

## **7<sup>th</sup> Grade Pre-Algebra / Pre-load**

### **I. Course Description**

The pre-load math class is intended as a supplemental program to the curriculum presented in the general education setting to Special Education Students. Students in this class will receive extra support, instruction and strategies based on hands-on real world type problems using the concepts taught in the general education setting. The idea behind this class is to pre-teach and re-teach the concepts in an attempt to provide these students more knowledge and therefore confidence in completing the workload, while also being more active participants in the general education setting.

### **II. Course Objective:**

- A. Students will be able to use and understand basic Pre-Algebra terminology.**
- B. Students will learn how to write equations.**
- C. Students will learn how to solve basic equations and inequalities with Integers, Decimals and Fractions.**
- D. Students will learn to use formulas to find area, volume and surface area.**
- E. Students will be introduced to linear functions and graphs.**

### **III. Content Outcomes:**

#### **\*September:**

##### **Chapter 1-2 Integers / Rational Numbers**

**(Students will learn to Add, Subtract, Multiply and divide using Integers and Rational Numbers)**

#### **\*October:**

##### **Chapters 3-4 Expressions & Equations and Inequalities**

**(Students will learn to simplify expressions solve 1 and 2 step problems using addition, subtraction, multiplication and division)**

#### **\* November:**

##### **Chapters 5-6 Ratios Proportions and Percents**

**(Students will learn what these 3 are as well as how to solve and set up proportions. They will also learn how to compare fractions decimals and percents and find percent of increase, decrease, mark-up, discount and simple interest)**

**\*December:**

**Chapter 7-8 Scale Drawings and area of circles**

(Students will learn to use scales and make scale drawings, as well as finding the area of circles, and composite shapes as well as perimeter and circumference)

**\* January:**

**Chapter 9-10 Surface Area, Volume and Probability and Statistics.**

(Students will be able to use formulas to find volume and surface area of prisms, pyramids and cylinders. Students will also be able to show Outcomes and Events, Experimental and Theoretical Probability as well as Dependent and Independent events.)

**\* February:**

**Chapters 11 and Chapter 5.5-6 & 13.1-4**

(Students will be able to learn what congruent and similar figures are and how to translate, rotate, and reflect these shapes on a coordinate plane. Students will also be able to identify that slope is a rate as well as graphing linear equations using tables and slope intercept form)

**\*March:**

**Chapter 15-16**

(Students will be able to find Volume and Surface Area of Cylinders, Cones and Spheres. They will also be able to find these using similar solids using proportions. Students will also learn how to read write and do operations in Scientific Notation)

**\* April:**

**MCA prep**

**\* May**

**Chapter 12 angles and Triangles**

(Students learn how to find measurements of angles in Polygons and Triangles. )

## **IV. Grading**

**100%-90% = A**

**89%-80% = B**

**79%-70% = C**

**69%-60% = D**

**59% > = U**

