

BERTHA-HEWITT HIGH SCHOOL
Fall /Spring Semester Curriculum Map – 2014-15
Peggy Leitch – Instructor

Academic Standard Area: **Math** *Course Title/Strand:* **Integrated Algebra** *Grade Level:* **10-12**

Textbook & Copyright date: **Glencoe, MathMatters 2, 2006**

CONTENT/UNIT/SUB-STRAND	PROCESS/ACTIVITY/STANDARD	TEST DATE
Chapter 1 – Sample and Display Data	Surveys and Sampling Methods; Measures of Central Tendency and Range; Histograms and Stem-and-Leaf Plots; Scatter Plots and Lines of Best Fit; Coefficients of Correlation; Quartiles and Percentiles; Misleading Graphs and Statistics; Use Matrices to Organize Data	September
Chapter 2 – Foundations of Algebra	Real Numbers; Order of Operations; Write Variable Expressions; Add and Subtract Variable Expressions; Multiply and Divide Variable Expressions; Simplify Variable Expressions; Properties of Exponents; Zero and Negative Exponents; Find a Pattern	October
Chapter 3 – Equations and Inequalities	Equations and Formulas; One Step Equations; Problem Solving Skills: Model Algebra; Equations With Two or More Operations; Proportions; Graph Inequalities on a Number Line; Solve Inequalities; Equations With Squares and Square Roots	November
Chapter 4 - Probability	Experiments and Probabilities; Simulations; Sample Spaces and Theoretical Probability; Probability of Compound Events; Independent and Dependent Events; Permutations of a Set; Combinations of a Set	December
Chapter 5 - Logic and Geometry	Elements of Geometry; Angles and Perpendicular Lines; Parallel Lines and Transversals; Properties of Triangles; Congruent Triangles; Quadrilaterals and Parallelograms; Diagonals and Angles of Polygons; Properties of Circles; Circle Graphs	January
Chapter 6 – Graphing Functions	Distance in a Coordinate Plane; Slope of a Line; Write and Graph Linear Equations; Write and Graph Linear Inequalities; Linear and Nonlinear Functions; Graph Quadratic Functions; Patterns and Functions; Direct Variation; Inverse Variation	January
Chapter 7 – Coordinate Graphing and Transformations	Translations in a Coordinate Plane; Reflections in a Coordinate Plane; Rotations in a Coordinate Plane; Line Symmetry and Rotational Symmetry; Dilations in the Coordinate Plane; Tessellations	February
Chapter 8 – Systems of Equations and Inequalities	Parallel and Perpendicular Lines; Solving Systems of Equations Graphically; Solve Systems by Substitution; Solve Systems by Adding, Subtracting, & Multiplying; Matrices & Determinates; Directed Graphs; Systems of Inequalities	March
Chapter 9 – Polynomials	Add and Subtract Polynomials; Multiply Monomials; Divide by a Monomial; Multiply a Polynomial by a Monomial; Multiply Binomials; Work Backwards; Factoring Using Greatest Common Factors; Perfect Squares and Differences of Squares	April
Chapter 10 - Three-Dimensional Geometry	Visualize and Represent Solids; Nets and Surface Area; Surface Area of Three-Dimensional Figures; Perspective Drawings; Isometric Drawings; Orthogonal Drawings; Volume of Prisms and Pyramids; Volume of Cylinders, Cones, and Spheres; Length, Area, and Volume	May
Chapter 11 - Right Triangle Trigonometry	Similar Polygons; Indirect Measurement; Pythagorean Theorem; Sine, Cosine, & Tangent Ratios; Find Lengths of Sides in Right Triangles; Find Measures of Angles in Right Triangles; Special Right Triangles; Reasonable Solutions	May

