



GSE Geometry

Morrow High School

2299 Old Rex Morrow Road, Morrow, GA 30260
(770) 473-3241 main office, (770) 473-3244 fax

Teachers: Mr. Do

Email: dang.do@clayton.k12.ga.us

Room Number: MM03

Textbook: GSE Geometry

Website: www.clayton.k12.ga.us – Look under MHS

Phone Number: (404) 550-8181

Tutorial Hours: 4:30-5:30 PM *Tuesdays and Thursdays*

Tutorial Location: Room MM03

Department Philosophy: Believing that every student is capable of learning mathematics, opportunities are provided for all students to strive toward their maximum potential and to increase their confidence in themselves and in their own abilities. Teachers and parents work together in helping students to appreciate mathematics, to grow more proficient mathematically, and to realize that mathematical skills are stepping stones to success. Mathematics instruction must continue to grow to meet the changing demands of our society. Literacy in Mathematics requires understandings and habits of mind that enables citizens to make sense of our world, to think critically and independently, to recognize and weigh alternative explanations, and to deal reasonably with problems that involve numbers, patterns, and logical arguments. **Geometry** is the second course in a sequence of three required high school courses designed to ensure career and college readiness. The course represents a discrete study of geometry with correlated statistics applications.

The standards in the three-course high school sequence specify the mathematics that all students should study in order to be college and career ready. Additional mathematics content is provided in fourth credit courses and advanced courses including pre-calculus, calculus, advanced statistics, discrete mathematics, and mathematics of finance courses. High school course content standards are listed by conceptual categories including Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Conceptual categories portray a coherent view of high school mathematics content; a student's work with functions, for example, crosses a number of traditional course boundaries, potentially up through and including calculus. Standards for Mathematical Practice provide the foundation for instruction and assessment.

Course Description:

Unit 1: Building on standards from middle school, students will perform transformations in the coordinate plane, describe a sequence of transformations that will map one figure onto another, and describe transformations that will map a figure onto itself. Students will compare transformations that preserve distance and angle to those that do not.

Unit 2: Building on standards from Unit 1 and from middle school, students will use transformations and proportional reasoning to develop a formal understanding of similarity and congruence. Students will identify criteria for similarity and congruence of triangles, develop facility with geometric proofs (variety of formats), and use the concepts of similarity and congruence to prove theorems involving lines, angles, triangles, and other polygons.

Unit 3: Students will apply similarity in right triangles to understand right triangle trigonometry. Students will use the Pythagorean Theorem and the relationship between the sine and cosine of complementary angles to solve problems involving right triangles.

Unit 4: Students will understand and apply theorems about circles, find arc lengths of circles, and find areas of sectors of circles. Students will develop and explain formulas related to circles and the volume of solid figures and use the formulas to solve problems. Building on standards from middle school, students will extend the study of identifying cross-sections of three-dimensional shapes to identifying three-dimensional objects generated by rotations of two-dimensional objects.

Unit 5: Students will use the concepts of distance, midpoint, and slope to verify algebraically geometric relationships of figures in the coordinate plane (triangles, quadrilaterals, and circles). Students will solve problems involving parallel and perpendicular lines, perimeters and areas of polygons, and the partitioning of a segment in a given ratio. Students will derive the equation of a circle and model real-world objects using geometric shapes and concepts.

Unit 6: Students will understand independence and conditional probability and use them to interpret data. Building on standards from middle school, students will formalize the rules of probability and use the rules to compute probabilities of compound events in a uniform probability model.

Course Prerequisites: **Algebra I**

Course Outline:

Fall Semester		Spring Semester	
Unit 1	Transformations in the Coordinate Plane	Unit 4	Circles and Volume
Unit 2	Similarity, Congruence, and Proofs	Unit 5	Geometric and Algebraic Connections
Unit 3	Right Triangle Trigonometry	Unit 6	Applications of Probability

* The teacher reserves the right to alter or change any part of this course syllabus to better suit the need of the students.

Required Materials/Supplies:

Notebook Paper, 3-Ring-Binder, 5 Tab Dividers, Pencils, Highlighters, Index Cards, and **TI-36X Pro Calculator**

Course Evaluation Categories / Grading System:

- 25% Classwork
- 20% EOCT / Final (This course has a state mandated Georgia Milestone End of Course Test)
- 20% Tests
- 15% Homework
- 10% Projects
- 10% Quizzes

A: 100% - 90% B: 89% - 80% C: 79% - 71% D: 70% F: 69% and below

Behavior Expectations:

1. **Be Punctual** - for being early is on time, being on time is late and being late is unacceptable
2. **Be Polite** - for everyone you meet is fighting a hard battle.
3. **Be Prepared** - for it prevents poor performance.
4. **Be Productive** - for successful people make wise decisions.

School Rules: Make sure you are following dress code and no eating or electronic devices in the classroom.

Tardy Policy

1st Offense: Warning 2nd Offense: Student Conference 3rd Offense: Parent Contact
4th Offense: Teacher Detention 5th Offense: Parent Conference 6th Offense: Office Referral

Detention Policy

Detention will be held from **4:05 – 5:00 PM** in Room **MM03** on the assigned date(s). You should arrive promptly and have work to complete. You will not be allowed to use an electronic device during detention. Failure to report to detention will result in a referral to an administrator. If you have a conflict with the dates assigned, please see the instructor **prior** to your assigned date(s).

Late Assignments

Each student is expected to complete all assignments in the allotted time. **Thirty points** will be taken off if assignment are turned in late.

Make-Up Work

IT IS THE STUDENT’S AND PARENTS RESPONSIBILITY TO OBTAIN AND COMPLETE MAKE-UP WORK WITHIN 3 DAYS OF THE STUDENT’S RETURN TO SCHOOL. Make-up work must be done after or before school, **NOT** during valuable class time. Students should arrange alternate times with the teacher for making up work for the mutual convenience of student and teacher.

Remind101: Text the code to: 81010

1st period: @g1stdo 5th period: @g5thdo
2nd period: @g2nddo 6th period: @a26thdo
4th period: @a24thdo 7th period: @g7thdo

Acknowledgment of Receipt: By signing below, the student and parent/guardian acknowledge that they have read and understood the contents in the 2017-2018 GSE Geometry course syllabus.

PLEASE FILL OUT & RETURN TO MR. DO.

Student Name (Print) _____ Class Period _____

Student Signature _____ Date _____

Parent Name (Print) _____

Parent Signature _____ Date _____

Parent Email _____ @ _____

Parent Contact # _____ Alternate # _____

Does the student have access to an electronic device and internet to complete online assignments at home?

YES _____ **NO** _____

Additional Comments:

Thank you for partnering with us to make this a productive and successful school year.