# **Geometry Course Syllabus**

Instructor: Alexandra Hatfield ("Aly")
Contact: ahatfield@goodwillvalleys.com
Office Hours: Fridays 10:00 AM - 12:00 PM

Communication Expectations: Please feel free to reach out via email for any questions or

concerns. I will respond within 24 hours during the school week.

### Course Overview

Welcome to Geometry! This course is specifically designed for adult learners (ages 21+) who are completing their high school credit requirement. This course is **8 weeks** in length.

Each class will begin with a warm-up or topic overview to introduce the day's concepts, followed by guided notes and example problems we complete together. Students will then have dedicated time to work independently or in small groups on problems for practice.

Our focus is on building understanding through clear explanations, gaining math confidence, hands-on problem-solving, and targeted practice to prepare for success and application in the real world.

### **Materials Needed**

To ensure your success in this course, please come prepared with the following materials:

- Notebook or binder with paper for notes and practice problems
- Pencils and erasers
- Ruler and protractor
- Calculator
- Access to a laptop

If you do not have these supplies, please let us know so we can assist you in acquiring them!

## **Units & Topics Covered**

All units and topics in this course are directly aligned with the Virginia Standards of Learning (SOL) for Geometry, ensuring a comprehensive and relevant curriculum.

- Unit 1: Reasoning, Logic & Venn Diagrams: Understanding logical reasoning and its application in geometry.
- Unit 2: Lines, Angles, and Parallelism: Properties of lines, angles, and parallel lines, including transversal relationships.
- Unit 3: Transformations & Symmetry: Exploring translations, reflections, rotations, dilations, and various types of symmetry.
- Unit 4: Triangles: Properties & Congruence: Classifying triangles, understanding properties of angles and sides, and proving congruence.
- Unit 5: Similarity & Trigonometry: Concepts of similar figures and an introduction to right-triangle trigonometry.
- Unit 6: Polygons & Circles: Properties of various polygons, circumference, area, and equations of circles.
- Unit 7: 3D Figures: Volume, Surface Area, and Dimensional Change: Calculating volume and surface area of three-dimensional figures and analyzing effects of changing dimensions.

## **Grading Policy**

Your final grade in this course will be calculated based on the following breakdown:

• Guided Notes: 30%

• In Class Problem Practice: 30%

Quizzes & Tests: 20%Final Exams: 20%

#### **Grade Scale:**

• A: 90-100%

• B: 80-90%

• C: 70-80%

• D: 60-70%

• F: 50-60%

### **Classroom Expectations**

To foster a positive and productive learning environment, all students are expected to:

- 1. **Be respectful:** To yourself, your peers, and the learning environment.
- 2. **Come prepared:** Bring all required materials and be ready to engage with the day's lesson.
- 3. Follow directions: For all activities, assignments, and assessments.
- 4. Stay engaged: Participate actively in lessons and dedicated practice time.
- 5. **Use technology appropriately:** Laptops and other devices should only be used for class-related work.
- 6. **Try your best:** Don't be afraid to ask for help and utilize the support systems available to you.

## **Late Work and Makeup Policy**

- Late Work: Late assignments will be accepted within one week of the original due date for partial credit (up to 90%).
- **Absences:** If you are absent, it is your responsibility to check with the instructor (via email or in person) for any missed notes, assignments, or materials.
- Make-up Assessments: Make-up assignments, tests, and quizzes must be scheduled with the instructor as soon as you return to class.

### **Support and Accommodations**

This class welcomes all learners, and my goal is to help everyone succeed.

- If you have documented accommodations or specific learning needs, please share them with me as soon as possible so we can work together to ensure your success.
- Additional tutoring or one-on-one help is available. Please do not hesitate to talk with me if you feel you need extra support.

### **Class Resources**

Several resources are available to support your learning throughout this course:

- Class Website: This is a central hub for all course information.
  - URL: <u>ahatmath.com</u>
- **Synergy:** You can view your grades, attendance, and assignments in real time, communicate with your teachers, and access course materials.
  - URL:
- **Desmos Calculator:** A free online graphing calculator that you can use for in-class work and on the quizzes/exams. Familiarity with Desmos will be a significant asset.
- **Weekly Class Calendar:** This calendar will outline everything we will be doing throughout the week. It has a link to each unit's interactive notebook.
- **Guided Notes:** This is our <u>interactive notebook</u> for each unit. This is our primary form of learning new concepts. We will complete these together as a class. I highly recommend you write down any problems or formulas I work out on the board directly into your notes.
- **Practice Problems:** We will work on these problems together, with partners or in small groups, or independently. We'll utilize several different online tools for practice, including:
  - o IXL
  - DeltaMath
  - Brilliant
  - MyOpenMath
  - o Ck12
  - Mathplanet