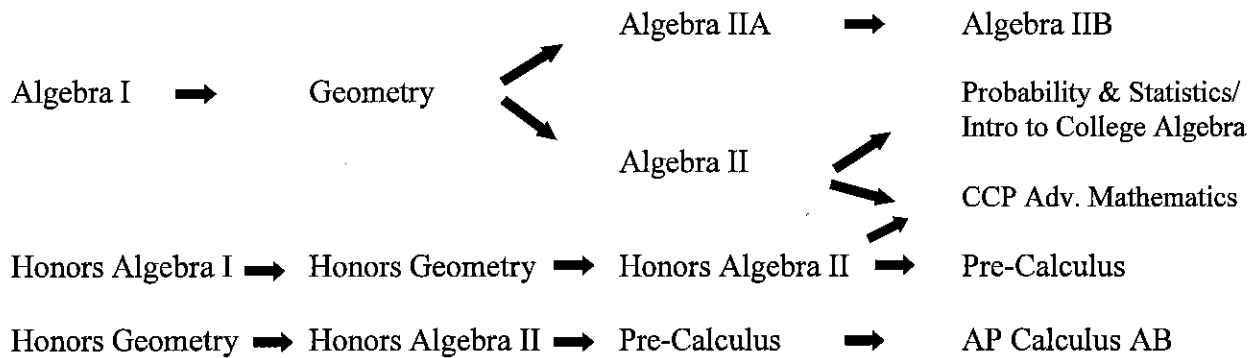


MATHEMATICS

<u>Courses</u>	<u>Grades</u>	<u>Prerequisites</u>
Algebra I	9	
Honors Algebra I (W)	9	Department Recommendation
Geometry	10	Algebra I
Honors Geometry (W)	9, 10	B- in Honors Algebra I
Algebra IIA	11	Geometry
Algebra IIB	12	Algebra IIA
Algebra II	10, 11	C+ in Geometry
Honors Algebra II (W)	10, 11	B- in Honors Geometry
Probability & Statistics	11, 12	Algebra II
Introduction to College Algebra	12	Algebra II
CCP Advanced Mathematics (W)	11, 12	B- in Algebra II and meet LCCC criteria
Pre-Calculus (W)	11, 12	B- in Honors Algebra II
AP Calculus AB (W)	12	B- in Pre-Calculus

Typical Math Sequences



Please Note:

1. Initial placement is made with reference to standardized test scores and previous math class grades.
2. Changes in the sequences of courses may be made with the approval of the Mathematics Department.
For example, a student enrolled in Honors Algebra I as a freshman may, if approved, take both Honors Geometry and Honors Algebra II as a sophomore in order to enroll in AP Calculus as a senior.
3. The use of calculator technology is an integral part of each course. The use of calculators on tests and quizzes remains at the discretion of the instructor.

ALGEBRA I

Code: #211

Credit: 1

Length: Year

This course encompasses such topics as first and second degree equations, graphing, linear functions, ratio and proportions, and many other topics which will help the student recognize the importance of mathematics. He/she will master algebraic skills needed to solve problems dealing with a variety of mathematical and science-related situations. Scientific calculators are required technology for all students.

HONORS ALGEBRA I

Code: #210

Credit: 1

Length: Year

Prerequisite: Department Recommendation

This course emphasizes the theoretical and logical study of the structure of mathematical ideas in solving problems ranging from everyday applications to the sciences. The student will apply algebraic skills and concepts to various problem-solving situations. Material will be covered at a faster pace in order to better prepare the student for advanced mathematics and science courses. Scientific calculators are required technology for all students.

GEOMETRY

Code: #221

Credit: 1

Length: Year

Prerequisite: Algebra I

This course includes both plane and solid geometry topics and poses a challenge to the student to reason deductively and to think logically. The formal proof method is taught, but greater emphasis is placed on the application of concepts so that the student can apply these concepts to the work-a-day world. Scientific calculators are required technology for all students.

