

Geometry Honors Expectations 2011 - 2012

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Course Objectives & Goals:

- **Course Objectives** - This one-year course provides a rigorous study of Euclidean Geometry for the more advanced student. Emphasis is on the development of logical reasoning, through the techniques of proofs and constructions, geometric concepts, and algebraic applications. Students will extend their abilities to make mathematical connections by problem solving. It is expected that a variety of technological tools, such as calculators and computer software, will be used to further develop and explore geometric relationships. This course will fulfill one of the mathematics credits required for graduation.
- **Course Goals** -
 - To understand and use the mathematical vocabulary and notation specific to geometry.
 - To develop the ability to reason and communicate mathematically in order to apply learned concepts to new problem-solving situations.
 - To analyze and solve problems using inductive and deductive methods of reasoning.
 - To explore connections among geometric and algebraic concepts, and the physical world.
 - To construct and analyze informal and formal proofs of mathematical conjectures.
 - To discover and validate geometric conjectures and properties by construction, coordinate geometry, and transformational geometry.
 - To formulate and solve problems using geometric concepts and algebraic techniques.
 - To understand and apply the relationships among similar and/or congruent polygons.
 - To solve problems using the properties of right triangles and their applications.



Required Class Materials

- TI-83 or TI-84 graphing calculator (suggested) **but any scientific calculator will do just fine.**
- Writing Tool (Pencil or Pen)
- 3 Ring Binder with paper (Possible Tabs - Notes, Homework, Tests/Quizzes, Vocabulary)
- Geometry Set (Compass, Ruler, Protractor)
- McDougal Littel Geometry Textbook (Provided by A-Tech)

Grade Scale

A (100 - 90) B (89.9 - 80) C (79.9 - 70) D (69.9 - 60) F (59.9 - 0)

Quarter Grade Breakdown

Tests & Quizzes 65%

Homework & Projects 35%

Tests - Tests will occur approximately every three weeks. They will evaluate all of the material from that time period as well as a few key concepts from previously taught material.

Quizzes - Quizzes will occur approximately once a week and cover the material that has been recently covered.

Homework & Projects - This category has a number of contributing activities - homework checks, problem solving, GSP computer assignments, the Problem of the Week (PoW) and projects. Homework checks will occur 2 to 3 times a week and the PoW will be weekly.

Semester Grade Breakdown

Quarter 1 40% Quarter 2 40% Semester Exam 20%

Student Behavior

(1) Absence from Class

You are responsible for what you have missed. Go to a friend to get the notes and the assignment from the class. If you know that you are going to be away contact me so that I can inform you what will happen.

(2) Absence from a Homework/Quiz/Test

If you are absent from class see me within 3 days after your return to school and then you have 3 days to complete the missing work. (Reg. #5113)

(3) Cheating

Cheating in any way will not be tolerated. A zero will be given, and a phone call home will be made.

(4) Homework Policy

Homework is due when asked for (not later in that day or period). Constant effort on your homework will make the greatest impact on your mathematical understanding and confidence.

(5) Late Assignment Policy

On homework assignments you will receive a maximum of 50% for being late. This rule does not apply if the answers have already been given out. If answers have been given out, there will be no points given to the students. On large projects or assignments you will receive 20% for being late.

Citizenship Grade

Unsatisfactory – A student that is a disruption to the classroom and its environment.

Satisfactory – A student that is respectful and studious.

Outstanding – This is given to students who take an active part of learning. These students are willing to participate in class, answer questions, be willing to demonstrate work, and support the classroom environment through active participation. This is an outstanding student. The grade is not the indicator for an outstanding student; it is effort and participation.

Extra Credit Policy

From time to time, students who demonstrate truly deep mathematical thought or hand in exceptional work due to an obvious amount of extra effort and work will be rewarded with additional points to further support such behavior. This is my 'bonus' reward.

What I do not participate in is providing 'extra' credit or 'bonus' work for students to raise a grade. If a student wants to raise a grade, he should gain a greater understanding of the concepts by coming in after school to get help from me..... or study and prepare for the next test or quiz... or do extra homework questions to increase speed and understanding of the material.... **IN OTHER WORDS, STUDENTS WHO WISH TO RAISE THEIR GRADES SHOULD TRY APPLYING A MORE STUDIOUS BEHAVIOR AND COMMITMENT TO MATHEMATICS INSTEAD OF LOOKING FOR SOME QUICK FIX!!!**