

Orange High School

To Educate, Elevate, and Empower Every Student!

Department of Mathematics

Geometry Course Syllabus

Instructor: Ms. Sonya Noebels (AKA Ms. Nikolaidis)

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Period: 1&2 (Honors Geometry); Periods 4,5,9 (General Geometry)

Room #: 235 (Period 1); 225 (Period 2); 173 (Periods 4-9)

Course Description

Geometry is a year-long 5 credit course provided for Orange High School students. In this course for the first several units, students practice generating conjectures and observations. This begins with work on compass and straightedge constructions. Next, students build on their middle school study of transformations of figures. Students use transformation-based definitions of congruence and similarity, allowing them to rigorously prove the triangle congruence and similarity theorems. In the course, students also derive volume formulas and study the effect of dilation on both area and volume. They use transformations and the Pythagorean Theorem to build equations of circles, parabolas, parallel lines, and perpendicular lines from definitions, and they link transformations to the concept of functions. Students analyze relationships between segments and angles in circles and develop the concept of radian measure for angles, which will be built upon in subsequent courses. They close the year by extending what they learned about probability in grade 7 to consider probabilities of combined events, including identifying when events are independent.

Course Outline

Unit 1- Constructions and Rigid Transformations

Unit 2- Congruence

Unit 3- Similarity

Unit 4- Right Triangle Trigonometry

Unit 5- Solid Geometry

Unit 6- Coordinate Geometry

Unit 7- Circles

Unit 8- Conditional Probability

Course Materials

Curriculum Resources: Illustrative Math [Illustrative Mathematics](#) | [Kendall Hunt](#)

Grading

Your Geometry grade is made up the following categories and their corresponding weights:

Authentic Assessments	25%
Tests	25%
Classwork / Participation	20%
Quizzes	20%
Homework	10%

Authentic Assessments: Minimum of 2 authentic assessment projects per marking period. These could be individual or in groups. Students will be graded on a rubric and receive feedback.

Tests: Minimum of 2 tests per marking period. To study for tests, students should complete test reviews and review their quiz and authentic grades.

Classwork: Minimum of 8 classwork grades per marking period. Whether it is individual work or group work, students are expected to actively work on these assignments. Class work may be collected at the end of the class to be graded for accuracy.

Quizzes/Checkups: Minimum of 3-4 quizzes per marking period. To study for the quizzes, students should complete all the homework assignments.

Homework: Minimum of 8 homework assignments per marking period. Homework will usually consist of practice problems from the packet and will be due the next day. I may spot-check the homework or I may collect and grade it – be prepared!

Before a quiz or test, I may assign additional homework (online) as a review.

Please complete your homework on time! I will accept late homework for **half credit at most**, unless you come to see me after school. I will **not** accept unit 1 homework after the unit 1 test.

- Don't be afraid to ask me for help on the homework! This will be the best way for you to do well on these assignments. I will be in room 173 after school until 3:00pm each day.

Required Supplies

Each student is responsible for coming to class everyday with the following:

- Illustrative Math work packets (I will give you **one** copy, if you lose it please make a new copy at the library). Packets are due at the end of the Unit.
- Math notebook **or** three-ring binder with filler paper, to be used only for Geometry assignments
- Classwork folder for storing graded classwork and homework assignments
- Pencils with erasers

Rules of Conduct & Guidelines

- **Be respectful** to yourself, your classmates, and your teacher(s)
- **Do not become a disruption or a distraction** in class. This will not be tolerated, and the student will receive detention and/or be removed from class if this occurs. Removal from class would result in loss of participation and classwork points for the day, and possible administrative action.

- **Be on time.** This means in your seat and quiet before the class starts.
- **Follow proper start up procedure.** I will write the Do Now on the board at the front of the room; please start immediately.
- **Do your class work with purpose and urgency.** Complete all classwork with the intention to LEARN something, not to just check it off a list.
- **ALL Orange High School Rules and Procedures MUST be followed in class and out of class.** Please visit our Orange High School Website to review the Student/Parent Handbook.

Absences

Students are responsible for all material taught. If pacing is too fast for a particular student, then they must seek extra help from me either before or after school. If a student is removed from class for disruptive behavior, they will lose points from their participation/class work grade, and they will still be responsible for all material they may have missed. If a student is absent, they are excused from classwork but must complete all homework, tests and quizzes. Students have as many days as they were absent to make up additional assignments (including quizzes and tests). For example, if a student is absent for 2 days and misses a class work assignment, homework assignment and a quiz, then it is THEIR responsibility to make up the quiz and homework assignment (but not the classwork) within 2 days after their return.

-----Please cut and return-----

To Students and Parents

With hard work and accountability, we can have all of our students succeed in Geometry.

I have read Ms. Noebels' Geometry 2023-2024 Syllabus and its guidelines. I understand that I am responsible for upholding all requirements and guidelines to succeed in this course. I know what I have to do in order to receive the grade I want.

Student Name

Student Signature

Date

Parent Name

Parent Signature

Date

Contact Name

Home Phone

Cell Phone