Pre-AP Geometry Course Syllabus 2018-19

Instructor: B. Robinson-Johnson (RM1134)   **Email**: brobins7@houstonisd.org
Tutorials: Each Monday 4- 5 pm (Tues.,Thurs by appointment)   **Conference**: M.T F (2:15-3:05) , Th (2:29-4:00)

Welcome to Geometry! Geometry is a branch of mathematics concerned with questions about points, lines, planes, and space. It investigates two and three-dimensional figures and the properties and definitions surrounding them.

CURRICULUM RESOURCES
The lessons and activities you will complete this semester will come from the primary sources listed below:
- Houston Independent School District Curriculum
- Laying the Foundations Curriculum
- Pearson Geometry (Digital Resources)

ASSESSMENTS AND RETAKE POLICY
This year, all Geometry students at Waltrip High School will take common assessments. Be prepared to do your best in our discovery of Geometry. Within HISD policy, students are allowed to retake any test failed during the school year. In the Geometry, our retake policy is as follows:
1. Students will have one week to retake an assessment.
2. Students must attend one Tutorial session from ANY math teacher before retaking the assessment.
3. Maximum score on a retake:
   a. If a student PASSED the original assessment: the original score plus half of the points lost on the original.
   b. If a student FAILED the original assessment: 80%

TECHNOLOGY
TI 84-Plus will be used in the classroom. Calculators will be assigned to each student, or students may choose to purchase their own. A laptop will be provided after students turn in the appropriate paperwork and pay a $25 fee.

CLASS MATERIALS (REQUIRED)
2	composition notebooks	loose leaf paper
1	pocket folder with brads	pencil/pen
	glue sticks	color pencils/markers
	laptop	

Your notebook may be kept in the classroom. Keep in mind that your teacher is not liable for anything that may happen to your notebook while it is in his or her room. You will have the option of taking the notebook home, studying, and bringing it back as needed. Also, there will be random notebook checks in-class that will count as a grade. Be prepared and organized always!

GRADING SCALE
Tests/Projects	30%
Daily/HW	50%
Participation/Do Now	20%

HOMEWORK
Expect to have homework weekly.

FINAL EXAM
The final exam counts as 25 percent of your semester grade

COURSE GOALS

Upon completing this course, you will be able to:

- determine coordinates of points located on segments.
- use the formulas for distance, slope, and midpoint and derive them.
- verify whether lines are parallel, perpendicular, or neither using formulas
- determine the equation of a line that passes through a particular point and is parallel or perpendicular to a given line
- transform figures in a plane by dilating, translating, reflecting, and rotating them.
- describe a transformation in words and in coordinate notation
- identify a sequence of transformations that will move one object onto another.
- distinguish and identify objects that have reflectional and rotational symmetry.
- identify whether a term is undefined, a definition, a postulate, a theorem, or a conjecture.
- determine whether a conditional statement is true or false; and if it is true, give a reasonable counterexample.
- identify, compare, and contrast a conditional statement with its converse, inverse, and contrapositive.
- contrast Euclidean and spherical geometries through examining the concepts of parallel lines and the sum of the angles in a triangle.
- prove various theorems about angles and apply these theorems to solve problems.
- prove triangles are congruent using triangle congruence theorems.
- apply the definition of triangle congruence to identify congruent sides and angles.
- verify theorems about triangles, such as the Pythagorean Theorem, and apply these theorems to solve problems

Pre AP students will be required to do application based assignments regularly which will include but will not be limited to 1-2 projects related to the topics of that grading period. Pre AP classes will also be expected to have a strong command of setting up and solving proofs as a flow chart as well in the two column format. Creating constructions using the Geogebra application will also be strongly emphasized.