**Geometry**

**Ms. Bridgett Hill**

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**Phone Number: (706)-592-2089      Planning Period: 1th  Period**

**Course Description and Objectives**

**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.

Unit 1 (3 - 4 weeks)    Transformations in a Coordinate Plane

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 transformation s that preserve distance and angle to those that do not.

Unit 2 (10 - 11 weeks)    Similarity, Congruence and Proofs

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 (3 - 4 weeks)    Right Triangle Trigonometry

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 (6 - 7 weeks)    Circles and Volume

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 (5 - 6 weeks)    Geometric and Algebraic Connections

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 to a given ratio. Students will derive the equation of a circle and model real world objects using geometric shapes and concepts.

Unit 6 (5 - 6 weeks)    Applications of Probability

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.

Unit 7 (5 – 6 weeks)    Review and 12th Grade Preview

**Assignments and Absences**

Students will receive a variety of assignments designed to enhance their learning. If a student is absent, the student is responsible for the missed assignment. Students who have an excused absence will be allowed five days to turn in the missed assignment. No work will be accepted after five days. **It is Students responsibility to contact me if they are having trouble or needs assistance.**

**Course Assessment Plan/Grading Scale:**This course will include many formative assessments and labs. The course will also include four countywide common assessments.



       Major Assignment 60%

 Minor Assignments 40%

**School Expectations**

Follow all school rules and policies (P.R.I.D.E – PBIS).

* P – Positive
* R – Respectful
* I – Innovative
* D – Determined
* E - Excellence

 **CLASS EXPECTATIONS**

**1.**      **Respect yourself, the teacher & others**

         Show respect for the teacher, yourself and others at all times.

         Respect others’ property.  Avoid touching or writing on anything that does not belong to you (including desks, textbooks, teacher’s belongings, walls, chalkboard, etc.). Don't expect that others will clean-up your messes. Please pick-up after yourself.

         Respect yourself and the rest of us by using appropriate language and wearing appropriate clothing.

         Be a kind person.

**2.**      **Put forth your best effort at all times**

         Always do your own best work.

         Put learning ahead of getting good grades.

         Put quality ahead of just getting it done.

**3.**      **Be prepared for class each day**

         Come prepared with all materials necessary:

         An organized class binder containing all necessary materials and handouts

         Loose-leaf paper, pens (blue or black), and pencils

         A red or purple pen for grading in class or underlining important elements in note taking

         Highlighters for emphasizing important text

**4.**      **Follow directions when given**

         When directions are given, do your best to follow them the first time.  If you are confused or have questions, ask.  I would rather have you stop class to clarify than be off task while everyone else is working.

**5.**      **Pay attention, participate and ask questions**

         Engage in what is going on in the classroom.  If you have a question, ask it!  Otherwise, I might not know until the test that you did not understand something.  There are no stupid questions, and chances are, if you are wondering about it, someone else in the class is to.  Be proactive about your learning and don’t be afraid to ask for help.  If you feel most comfortable waiting until after class, that is okay, too, but do keep communication open between us.

**6.**      **Preserve a positive learning environment**

         Student actions that interfere with teaching or learning in the classroom will NOT be tolerated.

         Use class time to learn history/government.  Please do not spend your time grooming, sleeping, talking, writing notes, playing cards, listening to you Ipod, text-messaging friends, or doing work for other classes.

         Minimize classroom interruptions by arriving to class on time and not leaving the classroom during the hour.

**7.**      **Take responsibility for your actions**

         If you are confronted about a rule infraction, own up to it.  Don’t deny it, lie about it, or blame someone else.

         Take responsibility for missed assignments.

         All handbook rules will be enforced.  Please read your handbook.  Students that choose to break these rules, choose to have points taken away from their learning readiness grade, and face the possibility of additional consequences.

**CLASS RULES**

**1.**      **Turn off cell phone ringer.**

**2.**      **No food or drink, except water**

         You may drink bottled of water in the classroom. If a spill occurs, please clean it up immediately and inform the teacher.

         No other food or beverage is permitted without a doctor’s note or prior a from teacher

**3.**      **Arrive to class on time & ready to learn**

         When the bell rings, you need to be sitting in your assigned seat.

         You should immediately begin on the bell ringer activity

         Be “physically” and “mentally” present in the classroom

**4.**      **Never line up at the door before dismissal**

         Please remain in your seat until I have dismissed you.  Never line up at the door before dismissal.  Remember, I dismiss you, not the bell.

**5.**      **Do not cheat, plagiarize, or copy work**

         Cheating is completely unacceptable.  If I see you cheating on any assignment… even for another class… I will give you a zero and report the incident to the other teacher as well as your assistant principal and parents.

         Plagiarism (copying work from another source without giving proper credit) is completely unacceptable.  If you plagiarize on any assignment you will earn a “0” on that assignment with no opportunity to re-do the work for credit.

**6.**      **Use polite and appropriate language**

         Offensive, derogatory, and profane terms are not tolerated.  In order to have a safe classroom environment where all students feel comfortable, no put downs, swear words, or slang words with demeaning connotations will be accepted. Remember, if you don’t have something nice to say, don’t say it at all!

**7.**      **Do your best work & turn it in on time**

         Remember that the work that you turn-in is a reflection of your effort on the assignment.  Think about the following expectations when you are preparing an assignment that I will review:

         Write your full name and Class period on all assignments.

         All work must be neatly done and legible in order to receive full credit.

**CLASS PROCEDURES**

**1.**      **Turn in homework to the proper bin**

**2.**      **Complete absent form for study buddy**

**3.**      **Sign the tardy book & put pass in box**

**4.**      **Pick up after yourself before you leave**

**5.**     **Get missed work from absent bin, talk to your study buddy, then ask the teacher**

**Classroom Consequences**

1. Verbal warning
2. Call home
3. Detention
4. Write-up
5. Parent Conference

  \* All consequences will be aligned with the HHS school wide discipline plan.

**Course Materials Suggested Students may take notes online and use Desmos**

* 1 Large Three-ring binder (1” or 2”)
* Pencils
* 1 Package of Dividers (Label: Notes, HW, QUIZZES/TEST)
* Erasers
* Loose Leaf Paper
* Headphones
* Compass. Protractor, straight edge
* Scientific Calculator

**Conferences**

The primary goal is to meet the developmental needs of each student; therefore, student progress during each grading period will be closely monitored.  A **Parent conference should be scheduled for all students earning 1’s and 0’s prior to the end of each nine weeks grading period.**

**In order to schedule a conference with your teachers, please contact the Guidance Office 706-592-2089**

**Parents are welcome to join Remind**

**Online Geometry**

Text @HillGeome to the number 81010

**KEEP THIS SYLLABUS IN THE FRONT OF YOUR MATH NOTEBOOK**

Signiture Page

By signing below, we acknowledge that we have read and understand the: **Course Syllabus 2021 – 2022 Geometry**

**Mask ARE TO BE WOREN PROPERLY AT ALL TIMES!**

Class Period \_\_\_\_\_\_\_\_\_\_\_\_

Print Student Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Print Parent Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_