

## Wallenpaupack Area School District

### Wallenpaupack Area High School

#### Mathematics Department – Honors Level

**Course Title:** Geometry Honors

**Length of Course:** 1 semester or 2 semesters

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#### District Policies:

***Academic Integrity:***

Academic integrity is essential to the success of an educational community. Students are responsible for learning and upholding professional standards of research, writing, assessment, and ethics in their areas of study. Written or other work which students submit must be the product of their own efforts and must be consistent with appropriate standards of professional ethics. Academic dishonesty, which includes cheating, plagiarism, multiple submissions and other forms of dishonest or unethical behavior, is prohibited.

***Assessment:***

The goal of grading is to report student progress and achievement to the parents to strengthen the home-school connection. The grade should accurately reflect the student's performance in mastering the PA Standards and the WASD curriculum.

***Attendance:***

Regular school attendance is vitally important to academic success. Not only does attendance reinforce and enrich the learning process; it also establishes patterns and attitudes that will carry forward into adult work habits. Regular, consistent attendance is a prerequisite to successful school life. Children should be absent only in cases of illness or emergency.

***Special Education:***

Our commitment to each student is to ensure a free appropriate public education which begins with the general education setting, with the use of Supplementary Aids and Services. Inclusive education describes the successful education of all students with the appropriate supports and services to participate in and benefit from the general classroom settings and other educational environments.

#### Course Description:

Geometry is a course recommended for the college-bound student. It places emphasis on proof, the need for clarity and precision of the language, and geometric visualization. A unit on formulas for plane and solid figures is included.

**Pennsylvania State Standards:** All WAHS courses are aligned to the PA State Standards and Common Core Standards, where applicable.

**Major Activities:** Homework, Tests and Quizzes

#### Student Responsibilities:

***Attendance expectations:*** Students are expected to be in class each day on time with book, notebook and pencil. (Pencil rather than pen is recommended because of ease in making corrections.)

***Homework expectations:*** Homework is a very important part of this course. It will be assigned almost every night. Homework must be completed on time with very limited opportunity to make up work depending on special circumstances. Problems not attempted at all or without showing work will not be considered completed. However, problems done incorrectly can and should be corrected by the following class period. Copying homework is cheating and may earn a zero as does homework not attempted or cheating on a test or quiz. Working together on homework is not cheating.

*Students are expected to keep a notebook containing all notes, worksheets and homework assignments.*

*Math Lab is available certain periods during the day, one night each week after school and one morning each week before school. Details are announced regularly.*

**Make-up work:** Students have the same number of days as the number of days they were absent to make up missed homework, tests and quizzes. It is the student's responsibility to ask for missed assignments, to submit assignments upon completion, and to schedule make-up test and quizzes.

**Late work:** See Homework Expectations. Due dates are announced for each course.

**Assessment:**

**Grading components:** Honors Level Quarter Grading - 55% for tests, 25% for quizzes and 20% for homework, class work and participation. Final Grade = 3/7 of Quarter 1 Average, 3/7 of Quarter 2 Average and 1/7 Final Exam Grade.

**Content Pacing Guide:**

Topic	Major Assignments	Estimated Time
Algebra Review of Skills - Slope - Systems - Solving Linear Equations - Radicals	Pre-Test Algebra Review Packet	1 block ¼ block for 6 days
Patterns		1 block
Points/Lines/Planes/Angles		1 block
Measuring		1 block
Distance/Midpoint		2 1/2 blocks
Area/Perimeter		3 1/2 blocks
Volume/Surface Area	Surface area/Volume Project	1 block + at home
	Chapter Review/Test	2 blocks
Conditional Statements - Converse - Inverse - Contrapositive - Biconditional		1 block
Chain Rule (Law of Syllogism)		1 block
Addition/Subtraction Properties		2 block
Supplementary/complementary		1 block
Vertical Angles		1 block
	Chapter Review/Test	2 blocks
Parallel Lines and Angles - Alternate interior,exterior - Same side interior/exterior		2 ½ blocks
Triange Angle Sum		2 ½ blocks
Types of Triangles		½ block
Finding Equations of Parallel and Perpendicular Lines		1 ½ blocks
	Chapter Review/Test	2 blocks
Congruent Figures		2 block
Ways to Prove Triangles Congurent - SSS,SAS,AAS,ASA,HL		2 block
Proofs	Proof Packet	3 blocks + at home
Base Angle Theorem		1 block
	Chapter Review/Test	2 blocks
Midsegments		1 block
Perpendicular Bisectors		1 block
Altitudes		1 block

Medians	Euler Line Activity	1 block
Indirect Proofs		2 blocks
Triangle Inequality Theorem		1 block
	Chapter Review/Test	2 blocks
Polygons - Sum of interior/exterior angles - Number of diagonals		2 blocks
Regular Polygons		2 blocks
Special Quadrilaterals - Parallelogram, rectangle, rhombus, square, trapezoid, isosceles trapezoid		4 blocks
	Chapter Review/Test	2 blocks
Ratios/Proportions - Probability - Arithmetic/Geometric Mean		3 blocks
Similar Polygons		2 ½ blocks
Similarity Theorems - Shadow Problems - Side-Spitter - Angle Bisectors		2 blocks
	Chapter Review/Test	2 blocks
Pythagorean Theorem - Families		3 blocks
Special Right Triangles - 30-60-90 - 45-45-90 (isosceles)		2 blocks
Trigonometric Ratios - Sine, cosine, tangent - Angle of elevation/depression		3 blocks
	Chapter Review/Test	2 blocks
Angles in Circles - Central angles - Inscribed angles - Other angles		2 blocks
	Assessment	1 block
Transformations	Transformations Project	1blocks + at home
CDT tests		2 blocks
Final Review/Exam		3 blocks