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Syllabus Disclaimer
A syllabus is not a contract between teacher and student, but rather a guide to course procedures on attendance, participation, requirements, grading, goals and objectives. The mathematics department reserves the right to amend the syllabus when necessary to best fulfill the course objectives. Students will be duly notified.

Course Description
Geometry connects algebra and geometry, resulting in powerful methods of analysis and problem solving. This is the second course in a sequence of three high school courses designed to ensure career and college readiness. The course embodies a discrete study of geometry analyzed by means of algebraic operations with correlated probability/statistics applications and a bridge to the third course through algebraic topics.

The course requires that students:

- Use and understand definitions of angles, circles, perpendicular lines, parallel lines, and line segments based on the undefined terms of point, line, distance along a line and length of an arc;
- Describe and compare function transformations on a set of points as inputs to produce another set of points as outputs, including translations and horizontal or vertical stretching;
- Represent and compare rigid and size transformations of figures in a coordinate plane using various tools such as transparencies, geometry software, interactive whiteboards, waxed paper, tracing paper, mirrors and digital visual presenters;
- Compare transformations that preserve size and shape versus those that do not;
- Describe rotations and reflections of parallelograms, trapezoids or regular polygons that map each figure onto itself;
- Develop and understand the meanings of rotation, reflection and translation based on angles, circles, perpendicular lines, parallel lines and line segments;
- Transform a figure given a rotation, reflection or translation using graph paper, tracing paper, geometric software or other tools;
- Create sequences of transformations that map a figure onto itself or to another figure;
- Verify experimentally with dilations in the coordinate plane;
- Use the idea of dilation transformations to develop the definition of similarity;
- Determine whether two figures are similar;
- Use the properties of similarity transformations to develop the criteria for proving similar triangles;
- Use AA, SAS, SSS similarity theorems to prove triangles are similar;
- Use triangle similarity to prove other theorems about triangles;
- Using similarity theorems to prove that two triangles are congruent;
- Prove geometric figures, other than triangles, are similar and/or congruent;
- Use descriptions of rigid motion and transformed geometric figures to predict the effects rigid motion has on figures in the coordinate plane;
- Know that rigid transformations preserve size and shape or distance and angle; use this fact to connect the idea of congruency and develop the definition of congruent;
- Use the definition of congruence, based on rigid motion, to show two triangles are congruent if and only if their corresponding sides and corresponding angles are congruent ;

- Use the definition of congruence, based on rigid motion, to develop and explain the triangle congruence criteria; ASA, SSS, and SAS;
- Prove theorems pertaining to lines, angles, triangles and parallelograms;
- Make formal geometric constructions with a variety of tools and methods;
- Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle;
- Prove the slope relationship that exists between parallel lines and between perpendicular lines and then use those relationships to write the equations of lines;
- Extend the Pythagorean Theorem to the coordinate plane;
- Develop and use the formulas for the distance between two points and for finding the point that partitions a line segment in a given ratio;
- Revisit definitions of polygons while using slope and distance on the coordinate plane ;
- Use coordinate algebra to determine perimeter and area of defined figures;
- Use algebra to model geometric ideas;
- Spend time developing equations from geometric definition of circles;
- Address equations in standard and general forms;
- Graph by hand and by using graphing technology;
- Develop the idea of algebraic proof in conjunction with writing formal geometric proofs;
- Take their previously acquired knowledge of probability for simple and compound events and expand that to include conditional probabilities (events that depend upon and interact with other events) and independence;
- Be exposed to elementary set theory and notation (sets, subsets, intersection, and unions); and
- Use their knowledge of conditional probability and independence to make determinations on whether or not certain variables are independent.

Course Prerequisite
Successful completion of GSE Algebra I, Advanced

GSE Standards
The course standards can be found at https://www.georgiastandards.org/Common-Core/Pages/Math-9-12.aspx.

GSE Geometry Units
Unit 1: Transformations in the Coordinate Plane
Unit 2: Similarity, Congruence, and Proofs
Unit 3: Right Triangle Trigonometry
Unit 4: Circles and Volume
Unit 5: Quadratic Functions
Unit 6: Geometric and Algebraic Connections
Unit 7: Application of Probability

Evaluation of Student Work

		Grading Scale	
Benchmark	10%	A	90 - 100
Daily	30%	B	80 - 89
Quizzes	15%	C	70 – 79
Tasks/Projects	20%	F	Below 70
Tests	25%		
	100%		

GSE Geometry has a state-mandated End-of-Course-Test (EOCT). This test will count 20% of the yearly average. EOCTs will be given May, 2017.

