide the required skills for the Gateway Tests.
5. To provide students real life examples of mathematical applications.

Chapter	Dates	Major Test Dates
1. Tools of Algebra Properties of Real Numbers, Algebraic Expressions, Solving Equations, Solving Inequalities, Absolute Value Equations and Inequalities, Probability	Aug 21-Sep 1	Aug 25 Mid Chapter Sep 1 Chapter 1
2. Functions, Equations, and Graphs Relations and Functions, Linear Equations, Direct Variation, Using Linear Models, Absolute Value Functions And Graphs, Vertical and Horizontal Translations, Two- Variable Inequalities	Sep 5-Sep 22	Sep 13 Mid Chapter Sep 22 Chapter 2
3. Linear Systems Graphing Systems of Equations, Solving Systems Algebraically, Systems of Inequalities, Linear Programming, Graphs in Three Dimensions, Systems with Three Variables	Sep 25-Oct 13	Oct 3 Mid Chapter Oct 13 Chapter 3
4. Matrices Organizing Data into Matrices, Adding and Subtracting Matrices, Matrix Multiplication, Geometric Transformations with Matrices, 2x2 Matrices, Determinants and Inverses, 3x3 Matrices, Determinants, and Inverses, Inverse Matrices And Systems, Augmented Matrices and Systems	Oct 16-Nov 10	Oct 23 Lesson 1-3 Nov 2 Lesson 4-6 Nov 10 Chapter 4
5. Quadratic Equations and Functions Modeling Data with Quadratic Functions, Properties of Parabolas, Translating Parabolas, Factoring Quadratic Expressions, Quadratic Equations, Complex Numbers, Completing the Square, The Quadratic Formula	Nov 13-Dec 8	Nov 17 Lesson 1-3 Dec 1 Lesson 4-6 Dec 8 Chapter 5
6. Polynomials and Polynomial Functions Polynomial Functions, Polynomials and Linear Functions Dividing Polynomials, Solving Polynomial Equations, Theorems about Roots of Polynomial Equations, The Fundamental Theorem of Algebra, Permutations and Combinations, The Binomial Theorem	Dec 11- Jan 24	Dec 14 Lesson 1-2 Jan 11 Lesson 3-4 Jan 18 Lesson 5-6 Jan 24 Lesson 7-8

Review of Chapter 1-5	Dec 18	Dec 19, 20, 21 Semester Final
7. Radical Functions and Rational Exponents Roots and Radical Expressions, Multiplying and Dividing Radical Expressions, Binomial Radical Expressions, Rational Exponents, Solving Radical Equations, Function Operations, Inverse Relations and Functions, Graphing Radical Functions	Jan 25-Feb 14	Feb 1 Lesson 1-3 Feb 8 Lesson 4-6 Feb 14 Lesson 7-8
8. Exponential and Logarithmic Functions Exploring Exponential Models, Properties of Exponential Functions, Logarithmic Functions as Inverses, Properties of Logarithms, Exponential and Logarithmic Equations, Natural Logarithms	Feb 15-Mar 3	Feb 23 Lesson 1-3 Mar 2 Lesson 4-6
9. Rational Functions Inverse Variation, Graphing Inverse Variation, Rational Functions and Their Graphs, Rational Expressions, Adding and Subtracting Rational Expressions, Solving Rational Expressions, Solving Rational Equations, Probability of Multiple Events	Mar 5-Mar 27	Mar 8 Lesson 1-2 Mar 27 Lesson 3-7
10. Quadratic Relations Exploring Conic Sections, Parabolas, Circles, Ellipses, Hyperbolas, Translating Conic Sections	Mar 28-Apr 12	Apr 4 Lesson 1-3 Apr 12 Lesson 4-6
14. Trigonometric Identities and Equations Trigonometric Identities, Solving Trigonometric Equations Using Inverses, Right Angles and Trigonometric Ratios, Area and the Law of Sines, The Law of Cosines	Apr 13- Apr 25	Apr 19 Lesson 1-3 Apr 25 Lesson 4-7
13. Periodic Functions and Trigonometry Angles and the Unit Circle, Radian Measure	Apr 26-May 1	May 1 Lesson 2-3
Special Project	May 2-May 18	May 18 Presentations
Review of Chapter 6-10, 13-14	May 21-22	May 23, 24, 25 Semester Final
	Senior Exams May 17 & 18	

The Honors section will study at a faster pace than the regular sections. They will cover Chapter 11, Sequences and Series, and Chapter 12, Probability, during the second semester. The time required to complete each section is approximate, as are the test dates. Activity schedules and special events have not been taken into consideration. The instructor may spend additional time on a section if the students are encountering problems.