

**Required Materials:** **Optional (or Donated) Materials:**

* 3 ring binder - graph paper
* loose leaf or notebook paper - glue sticks
* TI-83 (or higher) graphing calculator - markers / colored pencils
* Writing utensils - colored paper

 - general classroom supplies

(tissues, hand sanitizer, dry erase markers, pencils, tennis balls)

**Required Resources:**

* **Textbook, given**

**Course Description:** This course will call on you to practice applying mathematical ways of thinking to real world issues and challenges. The standards covered will prepare students to think and reason mathematically, as they set a rigorous definition of college and career readiness by helping students develop a depth of understanding and ability to apply mathematics to novel situations. We will emphasize development of mathematical modeling, the use of mathematics and statistics to analyze empirical situations, and the applications of functions and algebraic properties. Students should expect to become fluent in number and algebra sense, analytical problem solving, and abstract thinking.

**Policies & Procedures:**

* Students are expected to come to class prepared with all required materials and a GOOD ATTITUDE
* Disrespect for peers or teacher will not be tolerated. Disrespectful actions such as (but not limited to) cell phone use, refusal to put up/turn in cell phone, cursing, talking over teacher or peers, purposeful distraction, threats, fighting, etc., will be met with phone calls home, detention with teacher, or disciplinary referrals as deemed necessary by the teacher.
* Students can earn “Bonus Bucks” in class by being prepared, actively participating in class discussion, helping others, performing well on quizzes or tests, and by generally being a good citizen. Bonus bucks can be used to purchase candy, homework passes, asking a question on a test, etc.
* Students should be in their seats with materials ready prior to the start of class, or else they will be counted as tardy. All classes (with the exception of test days) will start out with a 5-minute warm up activity, which students are expected to start by the beginning of class.
* Students needing to leave the room will be able to do so one at a time, and only if they have been actively participating in class. Those who have chosen not to actively participate will not be allowed to leave, with the exception of illness and emergencies.

**Grades and Grading Policies:**

* Grade weights are as follows:
	+ Engagement – 50%
		- i.e. Homework, Warm Ups, Class Participation, etc.
	+ Tests – 35%
	+ Quizzes – 15%
* Success in a content area is determined by mastery – 80% correct on quizzes or tests per standard covered. All students are encouraged to retake quiz or test sections on which they did not master after they have completed at least 1 hour of tutoring at school, completed corrections on the quiz/test, and can “teach” a friend the content they wish to retake. Retaken sections will add at most 10 points to the original grade. Rewards will be given for students who master the most content.
* Homework will generally be given nightly. Typically, homework will be graded for completion, but on occasion I will take it up for accuracy. I will notify students when homework is to be taken up for accuracy.
* **Late Work** – ABSOLUTELY NO LATE WORK WILL BE ACCEPTED DUE TO AN UNEXCUSED ABSENCE. In the event of an excused absence, students are given 3 days to complete the missed assignment (with the exception of warm ups). If students are aware that they will miss class in the coming days, they should access the class website and download their assignments and have them ready to turn in upon their return.

**Course Outline (by Unit):**

Unit 1 – Algebraic Essentials

Unit 2 – Functions as the Foundation of Algebra 2

Unit 3 – Linear Functions, Equations, and their Algebra

Unit 4 – Exponential and Logarithmic Functions

Unit 5 – Sequences & Series

Unit 6 – Quadratic Functions and their Algebra

Unit 7 – Transformations of Functions

Unit 8 – Radicals and the Quadratic Formula

Unit 9 – Complex Numbers

Unit 10 – Polynomial and Rational Functions

Unit 11 – The Circular Functions

Unit 12 – Probability

Unit 13 – Statistics

\*\*The course outline is subject to change based on instructor’s judgement of class needs\*\*

**Tutoring**: Tutoring is available on Wednesday mornings from 8:30am – 9:25am in my room. Students needing additional tutoring hours are more than welcome to schedule additional times with me.

**Final Exams**: Students will take 2 cumulative exams during the course of the year – a midterm at the end of first semester, and a final comprehensive exam at the end of second semester. Both exams are teacher-made, but will pull heavily from released versions of the Algebra 2 state exam, and will be just as rigorous. Students should expect to study heavily for both tests.

**Please sign and return this page to Ms. Cox:**

I have read and discussed with my child \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the contents of this syllabus, and we declare to uphold the policies and procedures outlined in this document to the best of our abilities.

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 Parent/Guardian Signature Student Signature

Parent/Guardian Name (printed): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I prefer to be contacted by (please circle one): phone email