P.S. 035 Manhattan High School

Course Code:	MRS21QQB
Syllabus for:	ALGEBRA II 1/2
Teacher Name:	Pena
Year and Term:	MRS21QQBALGEBRA II 1/2

Learning Standards:

A-SSE Seeing Structure in Expressions NRN The Real Number System
A-CED Creating Equations
F-IF Interpreting Functions
F-BF Building Functions
A-REI Reasoning with Equations and Inequalities
A-APR Arithmetic with Polynomials & Rational Expressions NCN The Complex Number System
F-LE Linear, Quadratic, & Exponential Models

Course Description:

Hello and welcome go the Algebra II Class. The Algebra II curriculum is an extension of Algebra I and allows us to explore topics more in-depth, in addition to trigonometry. We have 14 units of study and only 1 academic year to get it done so we really have our work cut out for us. We will cover topics such as systems of equations, how to factor and multiply higher order expressions/equations, probability and statistics, and of course trigonometry.

Our studies will take us through the fundamentals of Algebra II and along the way we will consistently hone our reasoning skills, model with mathematics, and solve real-world problems involving all of the aforementioned topics. Every day is something new in store, so be prepared to work hard.

Calendar or Unit Map:

*1-1: Patterns and Expressions, *1-2: Properties of Real Numbers, *1-3: Algebraic Expressions, *1-4: Solving Equations, *1-5: Solving Inequalities, *1-6: Absolute Value Equations and Inequalities
*2-1: Relations and Functions, *2-2: Direct Variation, *2-3: Linear Functions and Slope-Intercept Form, *2-4: More About Linear Equations, *2-5: Using Linear Models, *2-6: Families of Functions, *2-7 Absolute Value Functions and Graphs, *2-8 Two-Variable Inequalities
*3-1: Solving Systems Using Tables and Graphs, *3-2: Solving Systems Algebraically, *3-3: Systems of Inequalities, *3-4: Linear Programming, *3-5: Systems With Three Variables, *3-6: Solving Systems Using Matrices
*4-1: Quadratic Functions and Transformations, *4-2: Standard Form of a Quadratic Function, *4-3: Modeling With Quadratic Equations, *4-4: Factoring Quadratic Expressions, *4-5: Quadratic Equations, *4-6: Completing the Square, *4-7: The

Course Materials:

A notebook/binder
A pencil
A folder to keep homework and class worksheets

Grading Policy:

Tests (30%) & Quizzes (20%): Tests and quizzes are a way for me to check in and see if you really do understand the material

Homework (20%): Homework is an important part of class because it is designed to reinforce what we are working on in class. You will be assigned homework throughout the week, which will be due the following school day. In order to receive credit, you must show all of your work, including work that was done on the calculator. If you are absent, homework will be due when you come back.

Participation (15%): It is important that you actively engaged in your own learning, which means that you come to class on time, and prepared to work. That being said, in order to participate you must come to school, and come to class. If you are regularly absent, that will have a negative effect on your grade. Every day you are in class, I will give you a grade between 5 (you were perfect in class) and 0. At the end of each week, your classwork grade is averaged

Other Expectations:

If you are absent, you are responsible to getting the information that you missed. Upon return, get the handouts you missed from the organizer, and copy notes from a peer instead of doing the Do Now.