

MATH

COURSE #	COURSE	SEM/YEAR	GRADE	CREDITS	TYPE
5024	Pre-Algebra	Y	9	1.0	E
5108	Algebra 1 (Sheltered) ELL	Y	9,10,11,12	1.0	E
5110	Algebra 1	Y	9,10,11,12	1.0	S
5128	Geometry (Sheltered) ELL	Y	10, 11, 12	1.0	E
5125	Geometry	Y	9,10,11,12	1.0	S
5154	Honors Geometry	Y	9	1.0	S
5130	Algebra 2	Y	10,11,12	1.0	S
5124	Honors Algebra 2	Y	10,11,12	1.0	S
5169	Functions	S	11,12	.5	S
5170	Trigonometry	S	11,12	.5	S
5183	Honors Pre-Calculus/Trigonometry	Y	11,12	1.0	S
5180	Pre-Calculus	Y	12	1.0	S
5220	College Algebra	S	11,12	.5	E
5212	Advanced Placement Statistics	Y	10, 11, 12	1.0	E
5185	Advanced Placement Calculus AB	Y	11,12	1.0	S
5186	Advanced Placement Calculus BC	Y	12	1.0	E

5024 PRE-ALGEBRA (Y) 9 **Prerequisite: Placement**
 This course focuses on pre-requisite skills for algebraic concepts, including reasoning and problem-solving with rational numbers, expressions, equations, and linear relationships. Students will be placed in this course based on standardized test scores, prior math performance and teacher recommendations. (CCHS, HPHS, HSA, THS, TWHS) Standard

5108 ALGEBRA 1 (SHELTERED) (Y) **Prerequisite: Placement**
 This is a first year Algebra course for ELL students. Topics include variable representation, properties of equations and inequalities, and graphical and statistical representation. This course is a foundation for all other math courses and a requirement for all college bound students. (THS) *Optional*

5110 ALGEBRA 1(Y) 9, 10, 11, 12
 This is a first year Algebra course. Topics include variable representation, properties of equations and inequalities, and graphical and statistical representation. This course is a foundation for all other math courses and a requirement for all college bound students. (CCHS, HPHS, HSA, THS, TWHS) *Standard*

5128 GEOMETRY (SHELTERED) (Y) 9, 10, 11, 12 **Prerequisite: Placement**
 This is a course for ELL students. This course is a study of geometric concepts and their applications. Topics include coordinate geometry, transformations, measurement formulas, and an introduction to geometric proofs using lines, triangles, polygons, and circles. (THS) *Standard*

