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

Academic Standard Area: **Math** *Course Title/Strand:* **Algebra I** *Grade Level:* **8-11**
Textbook & Copyright date: **McDougal Littell, Algebra I 2007**

CONTENT/UNIT/SUB-STRAND	PROCESS/ACTIVITY/STANDARD	TEST DATE
Chapter 1 – Expressions, Equations, and Functions	Evaluate Expressions; Order of Operations; Write Expressions, Equations and Inequalities; Represent Functions as Rules, Tables and Graphs	September
Chapter 2 – Properties of Real Numbers	Use Integers and Rational Numbers; Add, Subtract, Multiply, Divide Real Numbers; Distributive Property; Square Roots	September/October
Chapter 3 – Solve Linear Equations	Solve One-Step, Two-Step, and Multi-Step Equations; Solve Equations With Variables on Both Sides; Write and Solve Proportions; Rewrite Equations and Formulas	October
Chapter 4 - Graphing Linear Equations and Functions	Plot Points in a Coordinate Plane; Graph Linear Equations; Find Slope and Rate of Change; Graph Using Intercepts and Slope-Intercept Form; Direct Variation	November
Chapter 5 - Write Linear Equations	Write and Use Linear Equations in Slope-Intercept Form, Point-Slope Form and Standard Form; Write Equations of Parallel and Perpendicular Lines; Fit and Line to Data; Predict With Linear Models	December/January
Chapter 6 – Solving and Graphing Linear Inequalities	Solve Inequalities Using Addition, Subtraction, Multiplication and Division; Solve Multi-Step and Compound Inequalities; Solve Absolute Value Equations and Inequalities; Graph Linear Inequalities in Two Variables	January/February
Chapter 7 – Systems of Equations and Inequalities	Solve Linear Systems by Graphing, Substitution, and Elimination; Solve Systems of Linear Inequalities	February/March
Chapter 8 – Exponents and Exponential Functions	Apply Exponent Properties Involving Products and Quotients; Define and Use Zero and Negative Exponents; Scientific Notation; Write and Graph Exponential Growth and Decay Functions	March
Chapter 9 – Polynomials and Factoring	Add, Subtract and Multiply Polynomials; Find Special Products of Polynomials; Solve Polynomial Equations in Factored Form; Factor $x^2 + bx + c$, $ax^2 + bx + c$, Special Products, and Polynomials Completely	April
Chapter 10 - Quadratic Equations and Functions	Graph $y = ax^2 + c$ and $y = ax^2 + bx + c$; Solve Quadratic Equations by Graphing, Using Square Roots, Completing the Square and by Using the Quadratic Formula; Interpret the Discriminant; Compare Linear, Exponential, and Quadratic Models	May