Kensington Woods
HIGH SCHOOL

General Course Information

Course Title	Geometry
Description	This course develops students reasoning and problem-solving skills through exploration of topics such as congruence and similarity, along with applying properties of lines, triangles, quadrilaterals, and circles. Formal logic and proofs are also included to strengthen students' deductive reasoning skills, including application to both mathematical and real world problem contexts.
Room Number	134
Faculty Name	Mrs. McDermott
Contact Information	517-545-0828 lmcdermott@kwoods.org

Introduction

Welcome to Geometry! In this course you will do the following:
- Demonstrate analytic and spatial reasoning,
- Apply knowledge of geometric figures to real world situations,
- Understand the relationship between shapes developed through similarity relationships,
- Strengthen connections from prior knowledge of algebraic reasoning to geometric transformations and coordinate geometry,
- Understand the axiomatic system that underlies mathematics through the presentation and development of postulates, definitions, and theorems.
- Develop deductive reasoning skills that you can apply to both mathematical and real world situations.

Course Expectations

Students will be expected to:
- Participate in classroom discussions and in-class activities,
- Complete regularly assigned reading/homework independently,
- Take notes during class,
- Complete all assignments and assessments,
- **Show all work or thought process when completing homework. Full credit will not be given for answers which do not include supporting rationale and/or required prior steps.**

Recommended supplies:
- Notebook, folder, and/or binder for organizing notes, handouts, and homework
- Graph paper
- Graphing Calculator

Keys to Success
- Study daily (review notes).
- Take notes in class.
- Stay organized.
- Do the homework.
- Ask for help. Don't wait for the day before the exam to seek help. After-school help is available on Tuesday afternoons from 3:30 – 4:30 p.m. Students must pre-arrange with Mrs. McDermott if they plan to stay after.
- Ask questions and participate in class.
- Form a study group. Often working with another person can help promote student learning.

## Essential Standards of Learning

Instruction will focus on the following core standards:
- **Congruence**
- **Similarity, Right Triangles, and Trigonometry**
- **Expressing Geometric Properties with Equations**
- **Geometric Measurement and Dimension**
- **Modeling with Geometry**
- **Mathematical Practices**

Prerequisite knowledge/skills for success in this course

Mastery Level	**Prerequisites:** Open to all students who have successfully completed their previous math class.
	Work habits: Students will be able to work effectively independently and in groups.
	Academic integrity: Students will act honestly and ethically in their work.
	Study skills: Students will adhere to assignment deadlines.
Familiarity Level	**Intellectual openness:** Students will use mathematical skills and technological tools to solve real world problems.
	Reading and Comprehension: Students will be expected to read assigned text and be prepared to discuss in class.

Course Materials
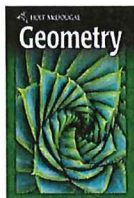
Textbook-*Geometry*, Holt McDougal, 2012
Students will be assigned a textbook at the beginning of the school year and will be required to complete a textbook agreement form signed by a parent/guardian. Students will be responsible for their assigned book throughout the school year and will be charged a replacement fee if the book is lost or damaged. The school is not responsible for books left behind in the classroom. Students are highly encouraged to use a book cover to protect their book from damage.

Calculator- TI-Nspire Handheld from Texas Instruments
Students will be assigned an Nspire to use during class. These handheld devices may not leave the classroom since they need to be shared among all classes.

Grading

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Your **semester** grade will be determined as follows:

Formative Assessments	**10%**
Summative Assessments	**70%**
Semester Exam	**20%**

Formative Assessments include classwork and homework.

Summative Assessments include quizzes, tests, and projects.

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KWHS Grading Scale

A = 95-100 (4.0)
A- = 90-94 (3.7)
B+ = 87-89 (3.3)
B = 83-86 (3.0)
B- = 80-82 (2.7)
C+ = 77-79 (2.3)
C = 73-76 (2.0)
C- = 70-72 (1.6)
F = below 70 (0.0)

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Mastery Learning Philosophy: Practice Leads to Success

At Kensington Woods, we believe in a Mastery Learning Philosophy that allows students to develop their skills and knowledge until they can demonstrate mastery of the content. For learning to happen best, teachers need to monitor where students are in the learning process. Therefore, we expect students to complete all homework to prepare for quizzes and tests. These assessments will give students feedback at regular intervals.

