



Fairfield Warde High School
GEOMETRY

Laura Kelly

T-7

lkelly@fairfieldschools.org

COURSE DESCRIPTION

Geometry provides students with a conceptual bridge between algebra and geometry that deepens their understanding of mathematics. The purpose of the Geometry course is to formalize and extend students' geometric experiences from the middle school grades. The critical areas of focus for this course are on geometric figures and theorems, transformations, similarity and congruence, analysis of right triangles and trigonometry, two and three-dimensional objects, coordinate geometry, and circles. The course includes a unit of statistics and probability to support students' understanding of concepts essential to quantitative literacy. Throughout the course, students solve problems across the domains of algebra, geometry, and statistics.

COURSE ENDURING UNDERSTANDINGS

- Statistics are numbers that summarize large data sets by reducing their complexity to a few key values that model their center and spread.
- Distributions are functions whose displays are used to analyze data sets.
- Probabilistic reasoning allows us to anticipate patterns in data.
- The method by which data are collected influences what can be said about the population from which the data were drawn, and how certain those statements are.
- A formal mathematical argument establishes new truths by logically combining previously known facts.
- Measuring features of geometric figures is the process of assigning numeric values to attributes of the figures, which allows the attributes to be compared.
- Pairs of lines in a plane that never intersect or that intersect at right angles have special geometric and algebraic properties.
- Right triangles are simple geometric shapes in which we can relate the measures of acute angles to ratios of their side lengths.
- Transformations are functions that can affect the measurement of a geometric figure.
- Congruent figures have equal corresponding angle measures and are equal distances between corresponding pairs of points.
- Similar figures have equal corresponding angle measurements, and the distances between corresponding pairs of points are proportional.
- The geometry of a circle is completely determined by its radius.
- The area of a figure depends on its height and its cross-sectional widths.
- The volume of a solid depends on its height and its cross-sectional areas.
- The geometry of a sphere is completely determined by its radius.

UNITS OF STUDY

- Measurement in Data
- Tools and Techniques of Geometric Measurement
- Measurement in Congruent and Similar Figures
- Measurement in Two and Three Dimensions

COURSE POLICIES AND REQUIREMENTS

GRADING (see FPS BOE [Policy 6146.1AR](#))

Cumulative/In-Progress Grade:

- 10% of the grade will be based on formative assessments, homework completion, and behavior.
- 90% will be based on summative assessments, of which there will be a minimum of eight, with no fewer than 2 per quarter, for this full-year course; these may include Unit Tests, Mid-Unit Tests, Projects, Performance tasks, Summative Quizzes, etc.

End-of-the-Year Grade:

- 80% of the overall course grade will reflect the student's mastery of course content and skills during the school year through the Cumulative/In-Progress Grade.
- 10% of the End-of-the-Year course grade will be based on the Mid-Year Assessment.
- 10% of the End-of-the-Year course grade will be based on the Final Assessment.

Grade Reporting

- All grades will be communicated through Infinite Campus.
- Summative assessment results will be reported back to the student within ten school days from the date of submission or the due date, whichever is later.
- Formative assessment results will be reported back to the student within five school days from the date of submission or the due date, whichever is later and prior to any subsequent assessment..

Guidelines for Late Work:

- Late work will be accepted for both summative and formative tasks within a defined timeline agreed upon between the student and the teacher for excused absences.
- The total points may be reduced as a penalty for late work for unexcused absences. Students will earn a zero (0) if the assignment is not submitted or is submitted after the deadline for late work.

Reassessments:

- Any extenuating circumstances may be discussed with administration to allow alternative reassessment opportunities with administrative approval.
- Reassessment opportunities are defined as twice per year (with a maximum of one per quarter) for assignments where students met the original required deadlines and do not violate the academic integrity policy. Reassessment does not apply to midyear assessments or final assessments.
- Gradebook impact of Reassessment: original and reassessment scores will be averaged in the gradebook.

MATERIALS

[PreAP Geometry Classroom](#)

Calculator, pencil, highlighter, a colored pencil or pen that is not blue or black, charged chromebook, and a folder or binder for storing handouts

EXPECTATIONS OF STUDENTS

In class...Please be seated *before* the bell and ready to learn once the late bell rings with your phone put away in the phone tree.

Out of class...check the chat regularly! Also, if there is a conflict with outside-of-class work completion, please do not tell me upon arrival to class, but rather *beforehand*...

Thank you in advance!

EXTRA HELP

As needed by appointment