Mathematics Scope and Sequence
Vashon Island High School: Honors Geometry

First Trimester	Second Trimester	Third Trimester
Brief (1 week) review of Algebra 1 1st and 2nd trimester curriculum (Chs. 1-10) Systems of linear equations (Ch. 11) • Graphing method • Substitution method • Elimination method (add, subtract, multiply) • Matrix method (optional supplement) • Applications (digit, age, money, mixture, wind, and current) • Graphing systems of linear inequalities Radicals (Ch. 12) • Roots • Irrational roots • Fractions to decimals • Decimals to fractions • Adding and subtracting radicals • Multiplying and dividing radicals • Solving radical equations • Pythagorean Theorem • Distance formula • Coordinate geometry Quadratic equations and functions (Ch. 13) • Perfect squares • Completing the square • Quadratic formula • Graphing quadratic functions • Discriminant • Applications Statistics (Ch. 14) • Central tendency (mean, median, mode) • Variability (variance, standard deviation, range) • Graphing data (histograms, box and whisker plots, scatter plots, trend lines) Probability (Ch. 14) • Simple probability • Venn diagrams • Compound events	Elements of Geometry (Ch. 1) • Points, lines, planes • Subsets of a line • Proofs in geometry Angles (Ch. 2) • Angles and their measure • Definitions • Theorems • Postulates • Proofs Parallel and Perpendicular Lines (Chs. 2 and 3) • Right angles and perpendicular lines • Definitions • Theorems • Postulates • Proofs Congruent Triangles (Ch. 4) • Congruence of triangles • Proofs • CPCTC • Isosceles triangles Applying Congruent Triangles: Parallelograms (Ch. 5) • Properties of parallelograms • Proofs • Rectangles, Rhombuses, Squares • Trapezoids • Triangle inequalities	Similar Polygons (Ch. 6) • Definitions • Ratio and Proportion • Similar Polygons • Proving triangles are similar • Segments divided proportionally Right Triangles (Ch. 7) • Altitude and hypotenuse of a right triangle • Pythagorean theorem • Special right triangles • Rectangular solids • Trigonometric ratios (sine, cosine, tangent) Circles (Ch. 8) • Circles and lines • Tangents • Arcs and central angles • Arcs and chords • Inscribed angles • Other angles • Lengths of segments Areas and Volumes (Ch. 9) • Rectangles • Parallelograms and triangles • Trapezoids • Regular polygons • Circumference • Circles • Right prisms • Regular pyramids • Right circular cylinders and cones Constructions and Loci (Ch. 10) • Basic constructions • Loci (optional depending on time)

Texts: Fair, & Bragg (1993). Algebra 1. Englewood Cliffs, NJ: Prentice Hall. Jurgensen, Donnelly, Maier, & Rising (1978). Geometry. Boston, MA: Houghton Mifflin Co.
(Curriculum Guide, Rev. 10/02)