P.S. 035 Manhattan High School Course Syllabus

Course Code: MES42QQB Course Name: Algebra I (2/4) Teacher Name: Thomas Year and Term: 2019 Spring

Learning Standards:

N-RN: The Real Number System

N-QA: Quantities

SSE: Seeing Structure in Expressions

CED: Creating Expressions

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 consist of. As a result of 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 used in both the process of reasoning and structure as students focus of precision.

Calendar or Unit Map:

- *3-7 Absolue Value Equations and Inequalities, *3-8 Unions and Intersections
- *4-1 Using Graphs to Relate Two Functions, *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 Arthimetic 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,
- *5-8 Graphing Absolute Value Functions
- *6-1 Solving Systems by Graphing, *6-2 Solving Systems Using Substitution, *6-3 Solving Systems Using Elimination, *6-5 Solving Systems Using Elimination, *6-6 Systems of Linear Inequalities

Course Materials:

Notebook
Paper
Pencil
Math homework
Math workbook

Grading Policy:

Exam/Final (30%): four exams will be given during the summer term. Each exam will consist of vocabulary words, fill in the blank, and computation. There will be a review before the exam/final is given and it will not be open notebook. If you are absent during the day of the exam/final, you need to speak with me to schedule a make-up. If you were present during the day of the exam/final and decided to cut class, you will not be able to make it up and receive a grade of a zero (0).

Quizzes (20%): a mid-chapter quiz will be given in the middle of each chapter covered. The quiz will be similar to the exam, but less extensive. It wil not be open notebook. There will be a review before the midterm exam is given and it will not be open notebook. If you are absent during the day of the midterm exam you need to speak with me to schedule a make-up. If you were present during the day of the midyerm exam and decided to cut class you will not be able to make it up and receive a grade of a zero (0).

Class Participation (10%): Students are encouraged to actively participate in class. This involves not only asking questions, but answering questions, and volunteering to do class work on the board or go over it out loud.

Homework (10%): There will be homework given on a daily basis. It is pertinent that you do homework when it is given so it does not accumulate. You are expected to do it every night and hand it in the next day. Not doing homework can affect your garde and you passing this class.

Behavior (10%): Student behavior should consist of being focused on learning and not talking to classmates, sleeping, or using your phone. Evey time your behavior is inappropriate or disruptive, you will loose poitns, which can affect your grade in this class.

Classwork (20%): Classwork is a combination of copying the notes from the power point presentation slides as well as doing the actual handout/problems on board. If you fail to do either of these two, in which you only do the classwork handout/problems on the board and not copy the notes or vice versa, you will not get the full points for classwork. Instead you will receive only partial credit.

Other Expectations:

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

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 students' 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.