



**Course Description:** The purpose of this course is to develop the geometric relationships and deductive strategies that can be used to solve a variety of real world and mathematical problems. The content will include Euclidean geometry of lines, planes, angles, triangles, construction and logic, and properties of circles, polygons, right triangle trigonometry, and reinforcement of algebraic concepts. Calculators and computers will serve as instructional tools in concept development. 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*

<b>Quarter</b>	<b>Unit</b>	<b>Topics Covered</b>
1	Unit 1: Definitions, Segment and Angle Pair Relations	Writing precise definitions, using parallel lines with transversals and angle pair relationships to solve algebraic problems, constructions of parallel and perpendicular lines
1	Unit 2(A): Triangle Congruence and Proofs	Rigid motion Transformations such as: reflection, rotation, translation, and Non-rigid motion- dilation of a variety of geometric shapes. Classify and prove triangle congruence (SSS, SAS, ASA, AAS, HL)
<b>DIA 1</b>	<b>15 Questions</b>	<b>Covers Unit 1 and 2A</b>
2	Unit 2(B): Triangle Properties	Triangle inequality theorem, Hinge theorem, triangle midsegment proof, median concurrency proof
2	Unit 3: Similarity	Dilations, classify and prove triangle similarity (AA, SAS, SSS), use triangle similarity to solve problems
<b>DIA 2</b>	<b>15 Questions</b>	<b>Covers Unit 2B and 3</b>
2	Unit 4: Right Triangles and Trigonometry	Geometric mean, Pythagorean theorem applications, trigonometric ratios: sine, cosine, tangent and their applications, special right triangles and their applications, <b>law of sine and cosine and their applications</b>
<b>SMT</b>	<b>Estimated 40 questions</b>	<b>Covers All Above Units (Midterm Summative)</b>
3	Unit 5: Quadrilaterals and Coordinate Geometry	Classify and prove theorems about parallelograms, use coordinate plane to solve problems algebraically
<b>DIA 3</b>	<b>15 Questions</b>	<b>Covers Unit 5</b>
3	Unit 7: Two- Dimensional Measurements	Define and calculate density, area of circles, sectors, and regular polygons. Represent and interpret real world problems using geometric figures.
<b>DIA 4</b>	<b>15 Questions</b>	<b>Covers Unit 7</b>
3	Unit 8: Three-Dimensional Measurements	Identify the parts of three dimensional figures and calculate the volume. Identify and rotate two dimensional figures. Describe, interpret, and solve real world problems. <b>Cavalieri's Principle</b>
<b>DIA 5</b>	<b>15 Questions</b>	<b>Covers Unit 8</b>

4	Unit 9: Circles With and Without Coordinates	Define and prove circle similarity. Identify and apply parts of the circle, use theorems and postulates to solve problems. Convert degrees to radians. Write the equation of a circle. Construct shapes inscribed in a circle. <b>Define, identify, and find tangent lines, parabolas, ellipses, and hyperbolas.</b>
<b>FSA</b>	Estimated 60 Questions	<b>Covers All Above Units</b>
4	Unit 10: Algebra 2 Preparation	Graphing linear/ quadratics, key features of graphs, factoring, quadratic formula

**Estimated FSA Window May 1<sup>st</sup>- May 11<sup>th</sup>**

**2 Day Exam: Day 1 NO CALCULATOR, Day 2 Calculator**

**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 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 Geometry! 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**

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**I have read and understand the rules and requirements of Geometry 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 \_\_\_\_\_