**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**