## 8th grade Pre-load Algebra

#### **Course Description:**

The pre-load algebra class is a supplemental algebra class for special education students who are attending the core algebra class. Students in this class will have a special emphasis on learning algebra vocabulary used in the core algebra class. The class will also pre-teach and re-teach concepts being discussed in the general education classroom. Students will be given opportunity to teach in front of their peers and work collaboratively as well as progress from concrete to representational to abstract ways of doing algebra.

#### **Course Objective:**

- A. Students will understand algebra vocabulary
- B. Students will learn to write expressions, equations and Inequalities using rational numbers
- C. Students will learn about rational and irrational numbers
- D. Students will learn to solve linear equations and absolute value equations and inequalities
- E. Students will learn to graph linear equations in a variety of forms.
- F. Students will learn to solve linear systems and inequalities
- G. Students will learn the properties of exponents and solve exponential equations.

September: Chapter A Connections to algebra;

Writing expressions Writing equations

Writing inequalities

Math vocabulary for the operations

Using fractions and decimals

October: Chapter B: Properties of real numbers:

- 1. learn to compute with real numbers i.e rational, irrational,
- 2. use rational numbers to solve equations and combine like terms

#### November: Chapter 1- Solving Linear Equations

- 1. With addition and subtraction
- 2. With Multiplication and division
- 3. Using multi step equations
- 4. Variables on both sides
- 5. Absolute value equations

#### December - Solve Linear Inequalities

- 1. Graph inequalities
- 2. Write inequalities from graphs
- 3. Solve inequalities multiplying or dividing by negative numbers
- 4. Solve multi-step inequalities

#### January - Chapter 3 Graphing Linear Equations

- 1. Review coordinate graph
- 2. Graph lines in standard form
- 3. Graph lines in Slope intercept form
- 4. Graph lines in Point Slope form
- 5. Learn Function notation
- 6. Evaluate functions

## February - Chapter 4 Writing Linear Functions

- 1. Write Linear equations from a graph
- 2. Write functions
- 3. Apply linear equations to real-life situations
- 4. Learn about scatter plots and lines of best fit

# March – Chapter 5 Solving systems of Linear Equations and inequalities

- 1. Learn to solve linear systems using
  - A. Graphing
  - B. Substitution
  - C. Linear Combination
- 2. Learn to graph Linear Inequalities
- 3. Learn to graph Systems of Linear inequalities

# April- Chapter 6 Exponential Functions and Sequences

- 1. Learn about properties of Exponents,
- 2. Learn about exponential functions
- 3. Solve exponential equations

4. Practice for MCA III test and review areas of concern

May – Chapter 7 Polynomial Equations and Factoring

- 1. Students will add subtract and multiply polynomials
- 2. Factor Polynomials

# Grading:

90 - 100 %	A
80 - 89%	В
70 - 79%	C
60 - 69%	D
Below 60%	U

11/17/2014