**Basic Skills Algebra**

**Semester I Syllabus**

**Fall 2011**

**I. Solving Linear Equations**

 A. Single-Step

B. Multi-Step

 C. Proportions

 D. Formulas

**II. Solving Linear Inequalities**

 A. Basic

 B. Compound

**III. Interpreting Linear and Non-Linear Relations**

 A. Domain and Range

 B. Relation and Functions

 C. Slope

 D. Interpreting Distance over time

**IV. Graphing Linear Equations**

 A. Slope-Intercept Form

 B. Special Lines

 C. Intercepts

**V. Writing Linear Equations**

 A. Given Slope and y-Intercept

 B. Given Slope and a Point

 C. Given Two Points

 D. Parallel and Perpendicular Lines

 E. Best-Fit Lines

**VI. Systems of Linear Equations**

 A. Graphically

 B. Substitution Method

 C. Linear Combination Method

**VII. Systems of Linear Inequalities- Graphically**

**VIII. Simplifying Radicals (Radical Form)**

 A. Simple Numerical Radicands

 B. Rationalize the Denominator

**IX. Properties of Exponents**

A. Product Properties

 B. Zero and Negative Properties

 C. Quotient Properties

**X. Intro to Polynomials**

A. Combine Like Terms

 B. Adding Polynomials

 B. Subtracting Polynomials

**XI. Multiplying and Dividing Polynomials**

 A. Distribution Property

 B. F.O.I.L.

 C. Separation Property

**XII. Factoring Polynomials**

 A. GCF’s

B. x2+bx+c

 C. ax2+bx+c

 D. Special Product Patterns

**XIII. Solving Quadratic Equations**

 A. Using Square Roots

 B. Solving by Factoring

 C. Quadratic Formula

**XIV. Graphing Quadratic Equations-Finding vertex, A.O.S, and t-chart**

**XI. Solving Radical Equations**