

Holy Family Academy
Ad Veritatem Per Fidem Et Rationem
Grade 10

Instructor: Mr. Forrester

Course Title: Algebra II

Course Description:

In this course you will sharpen and expand your ability to work and reason with numbers and quantities. After becoming fluent in the language that is Algebra, you will be equipped to dive into studies of trigonometry, conic sections, logarithms, and other more advanced mathematical notions.

Course Objectives:

1. To master algebraic concepts and know of their origin
2. Be able to articulate an account of key operations and functions; not just the 'what' but also the 'how' and 'why.'

Scope and Sequence:

Chapter 1: Equations and Inequalities

Chapter 2: Linear Equations and Functions

Chapter 3: Systems of Linear Equations and Inequalities

Chapter 5: Quadratic Functions

Chapter 6: Polynomials and Polynomial Functions

Chapter 7: Powers, Roots, and Radicals

Chapter 8: Exponential and Logarithmic Functions

Chapter 9: Rational Equations and Functions

Chapter 10: Quadratic Relations and Conic Sections

Chapter 11: Sequences and Series

Chapter 12: Probability and Statistics

Chapter 13: Trigonometric Ratios and Functions

Chapter 14: Trigonometric Graphs, Identities, and Equations

Course Texts:

Larson, Boswell, Kanold, and Stiff, *McDougal Littell, Algebra 2*, (McDougal Littell: Boston), 2004.

Course Supplies:

- Calculator (scientific at least)
- Lined paper
- Graph Paper
- Pencil
- Pen
- Ruler

Grading:

Participation: 10%

Homework: 35%

Tests: 35%

Exam: 20%

Class Participation:

Class participation will be graded according to four tasks that can and should be done each class. 1) Be on time to class, 2) Bring all appropriate materials for class, 3) Have your homework (even if you didn't finish, have it out and that will count), 4) Be attentive in class, and make it a personal goal to say at least one thing each class (even if it's just a question about what page we're on, or asking someone to repeat themselves).

Homework:

Homework will primarily be graded according to effort, not necessarily accuracy. Even if you get every problem wrong you may still get a passing grade for a particular assignment.

Late/Make-up Work:

If you are absent when an assignment is handed in, then you have as many school days as you were absent to turn in the work for full credit. Work will be considered late after those days have expired. Late work will receive a grade no greater than 80% unless I'm in a bad mood, then good luck getting any credit at all.

SWAG

No homework or test grade is necessarily final until the semester ends. Students have the standing option to make corrections on homework OR tests to improve their grade.

Extra Assistance:

I am committed to the success of every student in this class, so I am available to collaborate with each student in the development of individual plans to overcome particular obstacles. Please see me outside of class, or email me at mforrester@holyfamilyacademy.org.

The instructor reserves the right to change or modify this course and the syllabus subject to appropriate and timely notice to the students enrolled in this class