Textbook/Materials Used In the Classroom
*GSE Geometry Frameworks (*Georgia Department of Education); *Holt McDougal Georgia Analytical Geometry*, 2014 (www.myhrw.com), cost: $84.70 (If the textbook is stolen, lost or damaged, the student is responsible for the replacement cost of the book.); chrome books, scientific and/or graphing calculator; colored pencils; graph paper; notebook paper; pencils

Availability for Extra Help
The mathematics department will provide a tutoring schedule during the first week of school. If you are having difficulty understanding material, please do not wait until just before a test to get assistance.

Supplies/Notebook
A one and a half or two-inch three-ring binder (notebook) with five dividers is needed for this class. The dividers should be labeled as follows: (1) Syllabus and Standards, (2) Activating Strategies/Bell Ringers, (3) Notes/Graphic Organizers/ Daily Assignments (Practice exercises/Tasks and Projects), (4) Graded assignments and (5) Quizzes/Tests. Pencils, loose-leaf paper, graph paper, glue sticks, colored pencils/markers, and scissors will also be used in class.

Notebook Reminders
1. The Cornell Notes format is strongly encouraged.
2. Keep all notes and practice problems neatly in the order given.
3. **Use *pencils only*. Work written in ink will not be accepted.**
4. Daily assignments should be done on a separate sheet from notes. **Label the assignment with your name, topic, date, and period in the upper right hand corner of the paper**.
5. You may clean out your notebook each nine weeks, but successful students will save notes to study for exams and the Georgia Milestones End-of-Course Assessment.

Daily Classroom Procedures
When you first enter the classroom:
1. Make sure you have your notebook, workbook, pencil, calculator and completed assignments. You will not be excused to get them.
2. Turn in your homework.
3. Sit in your *assigned seat*.
4. Place everything but your instructional materials on the floor.
5. Begin *Do Now* activity while attendance is being taken.

When you leave the classroom:
1. Make sure you have written down the homework.
2. Leave your desk area clean.
3. Place borrowed supplies in the appropriate location.

Writing Across the Curriculum
Writing is a powerful mode of learning. When students are able to write about the content being taught, they have a better understanding of the materials and can retain the information longer.

All students will be required to respond to **at least** 2 constructed response questions each nine weeks.

Constructed response questions are increasingly used on standardized tests ranging from the statewide assessments that usually begin in third grade all the way up to the college placement exams such as the SAT and ACT. To understand and answer the constructed response question, memorize the acronym "RACES." This stands for reword, answer, cite, explain, and summarize. If you are able to restate a question, provide an answer using evidence cited from the prompt given, and then explain how that evidence does, in fact, support the answer, you will probably score well on the constructed response section of any exam you take.

Performance Tasks
Tasks/projects will be done alone, in pairs, and in groups during each unit. These tasks/projects will be used as a tool to help you acquire the math content in the course. You will be asked to present your work during class.

Homework
Like the performance tasks, homework will be assigned daily as a tool to help you to acquire math content, develop confidence in problem solving, and develop your math skills. Students are expected to show all work. Homework will be graded. Other means of checking homework for accuracy and completion are also possible.

Working together on classwork and homework is encouraged, copying is prohibited. Be careful when you ask another student for help. Make sure you understand the solution. Putting an answer on your paper means that you understood that problem and could explain it to the entire class. Please review the school's policy on cheating.

Makeup Work and Attendance
Attendance is an extremely important part of class. Your success depends on your being in class every day. It is the student's responsibility to get the notes and assignment that are missed when absent. An excused absence does not excuse the work. If you are absent, you will follow the TCCHS policy regarding makeup assignments.

Recovery Policy for the Classroom
Assessments are used to gauge the level of mastery within a given time frame. For this reason, if a major unit summative assessment ("test") grade is higher than its corresponding unit formative assessment ("quiz"), the test grade can replace the quiz grade because it would demonstrate an increase in the level of mastery within the allowable time frame.

Test Preparation Across the Curriculum
Formative and summative evaluations will contain ACT/SAT formatted questions. Quizzes will be given on a regular basis. Quizzes **may or may not** be announced, so be prepared by asking questions if you do not understand something. You must show all work on quizzes to receive full credit.

Tests will be cumulative in nature, so be sure that you keep reviewing prior topics. Daily assignments, quizzes or tests questions will be any combination of constructed response, multiple choice, true/false or matching. You will be given credit only for answers that show work. You will not be given credit for problems with no work, regardless if the answer is correct. The Georgia

Department of Education formula sheet will be allowed on all quizzes and tests. You are required to keep all returned tests and quizzes in your notebook. Do not throw away any assignment.

