Leyden High School District 212

GEOMETRY HONORS	**Nadia Ruiz-Lopez**
MAT 231/232•2017/2018	nruiz-lopez@leyden212.org 847-451-3155

Welcome! Success in Geometry will enable you to go on to other math courses needed for higher education in promising careers. Today, a good mathematics and technical background is required for better positions in nearly every field.

This class will utilize the majority of your previously acquired algebra skills, and will provide you with the opportunity to learn and apply new skills. They will be applied to numerous geometric topics. As you will discover, all areas of mathematics are related and work together to create a collection of problem solving skills.

I am very excited about this school year, and the learning that will be taking place. I hope that you share these feelings. You should also know that you are expected to have retained a lot of mathematical knowledge from previous years. With this in mind, I want to stress the importance of asking questions during class. I am here to help you. I hope that you grow comfortable with me enough to ask for help, as this is an important life lesson.

Course description:
This course covers topics parallel to Geometry, while at an increased level of depth, rigor, and pacing. This is a course of study that will develop powers of visualization while building a knowledge of the relationships between geometric elements. Furthermore, it is a tool to develop deductive reasoning and will provide for the integration of plane and solid concepts with an effective use of algebra.

Materials you will need every day:
∞   MVP Curriculum (Unit packets will be given to student by teacher)
∞   TI-NSpire Graphing Calculator
∞   A ruler, compass and protractor
∞   A 1-inch three ring binder with loose-leaf notebook paper
    for notes, homework, etc **SOLELY** for GEOMETRY HONORS.
∞   **PENCILS (Work will not be accepted in PEN!)**
You will not be allowed to go to your locker to get materials once class has begun.

HOMEWORK: Completing your homework is vital to your success in this class. It allows you to explore the ideas and practice the skills covered in class. For this reason you will have an assignment every night. Each homework assignment is due at the beginning of class on the following school day. If homework isn't completed when collected, you will be expected to come to period 11* that same day (*Period 11 is from 3:05-3:25PM in Room 241). Full credit will be given for the completed work only if you attend period 11 that same day the homework is due. No late homework is accepted.

QUIZZES and TEST: Quizzes may or may not be announced ahead of time. You will have to be well prepared at all times. You will typically take one quiz and test per chapter. Tests will have problems incorporating the concepts covered in class. Tests will be cumulative. These make up a large percentage of you quarter grade so you must adequately prepare for each quiz and test. For some tests, you may be able to use your class notes, so you will want to keep them organized.

PARTICIPATION: We will work in-groups or as a class and you will be expected to be an active participant. Participation is a part of your grade, which is based on appropriate interaction. This involves listening, contributing your thoughts and questions and coming to class prepared. Your answers or suggestions don't have to be correct but do need to be thought out and relevant to the discussion.

GRADES: Quarter grades will be based on participation/projects, homework, quizzes and tests.

The grading scale is   **A 90 - 100%**
                            B 80 - 89%
                            C 70 - 79%
                            D 60 - 69%
                            F Below 60%

Grading Category   Category Percentage Weights

Grading Category	Category Percentage Weights
Participation/Projects	10%
Homework	10%
Quizzes	35%
Tests	45%

EXPECTATIONS:

∞   Bring all the material mentioned above
∞   Be on time to class each day
∞   Complete all homework, tests and assignments within two days of absence
∞   Be prepared with homework and willing to participate actively in class
∞   Be in your seat when the bell rings… have all your materials… be ready to work!!!

CLASSROOMS RULES:

●PUNCTUAL
●PRESENTABLE
●PREPARED
●RESPECTFUL
●PATIENT

Credit weight: Honors	

Priority Standards

Experiment with transformations in the plane	Apply trigonometry to general triangles
Understand congruence in terms of rigid motions	Understand and apply theorems about circles
Prove geometric theorems	Find arc lengths and areas of sectors of circles
Make geometric constructions	Translate between the geometric description and the equation for a conic section
Understand similarity in terms of similarity transformations	Use coordinates to prove simple geometric theorems algebraically
Prove theorems involving similarity	Explain volume formulas and use them to solve problems
Define trigonometric ratios and solve problems involving right triangles	Visualize relationships between two-dimensional and three-dimensional objects
	Apply geometric concepts in modeling situations

Grading Categories	Category Percent Weights
Participation & Projects	10%
Homework	10%
Quizzes	35%
Tests	45%