Arlington High School Math Course Information

AHS Math Courses at a Glance

Levels	Curriculum H or AP	Curriculum A
Grade 9	Geometry - Cur. H	Algebra I - Cur. A Geometry - Cur. A
Grade 10	Algebra II - Cur. H	Geometry - Cur. A Algebra II - Cur. A
Grade 11	Pre-Calculus - Cur. H AP Statistics	Algebra II - Cur. A Pre-Calculus - Cur. A
Grade 12	AP Calculus AB AP Calculus BC Calculus - Cur. H AP Statistics	Pre-Calculus - Cur. A Statistics - Cur. A Quantitative Reasoning - Cur. A

Additional Course Descriptions: http://bit.ly/3tfeG2m
Placement and Leveling Information: http://bit.ly/3htdIwD

Algebra I - Curriculum A

Grades 9, 10   5 credits

Algebra I Curriculum A is the first course in a four-year college preparatory sequence. This course addresses the standards of the current state framework with major emphasis on the Algebra domain and the Functions domain. Students will investigate patterns, relations, and functions, simplify polynomials, and solve linear and quadratic equations, inequalities, and systems of equations. Students will also study powers and roots in accordance with standards from the Number and Quantity domain. Content areas including scatter plot, line of best fit, and basic counting principles connect to the Statistics and Probability domain. The following topics are covered:

- Expressions and Equations: writing, modeling, and solving
- Graphs: from statistics to graphing equations
- Lines: slope, graphs, parallel lines, solving systems, and modeling
- Functions: naming, definition, graphs, tables
- Exponents and Radicals: squares, cubes, roots, expressions and functions
- Polynomials: identities, factoring to solve
- Quadratics: quadratic formula, graphs, applications

Suggested Entry Criteria: Understand the concepts and skills of Math 8 or equivalent.

Next Course: Geometry Curriculum A or Geometry Curriculum H.

Geometry - Curriculum A

Grades 9, 10, 11, 12   5 credits

In this course, students study a full geometry curriculum. Major content areas include the study of lines, angles, polygons, circles, and congruence and similarity relationships. Students apply area and volume formulas to solve problems as well as use inductive and deductive reasoning processes to justify conclusions. Students will also work in the coordinate plane with transformations, distance and midpoint formulas, and parallel and perpendicular lines. The Number and Quantity domain is addressed as students work with powers and roots and use estimation in problem solving. Students use sample spaces to find simple probabilities, which is consistent with the standards of the Statistics and Probability domain. The following topics are covered:

- Congruence and Proof
- Quadrilaterals
- Area, Surface Area, Volume
- Similarity
- Circles
- Using Similarity
- Coordinates and Vectors
- Optimization

Suggested Entry Criteria: Successful completion of Algebra I.

Next course: Algebra II Curriculum H or Algebra II Curriculum A.

Geometry - Curriculum H

Grades 9, 10   5 credits

This accelerated course addresses the requirements of the current state framework, with major emphasis on the Geometry domain. Major content areas from this domain include the study of angles, polygons, polyhedrons, and circles, recognizing and applying properties of similarity and congruence, calculating measurements, and demonstrating and applying transformations. Students will also identify and apply trigonometric ratios and the Pythagorean theorem. The Statistics and Probability domain is addressed as students determine sample spaces using counting principles to find probability. Additionally, all students will participate in the year-long Math Fair project. The following topics are covered:

- Congruence and Proof
- Similarity
- Circles
- Using Similarity
- Coordinates and Vectors
- Optimization

Suggested Entry Criteria: Mastery of the concepts and skills of Algebra I.

Next course: Algebra II Curriculum H or Algebra II Curriculum A.
For more information and course descriptions visit: