

P.S. 035 Manhattan High School
Course Code: MRF22QQB
Syllabus for: ALGEBRA II 2/2
Teacher Name: Pena
Year and Term: 2018 - 2019 Summer

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
F-LE Linear, Quadratic, & Exponential Models
G-GPE Expressing Geometric Properties with Equations
F-TF Trigonometric Functions

Course Description:

Hello and welcome to 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 six weeks to cover the most exciting aspects of that curriculum: transformations, systems of equations, rational equations, logarithms, 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:

*6-1: Roots and Radical Expressions, *6-2: Multiplying and Dividing Radical Expressions, *6-3: Binomial Radical Expressions, *6-4: Rational Exponents, *6-5: Solving Square Root and Other Radical Equations, *6-6: Function Operations, *6-7: Inverse Relations and Functions, *6-8: Graphing Radical Functions
*7-1: Exploring Exponential Models, *7-2: Properties of Exponential Functions, *7-3: Logarithmic Functions as Inverses, *7-4: Properties of Logarithms, *7-5: Exponential and Logarithmic Equations, *7-6: Natural Logarithms
*8-3: Rational Functions and Their Graphs, *8-4: Rational Expressions, *8-5: Adding and Subtracting Rational Expressions, *8-6: Solving Rational Equations
*13-1: Exploring Periodic Data, *13-2: Angles and the Unit Circle, *13-3: Radian Measure, *13-4: The Sine Function, *13-5: The Cosine Function, *13-6: The Tangent Function, *13-7: Translating Sine and Cosine Functions, *13-8: Reciprocal Trigonometric Functions
*14-1: Trigonometric Identities, *14-2: Solving Trigonometric Equations Using Inverses, *14-3: Right Triangles and Trigonometric Ratios, *14-5: The Law of Cosines, *14-6: Angles

Course Materials:

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

Grading Policy:

- Quizzes – 20%
- Homework - 30%
- Classwork/Participation – 30%
- Final – 20%

Tests & Quizzes: Tests and quizzes are an opportunity for me to check in on your understanding. If you miss a Quiz, you have 1 week to make it up.

Homework: 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. You can hand in homework up to one day late. If you are absent, I will accept the homework when you come back to class.

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.