# **Geometry Syllabus**

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### **Course Description**

This study of Euclidean Geometry emphasizes the interrelationship of both plane and solid Geometry with concepts of Algebra and Arithmetic. Topics include the real numbers, including irrational numbers and their properties, deductive reasoning and the two-column proof, perpendicular lines, angles and their measure, parallel lines and planes, congruency, triangles, quadrilaterals and other polygons, triangle inequalities, similarity, circles, area, and volume. An emphasis on right triangular solutions permeates most topics.

Geometric concepts will be reinforced through the use of classroom technology including the Polyvision SMART board and Apple laptop computers.

# **Prerequisites**

Satisfactory completion of Algebra I.

## **Topics Covered**

- Chapter 1 Tools of Geometry
- Chapter 3 Parallel and Perpendicular Lines
- Chapter 5 Relationships within Triangles
- Chapter 6 Quadrilaterals
- Chapter 7 Similarity
- Chapter 8 Right Triangle and Trigonometry
- Chapter 10 Area
- Chapter 11 Surface Area and Volume
- Chapter 12 Circles

# Calculators

Calculators will be available for classroom use as needed. You will be assigned a calculator to use during class. If you damage any of the classroom calculators you are responsible for the cost of the replacement. If you get a calculator that is damaged tell me immediately so you are not held responsible for the damage.

I encourage you to do most of your calculations by hand and not rely heavily on your calculator. If you want a calculator for home use to help with homework I recommend a Texas Instrument TI-30XIIS (the calculator that we will be using in class). Other excellent and acceptable, not required, calculators are the Texas Instrument 84 Plus Silver Edition, Texas Instrument 83/84 Plus, or Texas Instrument 89 Titanium.

### **Notebook & Textbook**

Each student should keep a notebook and folder for this class. **A three-ring notebook is recommended.** The notebook will, in an organized fashion, contain all homework assignments, class notes, group activities, and any handouts. You should divide the notebook into various sections and be able to insert handouts. The notebook will be checked periodically. A score will be determined based on completeness, organization, and quality of work. Specific dates for notebook checks will be announced in class.

I also suggest that you get index cards to write down the Geometry vocabulary, theorems, postulates, and formulas. Our textbook is *Geometry* by Bass, Charles, Hall, Johnson, and Kennedy. The textbook should have a book cover on it at all times.

### Homework

In this course, homework will be given **daily** as problems in the book, looking up vocabulary for the upcoming section, worksheets, or reading assignments in the book. Students are encouraged to complete their homework to the best of their ability since there are random homework checks throughout each marking period for points. I will also randomly grade one homework assignment a week for correctness. If the majority of students are not doing their homework on a daily basis I reserve the right to a give pop quiz on the previous nights' homework or collect the homework and grade it for points. If you did not have your homework done on the day I checked it you get a zero for that homework assignment. If any student has three zeros on homework throughout one marking period the student will be assigned to Retraining, and your parents will be notified. If the homework is not completed you will receive partial credit for the work you have done. Each assignment is worth 2 points, 1/2 done is worth 1 point, less than half of completed 0 points. The point value for the graded assignments depends on the length of the assignment. All homework should be done in pencil and needs to be organized and legible.

#### Makeup Work

It is the student's responsibility to ask for any missing work due to being absent. All assignments will be posted in my classroom. Tests or quizzes will be made up during the student's study hall, in the morning, or after school (teacher's discretion). If you are absent the day of a test or quiz, you are responsible for taking it the next day you return or scheduling a time within the next day or two to make it up.

### Quizzes, Exams, & Projects

All exams, quizzes and projects are based on point values. There will be at least one project given throughout the year. There will also be quizzes and exams throughout the chapter. The **Final Exam** at the end of the year is comprised of all the chapters we covered throughout the year. The Final Exam will be worth 10% of your overall grade for the year.

## Honor Code

Cheating on tests and homework is taken seriously. You are usually free to collaborate on homework. This means you may work together and help each other. This is different from copying an assignment. Copied assignments or answers copied from the back of the book will be given a grade of zero.

Testing is meant to determine your level of achievement. The testing environment is important. You are to work on your test quietly and keep your eyes off of other students' work. You are not allowed to share calculators or any other material during testing. When you are done with your test, you may work quietly on other assignments, but you must respect the testing environment until all are done with the test. Disrespecting the testing environment is a form of cheating. Cheating will result in a grade of zero for that test. I will also contact a principal and your parents.

### **Grading Scale**

Your grade will be determined by dividing the number of points earned by the number of points possible for the grading period. Points are accumulated from tests, quizzes, homework, activities, and projects. The grading system used on report cards is as follows:

A	93-100
В	85-92
С	77-84
D	70-76
F	Below 69 (Failure)

#### There is no extra credit!

#### **RECOMMENDATIONS FOR SUCCESS**

- Always come to class prepared to work on the text material. Every time you miss a class, you miss some vital information that can hamper your understanding of the concepts. If you miss a class, it is a good idea to let your teacher know why you were absent.
- Working collaboratively in small groups can enhance your learning. Working with another student outside of class on a regular basis can help as well. Find a study partner, and get that person's name, phone number, and e-mail address so you can plan times to get together to study.
- If you begin to have difficulty with the material, seek help <u>immediately</u>. Waiting until you are totally lost and confused only makes it more difficult to catch up.
- Take notes in class and refer to them when completing your homework.
- Make sure you read the textbook and make a concerted effort to become familiar with the terminology. It's difficult to solve a problem if you don't know what the question is asking.
- Do homework on a regular basis. Mathematics requires strong problem-solving skills, which improve with practice.
- To be successful in any class, you need to be an active participant. Ask and answer questions during class, and actively participate in small-group activities.
- Take advantage of opportunities to improve your grade such as completing homework, participating in class activities, and being prepared for quizzes.
- Your attitude and commitment to learning the material can make an enormous difference in your success in the class. Keep a positive attitude!
- Learn to accept the challenges of the class and to appreciate the beauty of the discipline.

# YOU MUST ACCEPT RESPONSIBILITY FOR YOUR OWN LEARNING!

# **Geometry Acknowledgement of Course Policies**

I, \_\_\_\_\_\_, acknowledge having read the entire class syllabus for Geometry. I understand that throughout the school year I will be expected to adhere to policies and procedures set forth in the syllabus. In particular, I have read the sections of the syllabus dealing with required materials for the class, homework and notebook requirements, makeup work, and grading procedures.

After reading the class syllabus, I understand that if I have questions regarding the policies of the course I should direct them to my teacher immediately. There is no excuse for a failure to abide by the course policies throughout the school year.

Although students are encouraged to seek outside help and to work collaboratively on homework assignments and handouts, students are still expected to submit their own work. In addition, students are expected to work independently in any testing situation. Evidence of academic dishonesty may result in the student's failing the given exam or quiz. Please review the school district's expectations as outlined in the Student Handbook.

Please sign and date this document and return to your teacher at the next class meeting.

Signature

Date