Formative Assessments/Homework

- Assignments should be done neatly. **Writing in pencil is highly recommended.** The process of solving a math problem is just as important as the final answer. Therefore, **you must show your work!**
- Assignments that are not completed during class time are expected to be finished as homework before the date it will be collected. On the due date, students must turn in an assignment that shows their best effort. If students feel they need additional time to master the material, they must make arrangements with Mrs. McDermott to get help outside of class time. It is the students' responsibility to make sure they find out what they missed during an absence.

Summative Assessments

- **Quizzes and Tests** - Students will generally have one or two quizzes per chapter and one test at the end of each chapter. These tests will include the current material covered in the chapter as

well as some **review problems**. If students are absent on test day, they will be expected to make up the test on the day they return to school.

- **Test Corrections** - Students will usually be given the opportunity to make test corrections for half credit on the day the test is returned. Generally, only one class day will be allotted for test corrections. Beyond that, students must meet with the teacher outside of class time for corrections.
- **Retakes** – Students who wish to retake a quiz or test must follow the following steps within two weeks after they receive the graded test:
    - Fill out and turn in the Request to Revise or Retest form,
    - Turn in all homework from the unit,
    - Arrange to retake the test (after school, during study skills, etc.).

Classroom Expectations

Students should come to class ready to learn. Students should respect the learning environment, including the people and property around them. Students will be given the opportunity to have food and drinks in the classroom if they prove they can do so in a responsible manner.

Beginning of Class

Be on time and in your seat with all required materials. This includes your book, calculator, folder or notebook, assignments, paper, pencil and checking pen. Students will be expected to complete the Warm Up or follow directions as given.

Class Assignments and Activities

Students will be expected to participate in classroom activities and to complete classroom assignments. Class assignments will usually be graded on effort and completeness. Assignments may be collected on a daily or weekly basis. Students will be given the responsibility to check their own assignments in class.

End of Class

Students are expected to return all materials to their designated places and then return to their seats. Students will be dismissed by the **teacher. All students must be seated before class will be dismissed.**

Course Grade

Students are encouraged to check MI-STAR to see their grades. Students may also make arrangements to see Mrs. McDermott outside of class to get grade information.

Schedule

The following is an outline of the topics that will be covered as well as the planned schedule for the course. Please keep in mind this schedule will be adjusted as needed to best meet the needs of the class.

Time Frame	Topics	Assessments
Sept - Oct	Chapter 1 – Foundations of Geometry Chapter 2 – Geometric Reasoning	Chapter 1 Quiz Chapter 1 Test Chapter 2 Quiz Chapter 2 Test
Oct - Nov	Chapter 3 - -Parallel and Perpendicular Lines Chapter 4 – Triangle Congruence	Chapter 3 Quiz Chapter 3 Test Chapter 4 Quiz Chapter 4 Test
Nov - Dec	Chapter 5 – Properties and Attributes of Triangles Chapter 6 – Polygons and Quadrilaterals	Chapter 5 Quiz Chapter 5 Test Chapter 6 Quiz Chapter 6 Test **Semester Exam Chapters 1-6**
Jan - Feb	Chapter 7 – Similarity Chapter 8 – Right Triangles and Trigonometry	Chapter 7 Quiz Chapter 7 Test Chapter 8 Quiz Chapter 8 Test
March	Chapter 9 – Transformational Geometry Chapter 10 – Perimeter, Circumference, and Area	Chapter 9 Quiz Chapter 9 Test Chapter 10 Quiz Chapter 10 Test
April	Chapter 11 – Spatial Reasoning	Chapter 11 Quiz Chapter 11 Test
May	Chapter 12 – CIrcles	Chapter 12 Quiz Chapter 12 Test **Semester Exam Chapters 7-12**