

# Orange High School

*To Educate, Elevate, and Empower Every Student!*

## Department of Mathematics

### Geometry Course Syllabus

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

Email: [nikolaso@orange.k12.nj.us](mailto:nikolaso@orange.k12.nj.us)

Period 1-2 Honors Geometry: Room 118 (8:20am – 9:43am)

Period 6-7 General Geometry: Room 173 (11:54am – 1:16pm)

### Course Description

Geometry is a year-long 10 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

Illustrative Math, available online at <https://im.kendallhunt.com/>

### Required Supplies

- Math Workbook (each student will receive **one** workbook)
- Math Journal (must be a **single-subject** notebook or binder with binder paper)
- Math Folder (for storing graded classwork and homework assignments)
- Pencils with erasers

## 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 assessments per marking period. These could be group projects or ECR (extended constructed response) questions to be completed individually. I will also collect and grade student **math journals** once per marking period for an authentic assessment grade.

**Tests:** Minimum of 2 tests per marking period. Tests will typically take 40-80 minutes. To study for tests, students should complete test reviews and review their exit slips, quizzes and authentic assessments.

**Classwork:** Minimum of 8 classwork grades per marking period, however in my class you can expect a classwork grade every day we are not taking a test. I will usually collect and grade some portion of the classwork (an exit slip) every day but students will also receive a participation grade for their other work.

**Quizzes:** Minimum of 3-4 quizzes per marking period. Quizzes will typically take 15-30 minutes and will be based on the homework and exit slips. I will also check student **workbooks** once per marking period for a quiz grade.

**Homework:** Minimum of 8 homework assignments per marking period, however in my class we will typically have two homework assignments per week: one in ALEKS and one based on the practice problems in the workbook. 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.

## 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.** You must arrive within the first two minutes of class to be considered on time. Once a week, I will check absences and tardies and call home. Repeat offenders will be assigned teacher detention, have a parent conference scheduled, and/or receive administrative action.
- **Follow proper start up procedure.** I will display the Warm Up on the smartboard on the front of the class; please open your workbook to the correct page and start immediately.
- **Do your classwork 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.

## **New School Policies:**

Please be informed of the following new school policies:

Mandatory Parent Contact:	Academy Intervention Plans:	Progressive Discipline:
I will contact parents/guardians once per week, usually on Fridays, to inform you if your child has been late or absent to class 3 times or more, or is missing 2 or more graded assignments (exit slips, quizzes, tests). Please provide me with an <b>updated</b> phone number or email, indicating how you wish to be contacted.	All students whose grades are below 70 after progress reports will be placed on an academic intervention plan. Please sign and return the plan to me within one week. Students who fail to adhere to the academic intervention plan and do not improve their grades may receive a failing grade for the marking period.	If there are issues with student attendance or behavior, I will: <ol style="list-style-type: none"><li>1) First call home to inform you of the issue;</li><li>2) Then assign teacher detention after school from 2:40-2:55pm;</li><li>3) Then call home to schedule a parent-teacher conference;</li><li>4) Then refer the matter to a school administrator</li></ol>

## **Absence Policy:**

If a student is absent from class, they are still responsible for learning what they have missed. To accomplish this, students must read the **lesson summary** in their workbooks and add any **bold** vocabulary words to their math journals for each day they missed. Students with questions about the lesson summary or vocabulary are encouraged to see me in room 173 after school.

Absent students do **not** need to make up missed classwork, but they **do** have to complete homework assignments and make up any quizzes, tests or authentic assessments they missed. Students have as many days as they were absent to make up their assignments – for example, if a student was absent one day and missed a test they must make up the test the next day; if a student was absent five days and missed a quiz and an authentic assessment they will have five days to make up these two assignments.

## **Cell Phone Policy:**

Upon entering the class, students will be **required to place their cell phone** in the organizer at the front of the class. Each student will receive their own, numbered spot on the organizer, which will not be accessible to other students during class time. During the last three minutes of class, students will have time to retrieve their personal belongings.

As they place their cell phone in the organizer, students also will take their own numbered calculator (or ruler, compass or other supply for the day) from the same numbered spot.

This policy was decided after intense discussion among all Orange High School math teachers, and we will all be adhering to the same policy. I kindly ask all parents/guardians to **refrain from contacting your children during class time**. Unless it is a true emergency, please call the OHS front office, or leave your child a text message to call back later. Thank you in advance for your support in this matter.

-----Please return this page!!!!-  
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## **To Students and Parents**

**To Parents/Guardians: I have read Ms. Noebels' Geometry 2024-2025 Syllabus in its entirety – but especially page 3!! - and I agree to support my child in these areas:**

- ☐ I have read and understood the **parent contact** policy
- ☐ I have read and understood the **absence** policy
- ☐ I have read and understood the **cell phone** policy

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**Guardian Name**

**Guardian Signature**

**Date**

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**Daytime Phone Number**

**Alternate Phone Number (if needed)**

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**Email**

**Preferred Method of Contact?** \_\_\_\_\_

**To students: I understand that I am responsible for upholding all requirements and guidelines to succeed in this course. I know what I have to do to receive the grade I want.**

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**Student Name**

**Student Signature**

**Date**

**Class Period?** \_\_\_\_\_