### **Orange High School**

**Course Outline / Syllabus** 

**High School Honors Geometry** 

Instructor: Ms. Nikolaidis Email: NikolaSo@orange.k12.nj.us Phone: (862) 253-2917 Classroom: 237 Office Hours: Block 4 (A Days) and afterschool Principal: Mr. Belton

Note to Parents/Guardians: You are <u>encouraged to</u> <u>contact me</u> regarding any concerns regarding your child in my class. You can reach me by email or text/voicemail and I will do my best to reply <u>within</u> <u>48 hours</u>. I will also regularly contact Parents/Guardians to discuss student progress.

## Welcome back!

Welcome back to Orange HS for the 2017-2018 school year! I'm looking forward to getting to know each and every one of you as the school year progresses. You will get out of this course what you put into it, so be ready to apply your best effort every day! -Ms.Nikolaidis

## What Kind of Class Is This?

This is an **honors level**, **college-track** math class. All of the expectations of an honors class apply:

- -I expect students to come prepared every day with a pen or pencil, binder, and homework
- -I expect students to stay focused in class for the entire 84-minute period
- -I expect students to make themselves aware of due dates written on the board
- -I expect students to monitor their progress and seek help if necessary
- -I expect students to make up missed homework, quizzes and tests within one week
- -I expect students to keep an organized binder including notes, classwork and returned graded work
- -I expect students to behave with honesty, integrity and respect both in and out of class

**Course Description:** Geometry is the third course in Mathematics for High School students. Within this course, students will have the opportunity to make conjectures about geometric situations; apply inductive and deductive reasoning; and chose from a variety of strategies to solve geometric problems. We need to cover many topics quickly to ensure students are prepared for testing including the PARCC, SAT and ACT in the Spring. This course addresses the National Common Core Standards and is a 5 credit course.

#### Unit 1: Geometric Transformations (4-5 weeks)

- Introduction to geometric notation
- Inductive reasoning and conjectures
- Rigid transformations (reflection, rotation, dilation)

#### Unit 2: Deductive reasoning with Angles and Lines (4-5 weeks)

- Deductive reasoning and formal proof
- Conditional statements and converses
- Lines and Transversals (parallel lines & angle pair relationships)

## Unit 3: Triangles (5-6 weeks)

- Properties of a triangle
- Special lines and points in triangles
- Congruent triangle postulates
- Proving triangles congruent and beyond

### Unit 4: Similarity Transformations (2-3 weeks)

- Dilations and similarity
- Proving triangles similar

### Unit 5: Right Triangle relationships and Trigonometry (3-4 weeks)

- Pythagorean Theorem and the Distance Formula
- Right triangle and Trig relationships

#### Unit 6: Polygons (2-3 weeks)

• Polygons and special quadrilaterals

#### Unit 7: Circles (6-7 weeks)

- Characteristics of a circle
- Equations of a circle
- Relationships between radii, chords, arcs, and angles
- Properties of chords, tangents, and secants
- Application of circumference and area formulas
- Arc lengths and radian measures

#### Unit 8: 3D Shapes (2-3 weeks)

- Relating 2-D and 3-D objects
- Prisms and Cylinders
- Pyramids and Cones

#### Textbook:

Aglie Mind CCSS Geometry (online)

Agile Mind CCSS Geometry Workbook

Login website: http://orange.agilemind.com

Username: student ID

Password: student ID

#### **Required Supplies:**

- Pencil or pen
- Student Binder (it is <u>required for all students</u>). All returned graded classwork and homework <u>must</u> be kept in your binder together with notes and examples.
- Class Folder for returned graded quizzes and tests. This stays with me but can be "checked out" before tests.

Note: I will perform periodic "supplies checks" which will affect your classwork grade.

<u>School Record Keeping Policy</u>: Parents/Guardians, teachers and administrators will have the right to look at the students' binders and test/quiz folders at any time. Therefore, students must always place their work in their binder or folder as soon as possible. Each student's binder will be **collected** during Unit Tests, and students will receive a **binder check grade** which will count as an **authentic assessment** once per marking period.

<u>Grading Policy</u>: Each nine weeks, grades will be based on quiz/test performance, homework, class work, class participation and authentic assessments according to school policy:

Tests	25%
Authentic Assessment:	25%
Quizzes	20%
Class Work:	20%
Homework:	10%

## Homework:

Homework will be assigned <u>every time we have class</u> unless stated otherwise, and will be due <u>at the beginning</u> of the next class. If I catch you copying homework in class I will assign a zero for the HW or mark it as late.

