P.S. 035 Manhattan High School Course Code: MES41QQN Syllabus for: Algebra I

Syllabus for: Algebra Teacher Name: Thomas

Year and Term: 2018 Term Spring

# Learning Standards:

N-RN: The Real Number System

N-QA: Quantities

SSE: Seeing Structure in Expressions

**CED**: Creating Equations

REI: Reasoning with Equations and Inequalities

F-IF: Interpreting Functions F-BF: Building Functions

F-LE: Linear, Quadratic, and Exponential Models

### Course Description:

Algebra I is a course designed to introduce students to fundamental math concepts that can be applied in a real world setting. Students will learn and interpret expressions and their structure, arithmetic operations, equations and their relationships, as well as solve equations and explain the reasoning it consists of. As a result of this taking this course, students will be able to make sense of problems and solve them, reason abstractly and quantitatively, and construct viable arguments and critique the reasoning of others. During the duration of this course and after it tools, models, and techniques strategically will be applied that can be applied in both the process of reasoning and structure as students focus on precision.

# Calendar or Unit Map:

\*4-1 Using Graphs to Relate Two Quantities, \*4-2 Patterns and Linear Functions, \*4-3 Patterns and Nonlinear Functions, \*4-4 Graphing a Function Rule, \*4-5 Writing a Function Rule, \*4-6 Formalizing Relations and Functions, \*4-7 Arithmetic Sequences

\*5-1 Rate of Change and Slope, \*5-2 Direct Variation, \*5-3 Slope-Intercept Form, \*5-4 Point-

Slope Form, \*5-5 Standard Form, \*5-6 Parallel and Perpendicular Lines, \*5-7 Scatter Plots and Trend Lines, \*5-8 Graphing Absolute Value Functions

\*6-1 Solving Systems by Graphing, \*6-2 Solving Systems Using Substitution,

#### Course Materials:

- Notebook
- Paper
- Pencil
- Math homework workbook

#### Grading Policy:

Exams/Test (30%): Two exams will be given during each semester/term. It will consist of vocabulary words, multiple choice, fill in the blank, and computation. There will be a review the day before the exam/test and it will be open notebook. If you are absent during the day of an exam you need to speak with me to schedule a makeup. If you were present during the day of an exam/test and decided to cut class you will not be able to make it up and will receive a grade of a zero (0).

Quizzes (20%): Quizzes will be given three to four times during each semester/term. They will not be open notebook.

Class Participation (10%): Students are encouraged to actively participate in Other Expectations:

Students are expected to come to class prepared and on time. This consist of being ready to do your work and fully participate. Students should also be polite, respectful, responsible, and ready to learn every day.

It is also encouraged that students use Khan Academy to reinforce what was learned in class, but also as a way to practice the course material. The use of videos and practice exercises can be utilized as an influential way to grasp the material and further their understanding of various topics that are discussed within this course. Students will be exposed to visual, audio, and tactile methods that are essential to learning.