Reading in the Content Areas
All students will be required to read an assigned novel in math during the school year.

Progress Reports
Keep all papers handed to you in the appropriate place in your notebook. Keep a record of your grades as you receive them. A written grade report will be provided by the teacher each nine weeks.

Infinite Campus
The teacher will update grades in Infinite Campus weekly. Unit tests will be entered into Infinite Campus to show when they will be given once the dates have been announced in class. Infinite Campus is a software program that links parents and teachers by allowing parents to access their student's grade and attendance. All parents are encouraged to register for this service. Additional information is available in the Guidance Office.

Classroom Rules
Rules are necessary whenever a group of people work together. Knowing what is expected of you should make class easier for everyone. You are expected to know all of this information after the first day of school. Please refer to the *Student Handbook* for additional rules and regulations.
Class Rules

1. Be in your assigned seat and begin working on the Bell Ringer/Warm Up *before* the tardy bell rings.
2. Bring your notebook, paper, calculator and pencils to class daily. You will not be excused to get them.
3. Students are expected to conduct themselves in an appropriate manner at all times as outlined in the TCCHS Student Handbook. Discipline for unacceptable behavior and tardies will be dealt with as described in the *Student Handbook*.
4. TCCHS does not permit students to leave class during the first 10 minutes or the last 10 minutes of each class period. Try to take care of all personal needs before coming to class. Be sure to visit the restroom and water fountain between classes.
5. Do *not* adjust or touch the air-conditioning thermostat.
6. Do *not* touch the teacher's desk, papers, or personal belongings.
7. Keep your work area clean and neat.
8. Respect the rights and property of others. Refrain from the following: verbal and physical abuse; vandalism; inappropriate touching; disrupting the learning of other students; taking the property of others; talking during announcements, *News 4 You*, while the teacher is talking, or when someone comes to the door.
9. *Do not cheat*. Anyone caught cheating in any way at any time will receive a zero on that activity or assignment. Remember, the inappropriate giving or receiving of information is cheating.
10. *No* gum chewing, eating, or drinking is allowed in class.
11. Cell phones and other electronic devices are permitted on the premises, but not allowed in the classroom unless sanctioned by a classroom teacher as part of an instructional exercise. Any student caught using an unauthorized electronic devise during school hours will have his/her devise confiscated.
12. The teacher, not the bell, dismisses you.

Consequences for failing to follow class rules will result in a phone call to your parents, a teacher detention, and ultimately a referral to an administrator.

REMIND instructions

This year we are integrating a way to let parents and students know when projects and important assignments are due. You will be able to receive a text message from our classes if you sign up for remind.

What is remind?
Remind is a website that provides a safe way for teachers to text message or email students and parents without exchanging personal phone numbers. The service is free, but standard messaging rates do apply. If you have an unlimited text plan from your phone carrier, then you do not pay anything. The only time you pay is when you have exceeded the maximum amount of "texting" minutes according to your personal phone plan.

How does remind work?
First, we will share a code with students or parents. At that point, any student or parent who sends a text message with the code will be "subscribed" to the class. Any time we send a message from remind, all the students or parents subscribed will receive it.

How do students/parents sign up?
Students and parents sign up for notifications by sending a text message with our class code (example: text @code to 555-555-5555).

If you would like to get texts from **Ms. Phillips' class**:

send a **text** message to: **81010**

in the message box write:
@9e9ch

Press to send **or**

Email 9e9ch@mail.remind.com.

You will receive a message back asking for a reply with your full name. After replying, you will then be subscribed.

To unsubscribe, reply with **unsubscribe@9e9ch** in the subject line. For additional information, visit remind.com.

Student name (printed, last name first) _____

Please read and sign the following, and have a parent or guardian read and sign it as well before returning it to Ms. Phillips.

I have received and read a copy of the syllabus during the first week of enrollment in this class. I understand the expectations and responsibilities. Should assistance be needed in obtaining any of these supplies, I will contact Ms. Phillips. Otherwise, it is assumed that each student will come to class daily with all of the supplies listed. Materials will not be loaned; all students must bring their notebook/paper, pencil, calculator and textbook to class daily.

Parent/Guardian Acknowledgement Section

_____ _____ _____

Print Name Signature Date

Cell: ( ) - Work: ( ) - Home: ( ) -

_____

Email Address (es)

Student Acknowledgement Section

_____ _____ _____

Print Name Signature Date

Cell: ( ) -

_____

Email Address *(optional)*