SYLLABUS

Teacher	Astghik Tantoushian
E-mail	atantoushian@ferrahian.com
Class Website	www.atantoushian.weebly.com
Phone	(818) 784 – 6228
Conference Hours	By Appointment

Course Name	Algebra 2
Course Number	511
Grade Level	10
Textbooks	Algebra 2 McGraw – Hill
Resources	Math with Pizzazz Worksheets Algebra 2 Text Resources
Required Materials	- textbook - composition notebook / writing paper - pencils / pens - correction pen (optional) - ruler - graph paper (if needed) - calculator

Course Description:

Students completing the Algebra 2 course would demonstrate mastery and understanding of the following:

(1) relating arithmetic of rational expressions to arithmetic of rational numbers;
(2) expanding understandings of functions and graphing to include trigonometric functions;
(3) synthesizing and generalize functions and extend understanding of exponential functions to logarithmic functions; and
(4) relating data display and summary statistics to probability and explore a variety of data collection methods.

ESLRs Addressed				
1a 1b 1c	2a 2b 2c	3a 3b 3c	4a 4b 4c	5a 5b 5c
Re-enter in the following boxes the designated ESLRs numbers, which are addressed by this course				
1a 1b 1c	2b	3a 3b 3c	4a 4b 4c	5b 5c

Content Standards

(1) A central theme of this Algebra II course is that the arithmetic of rational expressions is governed by the same rules as the arithmetic of rational numbers. Students explore the structural similarities between the system of polynomials and the system of integers. They draw on analogies between polynomial arithmetic and base-ten computation, focusing on properties of operations, particularly the distributive property. Connections are made between multiplication of polynomials with multiplication of multi-digit integers, and division of polynomials with long division of integers. Students identify zeros of polynomials, including complex zeros of quadratic polynomials, and make connections between zeros of polynomials and solutions of polynomial equations. The Fundamental Theorem of Algebra is examined.

(2) Building on their previous work with functions and on their work with trigonometric ratios and circles in the Geometry course, students now use the coordinate plane to extend trigonometry to model periodic phenomena.

(3) Students synthesize and generalize what they have learned about a variety of function families. They extend their work with exponential functions to include solving exponential equations with logarithms. They explore the effects of transformations on graphs of diverse functions, including functions arising in an application, in order to abstract the general principle that transformations on a graph always have the same effect regardless of the type of the underlying function. They identify appropriate types of functions to model a situation, they adjust parameters to improve the model, and they compare models by analyzing appropriateness of fit and making judgments about the domain over which a model is a good fit. The description of modeling as *"the process of choosing and using mathematics and statistics to analyze empirical situations, to understand them better, and to make decisions"* is at the heart of this Algebra II course. The narrative discussion and diagram of the modeling cycle should be considered when knowledge of functions, statistics, and geometry is applied in a modeling context.

(4) Students see how the visual displays and summary statistics they learned in earlier grades relate to different types of data and to probability distributions. They identify different ways of collecting data—including sample surveys, experiments, and simulations—and consider how randomness and careful design affect the conclusions that can be drawn.

The Standards for Mathematical Practice complement the content standards so that students increasingly engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle, and high school years.

Classroom Rules

Test / Quiz / Make Up Work

- Only excused absences will be allowed to make up tests, quizzes, or submit homework
- If the student needs to make up a test/quiz, a make up will be given in the office on the same day the student returns to school
- Upon returning to school after an absence, a student has the responsibility to meet with the teacher to develop a plan for making up missed work and/or examinations.

Important: If you are caught cheating or copying assignments, you and your partner will earn a score of zero and a possible detention.

Classroom Rules

1. Be on time for class and come prepared. Have all your materials ready.
2. No talking while teacher is talking. Raise your hand and wait to be called upon before speaking and do not interrupt others.
3. No eating in class. Only water is permitted.
4. Respect yourself, others and the environment. No writing or scratching on the desks, bulletin boards, walls, etc.
5. Positive remarks or comments only.
6. Carrying or using cell phones is not allowed during school hours.
   Cell phones must be turned off and stored in lockers or cars and may be used only after school

Note: School rules are to be followed at ALL times.

If the rules are not followed the following steps will be taken:

1st offence- Written or verbal warning from the teacher

2nd offence- Phone call to parent/guardian

3rd offence- Referral to administrator

*** **NOTE:** SOME OFFENCES WILL RESULT IN IMMEDIATE REFERRAL TO ADMINISTRATION***

Assessment Method

Test/Quiz Policy

Students take at least TWO tests and two quizzes per class or course per semi-quarter. Two to four quizzes may be counted as one test. It is up to the individual teacher to adopt a policy to drop the lowest test grade of a student in calculating the quarter grade. No more than two tests are scheduled on the same day. The test scheduled last will be automatically dropped.

Test/Quiz Make-Up

Students with **excused** absences shall have the opportunity to complete missed class work and make up all tests receiving full credit. The student is responsible to arrange for the make-up.

Students who miss a test/quiz because of an **unexcused** absence will receive a failing grade on that test/quiz, except when the teacher decides to offer the chance for make-up.

If a student misses a test/quiz while on suspension, he/she will not have the opportunity to make up the test/quiz and will receive an "F".

Cheating

Acts of cheating or plagiarism will result in suspension and the student will receive an "F" (20/100) on the test or the assigned work.

This section includes grade percent distribution and additional rules set by the teacher

Tests = 50%
Quizzes = 25%
Homework = 10%
Participation = 15 %

NOTE: For assigned projects, grades will count as part of Participation.