PINEWOOD – THE AMERICAN INTERNATIONAL SCHOOL OF THESSALONIKI, GREECE

NAME OF COURSE: GEOMETRY

GRADE LEVEL: 9-11

SCHOOL YEAR: 2010-2011

COURSE DESCRIPTION

This course is the standard high school geometry course and one of the math requirements for graduation. It is designed to introduce the student to logic as well as methods of inductive and deductive reasoning. Emphasis is on the properties of geometric figures and their application relating to solving geometric problems.

Prerequisite: Algebra I

LEARNING OBJECTIVES

1) The student will be introduced to basic concepts of Euclidian Geometry stressing the properties of triangles, quadrilaterals, circles, polygons etc.
2) The student will learn how to calculate the areas and volumes of basic plane figures and solids by the use of the appropriate formulas.
3) The student will be introduced to right triangle trigonometry and learn how to use properly the Pythagorean Theorem as well as the basic Trigonometric Ratios of Sine, Cosine, and Tangent.
4) The student will be introduced to the concept of Logic by the use of basic Truth Tables and Conditional Statements.
5) The student will review basic properties of algebra like the commutative property etc.
6) The student will learn to use the Midpoint and Distance Formulas.

SCOPE AND SEQUENCE *

QUARTER I

1) Points, Lines, Planes, and Angles
2) Deductive Reasoning / Introduction to Logic
3) Parallel Lines and Planes

QUARTER II

1) Congruent Triangles
2) Quadrilaterals
3) Inequalities in Geometry / Introduction to Sets

QUARTER III

1) Similar Polygons

QUARTER IV

1) Circles
2) Analytic Geometry
3) Areas of Plane Figures
4) Areas and Volumes of Solids

Note that the order in scope and sequence is subject to change during the school year.

HOMEWORK POLICY

Frequent homework assignments, based on the day's lecture and assigned out of the main textbook or given in the format of a worksheet. All homework is to be collected and graded.

Homework submitted late will loose 10% of the overall score for each day late, and will only be accepted two days after the due date.

ASSESSMENT

1) Weekly-unannounced quizzes, testing the students' understanding of the previous lecture and homework assignment.

2) Class participation including board work, attentiveness of the student during the lecture, interest and effectiveness of the student in answering and asking questions about the lecture, and general classroom behavior of the student.

3) Three to four tests per quarter, testing the student's overall knowledge and comprehension of a specific chapter or a number of sections.

4) The department will not be giving any retake tests, therefore thorough preparation is expected.

GRADING POLICY

TESTS, QUIZZES AND PROJECTS: 60% of the Quarter grade

HOMEWORK: 30% of the Quarter grade

CLASS PARTICIPATION: 10% of the Quarter grade

- 4% PARTICIPATION
- 3% EFFORT
- 3% BEHAVIOR / ATTITUDE

Semester I grade: 40% Quarter I grade + 40% Quarter II grade + 20% Exam I

Semester II grade: 40% Quarter III grade + 40% Quarter IV grade + 20% Exam II

FINAL GRADE: 50% SEMESTER I GRADE + 50% SEMESTER II GRADE

RESOURCES

1) Main Textbook: Geometry Houghton Mifflin 1997
2) Additional support material and various other reference texts including other editions of the main text .

ACADEMIC HONESTY

Academic honesty is fundamental to the integrity and operation of our school. Acts of academic dishonesty, including plagiarism (the act of presenting others' words and ideas as one's own without crediting the source), stealing in quizzes and tests, copying work from other students or allowing their own work to be copied, or using notes during a test, are considered serious offences. The consequences of academic dishonesty will be a zero grade on the specific test/assignment, and additional disciplinary action. The said student will be ineligible or removed from the National Honor Society.