Valencia High School

Learning For Life

Course Orientation for

Geometry A/B/C

Ms. Deborah Harris

Dear Student and Parents:

This course orientation has been prepared to communicate the expectations, course work requirements, policies and other information that will give you an opportunity to achieve, and have a positive learning experience. Please read it carefully, learn and discuss it together. If you have any questions about any part of this information, please see me for clarification.

Introduction to Course

This is a two semester Geometry course. We will prove theorems, learn about planes, lines, points, perpendicular and parallel lines, triangles, circles, and other geometric figures.
This course will cover the following state standards:

State Geometry Standards

1.0 Students demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning.

2.0 Students write geometric proofs, including proofs by contradiction.

3.0 Students construct and judge the validity of a logical argument and give counterexamples to disprove a statement.

4.0 Students prove basic theorems involving congruence and similarity.

5.0 Students prove that triangles are congruent or similar, and they are able to use the concept of corresponding parts of congruent triangles.

6.0 Students know and are able to use the triangle inequality theorem.

7.0 Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles.

8.0 Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures.

9.0 Students compute the volumes and surface areas of prisms, pyramids, cylinders, cones, and spheres; and students commit to memory the formulas for prisms, pyramids, and cylinders.

10.0 Students compute areas of polygons, including rectangles, scalene triangles, equilateral triangles, rhombi, parallelograms, and trapezoids.

11.0 Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids.

12.0 Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems.

13.0 Students prove relationships between angles in polygons by using properties of complementary, supplementary, vertical, and exterior angles.

14.0 Students prove the Pythagorean theorem.

15.0 Students use the Pythagorean theorem to determine distance and find missing lengths of sides of right triangles.

16.0 Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line.

17.0 Students prove theorems by using coordinate geometry, including the midpoint of a line segment, the distance formula, and various forms of equations of lines and circles.

18.0 Students know the definitions of the basic trigonometric functions defined by the angles of a right triangle. They also know and are able to use elementary relationships between them. For example, $\tan(x) = \sin(x)/\cos(x)$, $(\sin(x))^2 + (\cos(x))^2 = 1$.

19.0 Students use trigonometric functions to solve for an unknown length of a side of a right triangle, given an angle and a length of a side.

20.0 Students know and are able to use angle and side relationships in problems with special right triangles, such as 30°, 60°, and 90° triangles and 45°, 45°, and 90° triangles.

21.0 Students prove and solve problems regarding relationships among chords, secants, tangents, inscribed angles, and inscribed and circumscribed polygons of circles.

22.0 Students know the effect of rigid motions on figures in the coordinate plane and space, including rotations, translations, and reflections.

Books and Materials

We will cover chapters 1-13 in Geometry, Prentice Hall. The replacement cost of this book is $85.00. All work is to be done in pencil. Each student is expected to bring to class each day

- **Text book**
- **3 ring notebook**
- **pencil and a red pen**
- **color pencils**
- **4 X 5 ruled index cards**
- **Little ring to hold cards together**

Homework Policy

Homework is extended practice on theories that have been explained. Not doing the homework for mastery will seriously interfere with success on the test.

Homework will be assigned daily (weekend and holidays) and is due the next day. Homework is graded on the basis of completion and reasonable attempt at the problems **LATE HOMEWORK IS NOT ACCEPTED**.

Grading System

Grades are kept on a point system and then converted to a percentage. Grades are calculated by points earned divided by all possible points.

Grading scale A= 90-100%
B= 80-89%
C= 70-79%
D= 60-69%
F= below 60%

Extra Credit may or may not be given at the discretion of the teacher.

Academic Integrity

Any student involved in dishonesty on any work will be subjected to one, some, or all of the following: an automatic zero on the work, suspension from class, a referral to the Dean, and a conference between the dean, the parent, the student, and the teacher.

Classroom Management Policy

Each student is to be in his/her assigned seat before the tardy bell rings
Each student is to prepared for class.
Food is not allowed in the classroom. Students may have water.
No talking when the teacher is lecturing or giving instruction.
Valencia High School's "Behavioral Standards" will be enforced in this classroom

Attendance/Tardy Policy

Attendance is important and is directly related to your success. To be successful, students need to be in class and on time to class each day. The school tardy and the district attendance policy will be in effect in this class.

Teacher Conference Period

My conference period during the day is period 7, between 2-3 pm.
The school number is 294-1188. My voice mail extension is 1936. My email is dlharris@hartdistrict.org

Please sign and return orientation indicating that you have read and understand the information. Keep this document in your notebook.

RETURN IMMEDIATELY:

Student Name (please print)_____Period_____

Mother/Guardian's Name_____

Father/Guardian's Name_____

Home Phone#_____

Mother/Guardian's work phone #_____
Cell Number #

Father/Guardian's work phone #_____
Cell Number #

Parent's e-mail address_____

Student's e-mail address_____

Student's signature_____

Parent's signature_____