P.S. 035 Manhattan High School

Course Code: MES41QQ Syllabus for: ALGEBRA I Teacher Name: Thomas

Year and Term: 2017 - 2018 Term 1

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:

*1-1 Variables and Expressions, *1-2 Orders of Operations, *1-3 Real Numbers and the Number Line, *1-4 Properties of Real Numbers, *1-5 Adding and Subtracting Real Numbers, *1-6 Multiplying and Dividing Real Numbers, *1-7 The Distributive Property, *1-8 An Introduction to Equations, *1-9 Patterns, Equations, and Graphs

*2-1 Solving One-Step Equations, *2-2 Solving Two-Step Equations, *2-3 Solving Multi-Step Equations, *2-4 Solving Equations with Variables on Both Sides, *2-5 Literal Equations and Formula, *2-6 Ratios, Rates, and Conversions, *2-7 Solving Proportions, *2-8 Proportions and Similar Figures, *2-9 Percents, *2-10 Changed Expressed as a Decimal

Course Materials:

- Notebook
- Paper
- Pencil
- Math homework workbook
- Graphing Calculator

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. Students should be ready to do their work and fully participate. Students should be polite, respectful, responsible, ready to learn every day, and be prepared.

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.