



Phone: 713-688-1361

Website: www.houstonisd.org/waltrip

Geometry Course Syllabus 2022-23

Instructor: Matthew Steiner

Email: Matthew.Steiner@houstonisd.org

Room: 3210

Office Hours: Monday (10:10am-10:55am) & Tue/Thu (10:50am-12:25pm) & Wed/Fri (1:05pm-2:35 pm)

Waltrip Mission

Waltrip High School fosters a safe and challenging learning environment, preparing students for post-secondary education and a competitive global workforce through rigorous core academic instruction, comprehensive social-emotional supports, an array of quality fine arts programs, and comprehensive career and technology education.

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
- Pearson Geometry (Digital Resources)
- Imagine Math

GRADING SCALE

- | | |
|--------------------------|---|
| - Classwork/Homework | 30% |
| - Tests/Projects/Quizzes | 40% |
| - Daily Participation | 30%including warm-up, exit ticket, notes, etc.... |

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 Geometry, our retake policy is as follows: Students will have one week to retake a failed assessment with a maximum score of 75%.

MAKE-UP FOR LATE WORK:

It is the student's responsibility to check with the teacher about missing or make-up work. Students have up to **3 days** to turn in missing work from absences. Reminders will be given, when possible, but **ultimately it is the student's responsibility**. Late work will not receive full points and the **maximum score is 80**

CLASS MATERIALS (REQUIRED)

2 composition notebooks
Loose leaf paper
1 pocket folder
Pencil/pen
Glue sticks
Color pencils/markers
Laptop

HOMEWORK

Expect to have homework weekly.

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