

## MATHEMATICS DEPARTMENT

Class Number: 15  
Class Name: **Applied Math I** - Choice for 9th Grade Requirement  
Length of Class: One Year  
Prerequisite: None  
Grade Level: 9

Description: This first year course in Mathematics is designed to cover introductory Algebra topics with emphasis on real world problems. Emphasis in several vocational areas should develop skills and cooperation in group settings, while enhancing problem solving skills.

Required materials: Calculator.

Class Number: 16  
Class Name: **Applied Math II**  
Length of Class: One Year  
Prerequisite: Applied Math I  
Grade Level: 10 - 12

Description: Same materials as above, only more in-depth.  
Required materials: Calculator.

Class Number: 17  
Class Name: **Algebra I** - Choice for 9th Grade Requirement  
Length of Class: One Year  
Prerequisite: None  
Grade Level: 9 - 12

Description: Algebra I is strongly recommended for students going on to higher education (two year to four year programs). Students will work with real, rational, and irrational numbers and techniques for solving problems involving: Polynomials, factoring polynomials, solving equations and inequalities, graphing, quadratic equations and problem solving.

Required materials: Calculator

Class Number: 19  
Class Name: **Algebra II** (Elective)  
Length of Class: One Year  
Pre-requisite: Algebra I  
Grade Level: 9 - 12

Description: Algebra II is a course for students who have successfully completed Algebra I and Geometry. This course is strongly recommended for students planning to attend a two or four year program after high school. Basic Algebra I concepts will be expanded upon. The student will study complex numbers, quadratic equations, permutations, combinations, probability, and problem solving.

Required materials: Scientific calculator.

Class Number: 18  
Class Name: **Geometry** (Elective)  
Length of Class: One Year  
Prerequisite: Algebra I  
Grade Level: 10 - 12

Description: Geometry is strongly recommended for students planning on attending a two or four year program after high school. Students will work with definitions, theorems and postulates concerning points, lines, planes and angles. The first semester will emphasize proofs of parallel lines and planes, congruent triangles, and similar polygons. The second semester will be concerned with right triangle trigonometry, circles, area, volumes of figures, and coordinate geometry.

Required materials: Scientific calculator.

Class Number: 20  
Class Name: **Advanced Math** (Elective)  
Length of Class: Year  
Prerequisite: Algebra II and Geometry  
Grade Level: 11 - 12

Description: This class provides a comprehensive coverage of trigonometry and will furnish a sound basis for the college-bound student. The course concentrates on trigonometric functions, trigonometric identities, graphs of trigonometric functions, and any applications therein. Students will also study complex numbers, quadratic equations, exponential functions, and logarithms.

Class Number: 21  
Class Name: **Calculus** (Elective)  
Length of Class: Year  
Prerequisite: Advanced Math  
Grade Level: 12

This class is the equivalent to a first semester college calculus course. Throughout the year students will work with and study limits, differentiation, and integration. At the end of the course students will have the ability to take the AP Board exam from which they may receive college credit depending on how well they score.