Advanced Geometry Course Syllabus 2021-2022

Instructor: W. Xie   **Email**: wei.xie@houstonisd.org   **Room**: 2209

Office Hours: Monday (9:30AM-10:30AM)**&**Friday (9:30AM-10:30AM) **Ms. Xie's Office Hour Link**

Course Overview

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.

About the Teacher

Hi, welcome to my class. I am Ms. Xie (sounds like "she") and was born in central area of China. After graduating from Texas A&M University in 2017 with my Master's degree in Curriculum and Instruction, I became a math teacher in Houston ISD. I like teaching and believe that knowledge can change people' life and education can create the future. I have great passion to help my students become successful and my expectation for students is to become skilled life-long learners in the future.

Curriculum Resources

The lessons and activities you will complete this semester will come from the primary sources listed below:

- Houston Independent School District Curriculum located in the HUB
- Pearson Geometry (Digital Resources) located in the HUB
- Imagine Math

Course Topics

- Unit 1: Geometric Foundations with Algebraic Connections

- Unit 2: Conditional Statements
- Unit 3: Parallel and Perpendicular Line
- Unit 4: Equations of Parallel and Perpendicular Lines
- Unit 5: Triangle Inequality
- Unit 6: Spherical and Euclidean Geometry
- Unit 7: Rigid Transformations
- Unit 8: Generalizations About Triangle
- Unit 9: Corresponding Parts of Congruent Triangles
- Unit 10: Triangle Proofs
- Unit 11: Relationships Within Triangle
- Unit 12: Non-Rigid Transformation
- Unit 13: Similarity
- Unit 14: Right Triangles and Trigonometry
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- Unit 15: Circle Measurement
- Unit 16: Circles in the Coordinate Plane
- Unit 17: Circle Theorems
- Unit 18: Polygonal Angle Sum Theorem
- Unit 19: Properties of Quadrilaterals
- Unit 20: Area of Circles and Polygons
- Unit 21: Trigonometry and Area
- Unit 22: Surface Area
- Unit 23: Volume
- Unit 24: Experimental and Theoretical Probability
- Unit 25: Permutations and Combinations
- Unit 26: Compound Probability
- Unit 27: Conditional Probability

Grading Scale

- Classwork/Homework   50%   ……at least 1 per week
- Tests/Projects/Quizzes   30%   ……at least 1 per week
- Daily Participation   20%   ……including warm-up, exit ticket, notes, and attendance per week
- ***Any work not turned in will result in a zero.***
- Extra credit
    - Correcting exam questions will earn 0.5 point per question.
    - Extra credit opportunities will be designed with Ms. Xie's approval.
    - Late or missing work will not be eligible.
- Make sure turn in assignments on time to get Ms. Xie's feedback
- ***To pass this class, students must pass both semesters and the final exams with a 75+***

Exam Retake Policy
- Students will be allowed to retake exams for ***no more than 1 times within 1 week*** from the original exam except for semester exam.

- Maximum score on re-test is 90.

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 90__*. Make a schedule with Ms. Xie by text/TEAMS/email/HUB if student need help with make-up work.

Class materials
- Laptop, charged, all applications set up and ready to go
- [Download an online calculator Wabbit](#) or prepare a TI-83 or 84 Plus Calculator
- Be familiar with www.desmos.com
- Pencils or pens and scratch paper if students prefer to write

Classroom Norms

- Always use appropriate language (no profanity) during within instruction time.
- In-Person Class:
    - Prepare yourself before walking into the class.
    - Be active and engaged during class time.
    - Be dismissed by the teacher, not the bell.
    - Use of all electronic device will be supervised by teacher.

- Individual / Group Learning:
    - Honor your learning time
    - Cooperate with others
    - Follow pathway instructions post by the teacher
    - Think before you ask questions
    - Check your answers and learn from mistakes

Expectations

- Turned in complete work on time
- Come with the materials and mindset to learn
- Seek to understand, then be understood
- Contribute to our class community
- Embrace challenge and struggle as part of learning
- Acknowledge and respect lines of difference

Consequences

- 1st offense- verbal remind
- 2nd offense- individual talking
- 3rd offense- parent call/conference

- 4th offense- office referral and confiscation of electronic devise and will be turned over to the Administrator.

I truly look forward to working with you as we learn new things and to achieve success in the classroom! Please do not hesitate to talk to me about any questions, concerns, or comments you may have regarding to this course.

Waltrip High School

Geometry Course Student and Parent Signature Form

I have read and agree to the expectations, policies, rules, and consequences set forth in this syllabus. My signature below indicates this agreement.

_____   _____

Student Signature   **Date**

_____

Student Name (printed)

_____   _____

Parent/Guardian Signature | **Date | Fecha**

Firma del padre/tutor

_____

Parent/Guardian Name (printed) | Nombre del padre/tutor

Relation to student: _____

Parent Contact Information (phone number or email)

_____