Homework is the best way for you to practice and remember concepts covered in class. Copying homework, or completing it at the last minute "for the grade" will not help you to practice, learn, or improve. <u>I make it a point</u> to return all homework prior to quizzes so that you can study and learn from your mistakes. Because I work hard to correct and return your homework, I expect you to work hard to complete it on time.

<u>Late homework</u> will be accepted if it is completed within one week. Homework completed after a quiz will receive a maximum of 75 points; homework completed after a test will receive a maximum of 50 points. <u>No</u> late homework will be accepted after a Unit Test.

<u>Class Work:</u> Whether it is individual work or group work, you are expected to actively work on these assignments. Your grade will reflect not only 1) the accuracy of your answers on a daily exit slip, but also 2) the effort you put in during class. Even a perfect exit slip will receive a "D" or "F" if I notice you are not using class time effectively. For more information on the school's classwork grading policy, check your student handbooks. No late classwork will be accepted.

**Absences:** I do not expect students to make up classwork they have missed, but I do expect them to review class notes and make an appointment to see me if they do understand the work they missed. Missed homework must be made up within 1 day for each day the student was absent. Missed quizzes and tests must be made up within 1 week. **Work not made up on time will receive a zero.** 

**Fluency Check:** Fluency problems are a review of what was previously taught so I expect all students to be able to do them. I will be collecting and grading student fluency checks every day. Students will receive a classwork grade for their fluency work. Excessive tardies will result in a zero for this grade.

<u>Authentic Assessments</u>: There will be 2-3 small individual projects every marking period. These are problems that require students to demonstrate a higher level of thinking and take 20-45 minutes to complete. They will be graded according to a rubric and students will have an opportunity to reflect on their mistakes. Additionally, students will receive one **binder check grade** every marking period, which will count as an authentic assessment.

**Quizzes:** My quizzes contain about five questions based on homework and are to be completed individually at the beginning of class. They are designed to take about **20 minutes** to complete, and students are expected to continue to learn new material following a quiz.

**Tests:** To be successful on tests, students should pay attention in class, complete all assigned homework and online test reviews, and <u>review all returned homework and quizzes prior to a test</u>. During the test is not the right time to find out if you know the material!

All tests will be announced in advance and posted on the class calendar. If you miss class the day before a test, you will still be responsible for taking the test with the class. Quizzes may be made up at the start of the next class; all tests must be made up outside of class within one week of the missed test date.

**<u>Re-Take Policy:</u>** I do not believe in allowing "free" re-takes of tests or quizzes. Any retakes will contain different questions and you may find they are <u>harder</u> than the original test or quiz. Additionally, students must have completed **all** classwork and homework and must **demonstrate** that they have studied their mistakes before they will be allowed to retake a quiz or test.

# **Classroom Rules of Conduct:**

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1. Bring yourself and everything you need to succeed each day. This includes all required supplies (pen or pencil, binder, homework) and a productive attitude.

- 2. Be considerate of other people's feelings, opinions and thoughts.
- 3. Pay attention and participate in class.
- 4. Always be willing to try. You will learn more from trying and failing than from not trying at all.
- 5. Do not argue about grades or my classroom policies during instructional time.
- 6. All cell phones/iPods/etc. will be on silent and put away during instructional time.
- 7. Students will adhere to all OHS rules and policies.

**<u>Requirements to Receive Credit:</u>** I will be following the OHS student handbook regarding attendance, absences, and behavior. Please feel free to call or email me if you have any questions about attendance or lateness.

#### COURSE OUTLINE/SYLLABUS AGREEMENT

I HAVE READ AND UNDERSTAND THE EXPECTATIONS OF THIS CLASS AS OUTLINED IN THE SYLLABUS. I AGREE TO ABIDE BY THE RULES AND PROCEDURES ESTABLISHED BY THE INSTRUCTOR.

Student's Printed Name: Student's Signature : \_\_\_\_\_ Date: \_\_\_\_\_ **Orange High School Course Outline / Syllabus High School Honors Geometry** COURSE OUTLINE/SYLLABUS AGREEMENT I HAVE READ AND UNDERSTAND THE EXPECTATIONS OF THIS CLASS AS OUTLINED IN THE SYLLABUS. I AGREE TO ABIDE BY THE RULES AND PROCEDURES ESTABLISHED BY THE INSTRUCTOR. Student's Printed Name: Parent's Printed Name: \_\_\_\_\_ Parent's Signature: Date: Current Parent Phone Number: Current Parent Email: Preferred method of communication (e-mail/phone/text):

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