- 5125** GEOMETRY (Y) 9, 10, 11, 12 **Prerequisite: Algebra 1 (5110)**
 This course is a study of geometric concepts and their applications. Topics include coordinate geometry, transformations, measurement formulas, and an introduction to geometric proofs using lines, triangles, polygons, and circles. (CCHS, HPHS, HSA, THS, TWHS) *Standard*
- 5154** HONORS GEOMETRY (Y) 9, 10 **Prerequisite: Algebra 1 (5110)**
 This course is a study of Euclidean space with an emphasis on formal proofs. Topics include coordinate geometry, transformation, measurement formulas, and inductive and deductive reasoning. Enrollment will be determined by a placement test. (HPHS, THS, TWHS) *Standard*
- 5130** ALGEBRA 2 (Y) 10, 11, 12 **Prerequisite: Algebra 1 (5110)**
 This course focuses on algebraic expressions, especially linear and quadratic forms, powers and roots, and functions. Other topics include logarithmic, polynomial, and other special functions as tools for modeling real-world situations. (CCHS, HPHS, HSA, THS, TWHS) *Standard*
- 5124** HONORS ALGEBRA 2 (Y) 10, 11, 12 **Prerequisite: Algebra 1 (5110)**
 This course provides a review of the basic operations on and properties of the real number system. The complex number system is introduced and developed. Other topics include linear, exponential, and logarithmic functions; polynomial equations; graphing; systems of equations and inequalities; conic sections; and sequences and series. (HPHS, THS, TWHS) *Standard*
- 5169** FUNCTIONS (S) 11, 12 – **Fall Semester** **Prerequisite: Algebra 2 (5130) or Honors Algebra 2 (5124)**
 This course includes the study of relations and functions, including polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their inverses, graphs, and applications. (HPHS, HSA, THS, TWHS) *Standard*
- 5170** TRIGONOMETRY (S) 11, 12 – **Spring Semester** **Prerequisite: Algebra 2 (5130) or Honors Algebra 2 (5124)**
 This course includes trigonometric and circular functions; their inverses and graphs; relations among the parts of a triangle; trigonometric identities and equations; solutions of right and oblique triangles; and complex numbers. (HPHS, HSA, THS, TWHS) *Standard*
- 5183** HONORS PRE-CALCULUS AND TRIGONOMETRY (Y) 10, 11, 12 **Prerequisite: Algebra 2 (5130) or Honors Algebra 2 (5124)**
 This course for the college-bound student includes the definitions and properties of trigonometry and the application of trigonometry to the solution of triangle measurements, navigation, and vectors. Other topics include trigonometric functions and their graphs, identities, inversion functions and equations, circular functions, and polar coordinates, polynomial and rational functions, graphing, sequences and series, limits, derivatives, and conic sections. A graphing calculator is recommended. (HPHS, THS, TWHS) *Standard*
- 5180** PRE-CALCULUS (Y) 11, 12 **Prerequisite: Algebra 2 (5130) or Honors Algebra 2 (5124)**
 This course is a study of the real number line and the Cartesian plane; plane, polynomial, and rational functions; graphing; sequences and series; limits; derivatives; and conic sections. Pre-Calculus introduces limits and integrates work with functions and trigonometry. (THS, TWHS) *Standard*
- 5220** COLLEGE ALGEBRA (S) 11, 12 **Prerequisite: Honors Pre-Calculus and Trigonometry (5183) or Functions (5169) and Trigonometry (5170) and 3.0 G.P.A. and ACT score of 22 or better (Students may also take the W.U. math placement test scoring 15/25.)**
 This college-level course will cover equations, relations, functions, systems of equations, matrices, determinants, linear programming, logarithms, sequences, series, and binomial expansion. This course may be taken for dual high school and college credit. The college credit will be granted by Washburn University for College Algebra/Math 116. In order to earn college credit a fee payable to W.U. is required. The university also provides the final exam for this course, and the student must pass with a minimum of 70% to earn this credit. (HPHS, THS, TWHS) *Enrollment based*

5212 **ADVANCED PLACEMENT STATISTICS** (Y) 10, 11, 12 **Honors Algebra 2 (5124) or Functions (5169) and Trigonometry (5170)**

This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes – exploring data, sampling and experimentation, anticipating patterns, and statistical inference. (THS) *Enrollment based*

5185 **ADVANCED PLACEMENT CALCULUS AB** (Y) 11, 12 **Prerequisite: Honors Pre-Calculus and Trigonometry (5183) or Pre-Calculus (5180)**

This college level course includes a study of functions, limits, derivatives, and integrals and is intended for students who have a thorough and rigorous background in college preparatory mathematics, including trigonometry and pre-calculus. At the conclusion of the course, students have the option of taking the Advanced Placement Calculus AB Examination for college credit. (HPS, THS, TWHS) *Standard*

5186 **ADVANCED PLACEMENT CALCULUS BC** (Y) 12 **Prerequisite: Honors Pre-Calculus and Trigonometry (5183)**

This college level course continues the study of functions, limits, derivatives, and integrals. Other topics include polynomial approximation and series. The content is designed to qualify a student for placement and credit one semester beyond that granted for Advanced Placement Calculus AB. At the conclusion of the course, students have the option of taking the Advanced Placement Calculus BC Examination for college credit. (HPS, THS, TWHS) *Enrollment based*