



Course Description: Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout this course and together with the content standards says that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Course Overview

Quarter	Unit	Topics Covered
1	Linear Functions	Solving Equations, Literal Equations, Inequalities, Equations of Lines, Slope-Intercept Form, Standard Form, Graphing Lines, Functions, Absolute Value Functions, Piecewise Functions, Systems of Equations, Arithmetic Sequences
1	Quadratic Functions	Solving Equations, Complex and Real Solutions, Application Equations, Rate of Change, Graphing, Factoring, Vertex Form, Focus & Directrix, Transformations, System of Equations
DIA 1	15 Questions	Covers Linear and Quadratics
1 & 2	Polynomial Functions	Add, Subtract, Multiply, and Divide Polynomials, Factoring, Graphing, Systems of Equations, Binomial Theorem
DIA 2	15 Questions	Covers Polynomials Only
2	Radical Functions	Operations With Radicals, Composition, Properties of Exponents, Solving Radical Equations, Inverses, Graphing Radical Functions & Piecewise Functions, Transformations, Application Equations
SMT	Estimated 40 questions	Covers All Above Units
2 & 3	Exponential and Logarithmic Functions	Logarithmic and Exponentials Properties/Graphs, Transformations, Applications, Geometries Sequences
3	Rational Functions	Closure , Rewrite and Solve Rational Equations, Graphing, Systems of Equations, Application Problems
DIA 3	15 Questions	Covers Expo/Log/Rational
3	Statistics and Probability	Sample Spaces, Venn Diagrams, Frequency Tables, Conditional Probability, Calculations, Permutations/Combinations , Applications, Sample Mean, Standard Deviation, Normal Distribution, Analyzing Data/Graphs
4	Trigonometric Functions	Unit Circle, Trigonometric Identities, Graphing sine and cosine functions
EOC	Estimated 40 Questions	Covers All Topics From Algebra 2 Curriculum

Materials Required: Bring binder with dividers, loose leaf paper, pencils, dry erase markers, highlighter/colored pens DAILY. Other supplies may be needed throughout the year for projects. Scientific calculators are recommended but graphing calculators are acceptable- cell phone calculators are prohibited.

What is Inquiry-Based Learning and how does it affect my student?

Class is directed with the mindset of inquiry-based learning which refers to any pedagogy that replaces traditional lectures and textbooks with some form of student-centered activities. Teachers typically supply students with carefully crafted course notes consisting of a sequence of definitions, problems or theorems. Teachers then serve as mentors, by listening to the students, reading their work, and giving them minimal information they need to understand the defined concepts, solve the problems, or prove the theorems. **An old adage states: "Tell me and I will forget, show me and I will remember, involve me and I will understand."**

Technology: Phones will be used for educational purposes at specified times. All other times, phones should be put away so to not distract from your education. Failure to abide by rules will result in tiered consequences.

Assessments: I gather information for two distinct reasons: to make instructional decisions (diagnostic and formative assessment) and to communicate a summary of my students' achievement (summative assessment).

Formative: Bell ringers and quizzes are the most common; they allow me to assess the students' learning and provide feed-forward to the students. I am also able to evaluate the effectiveness of instruction and plan for future instruction. Formatives allow students to assess their mastery of the content and plan for their next steps.

******* Daily practice problems will be assigned as homework but will not be graded. Students will use these problems to self-assess and determine if tutoring is needed. These problems may later appear on bell ringers, quizzes and/or tests *******

Summative: Tests are the most common, but projects may be assigned. These are essential to report card grading. Students are given ONE class period to for the test; with the exception of students with 504 and IEP extended time requirements.

Submission and Make-Up Policies: Assignments will consist of text-book problems, extra practice from notes, worksheets, mini projects, math nation videos, and writing activities. Assignments are expected to be completed by the specified due date, normally being the following day, **but always before that unit's summative.**

If you are absent: First, ask a student for any missed notes and refer to the assignment board to see if you need any additional materials.

Summative Make-Up: Complete it as soon as possible, in ONE sitting, must be before the next summative.

Retakes/Interventions: Students with grades lower than a "C" **MUST CORRECT** their assignments (graded formatives) and still must be turned in prior to test day.

Summative assessments: 1 retake per nine weeks and must meet requirements of:

- Students must complete and turn in all formative work prior to the summative. Each formative grade must also be a passing grade of 6/10 or higher in order to be eligible for a retake.
- Students are required to submit a plan of relearning and to provide evidence of that relearning before being permitted to retake a summative assessment.
- Each problem will be completed with error analysis/ notations of key concepts.
- Upon approval for reassessment, after the above requirements are met with satisfaction by the teacher, students will be able to retake the summative by the specified deadline

Grading Policy: You turn it in promptly, it will be graded promptly. Double check your score with the grade book score, kindly inform me if I made a mistake.

Volusia County Grading Scale:

Grade	Range	Quality Points	Description
A	90 - 100	4.0	Outstanding Progress/Mastery
B	80 - 89	3.0	Above Average Progress/Mastery
C	70 - 79	2.0	Proficiency
D	60 - 69	1.0	Passing
F	0 - 59	0	Failing

Honor Code: Be Honest! If caught cheating/copying on a formative, you earn a zero. If you are caught cheating on a summative, (this includes any phone usage while testing) you earn a zero with NO RETAKE option and a referral.

Deltona High School Discipline Policy: The following policy is for minor offenses.

1. Teacher Warning
2. Parent contact via e-mail or phone
3. Teacher Consequence
4. Discipline Referral

Tutoring:

I will have tutoring 1-2 times per week every week, it is the student's responsibility to look at the white board to see when I am available and plan their time/work accordingly. Students must sign in/out and state what was worked on during the tutoring time. Students attending a session must bring proof they have attempted the material in which they are struggling.

***** USE *Remind* to communicate with me and classmates and/or form study groups.

Per Deltona High School, all teachers will have office hours the last 15 minutes of lunch, Monday- Thursday.

Restroom: EVERY single minute of class time counts. We will be working bell to bell and I do not want you to miss out on any information or activities, your classmates need you. If there is a medical issue I need to be informed about please email me as soon as possible. 10-10 Rule will be enforced.

Classroom Expectations:

- Be prompt, polite and prepared for the day's activities. Have your binder, notes, pencil, and calculator ready and be working on the bell ringer when the bell rings.
- Respect your teacher and fellow students. Listen when someone else has the floor, we all learn from each other!

I **BELIEVE** that **ALL** students have the ability to succeed with hard work and determination. Please come to class with a positive, ready to learn attitude. Always think "Is this the Deltona Way?"

Deltona High School 2018-2019 school goals:

1. Create a positive school culture
2. Effective communication between all stakeholders
3. Data driven emphasis on class instruction
4. Rigorous instruction

**Syllabus is subject to change to adapt to the ever-changing classroom*

WELCOME TO Algebra 2! I'm so excited to have you in my class this year; it's going to be a great year!!

Mrs. Musick

Please complete, sign, and return the following section to Mrs. Musick

I have read and understand the rules and requirements of Algebra II Honors.

Name _____ Nickname _____

Grade _____ Alpha Code _____ Counselor _____

***Parent or Guardian Name _____

***Daytime Phone Number _____

Email of Parent or Legal Guardian:

One word to describe me is: _____ because _____

My feelings about math are: _____

My academic goals this year are: _____

My personal goals this year are: _____

When I graduate, I want to: _____

I have received a copy of Mrs. Musick's syllabus and classroom policies. I have shared it with my parents/guardians and will abide by those rules.

Student signature _____ Date _____

***Parent signature _____ Date _____