



Aiken Performing Arts Academy

Mathematics

411100CW Algebra I CP

1 Unit

Description: This course covers topics of algebra including operations and properties of real numbers, first degree equations and inequalities, quadratic functions, graphing of linear equations and quadratic functions, matrix operations, factoring, exponential laws, operations with polynomials, rational and irrational numbers, problem solving, and solving systems of linear equations and using concrete, numerical, algorithmic, and calculators and computers with graphing capabilities. **End of course test is required.**

412100CW Geometry CP

Prerequisite: Algebra I or Math Tech I, II from another school

1 Unit

Description: Emphasis is placed on understanding the structure of geometry, patterns, location, size, and shape. It will cover deductive reasoning involving the application of definitions, postulates and theorems to solve problems and write proofs. Powers of spatial visualization and knowledge of the relationships among geometric elements are developed through classic constructions techniques. Simple logic, with emphasis on deductive reasoning, is taught through listing basic proofs and problem solving.

411200CW Algebra II CP

Prerequisite: Geometry

1 Unit

Description: Emphasis is placed on review and extension of Algebra I concepts and skills. The course will lend itself to a study of the following functions: quadratic, exponential, absolute value, radical and rational. It will also include linear equations and inequalities in two variables, quadratic equations and inequalities, matrices, algebraic and geometric representation of functions, and conic sections. The graphing calculator will be used extensively in this class.

413100HW Pre-Calculus H

Prerequisite: Algebra II

1 Unit

Description: This course is a review and extension of material covered in Algebra I and II. In addition, such topics as polynomial, logarithmic, trigonometric, rational and exponential functions, vectors, as well as inequalities, matrices, conic sections, binomial theorem, coordinate plane topics, sequence and series, and problem solving are introduced.

413500 Calculus H

Prerequisite: Pre-Calculus with a grade of B or better and have met standard on the math portion of the Exit Exam. Student must be in the 12th grade.

1 Unit

Description: This course is designed for the student who wishes to take advanced math classes in college, and who wishes to attempt to receive college credit for this class. Topics will include the properties and limits of functions, the derivative and its applications, the integral and its applications, transcendental functions, and other topics in line with the content currently recommended by the College Entrance Examination Board. All students enrolled in this course are required to take the AP Calculus Examination administered by the College Board in the spring.