HONORS GEOMETRY

Code: #220

Credit: 1

Length: Year

Prerequisite: B- in Honors Algebra I

Topics in both plane geometry and solid geometry will be discussed, emphasizing deductive reasoning and logical reasoning. The student will be expected to master material at a faster pace. More emphasis will be placed on the structure of the mathematical system and on logical deduction and proof. Scientific calculators are required technology for all students.

ALGEBRA IIA

Code: #231-A

Credit: 1

Length: Year

Prerequisite: Geometry

The student enrolled in this course will be encouraged to stretch his or her educational expectations through the use of real-world situations, a function approach, and implementation through hand-held technology. Topics to be covered include linear, quadratic, exponential, and square root functions. **Graphing calculators are required technology for all students. The TI-84 Plus is used for instruction.**

ALGEBRA IIB

Code: #231-B

Credit: 1

Length: Year

Prerequisite: Algebra IIA

This course will introduce the student to more advanced mathematical skills and concepts. Topics to be covered include exponential and logarithmic functions, polynomial and rational expressions, systems of equations and inequalities, and complex numbers.. **Graphing calculators are required technology. The TI-84 Plus is used for instruction.**

ALGEBRA II

Code: #231
Length: Year

Credit: 1
Prerequisite: C+ in Geometry

This course is necessary for the development of more advanced mathematical skills and concepts. Effort will be made to deepen the student's understanding of the structure of the real and complex number systems. Topics covered include linear, quadratic, exponential, and logarithmic functions, polynomial and rational expressions, systems of equations and inequalities, complex numbers, and problem-solving. **Graphing calculators are required technology. The TI-84 Plus is used for instruction.**

HONORS ALGEBRA II

Code: #230
Length: Year

Credit: 1
Prerequisite: B- in Honors Geometry

This course will emphasize the logical and analytical method in mathematics. Every effort will be made to develop the student's mathematical maturity and problem-solving techniques. Some of the topics covered include functions, complex numbers, exponential and logarithmic functions, and trigonometric functions. **Graphing calculators are required technology. The TI-84 Plus is used for instruction.**

PROBABILITY & STATISTICS

Code: #248
Length: Semester

Credit: 0.5
Prerequisite: Algebra II

This course will offer the student a practical approach to methods of displaying and interpreting data. The student will learn how to "fit" lines and curves and will explore measurement, probability, statistics and simulation. This course may be taken alone or in combination with Introduction to College Algebra. Students are encouraged to have a graphing calculator. **The TI-84 Plus is used for instruction.**

INTRODUCTION TO COLLEGE ALGEBRA

Code: #254
Length: Semester

Credit: 0.5
Prerequisite: Algebra II

This course will offer the student a thorough development of relations and functions. Topics include the analysis of polynomial, absolute value, rational, root, exponential and logarithmic functions. Piecewise-defined functions, inverses of functions and composition of functions will also be featured. **Graphing calculators are required technology. The TI-84 Plus is used for instruction.**

CCP ADVANCED MATHEMATICS

Code: #241 / #CCP 241
Length: Year

Credit: 1
Prerequisite: B- in Algebra II and
Department Recommendation

This course will offer the student a thorough development of the study of trigonometry and its applications. Analytic topics will be discussed to better prepare the college-bound student for many mathematical areas of study. Emphasis is placed on analysis of concepts rather than just performance of computational skills. **Graphing calculators are required technology. The TI-84 Plus is used for instruction.**

PRE-CALCULUS

Code: #240A
Length: Year

Credit: 1
Prerequisite: B- in Honors Algebra II

This course will offer the student a very thorough development of the study of trigonometry and its applications. The student will refine mathematical skills which were introduced in algebra and geometry, and calculus topics such as continuity, end behavior of functions, and limits will be introduced. **Graphing calculators are required technology. The TI-84 Plus is used for instruction.**

AP CALCULUS AB

Code: #246

Length: Year

Credit: 1

Prerequisite: B- in Pre-Calculus

This study of differential calculus of one variable discusses the topics of limits, continuity, techniques of differentiation, and applications of derivatives. The course continues with the study of the definite integral and its applications, calculus of transcendental functions, and techniques of integration. Upon completion the student may elect to take the AB portion of the AP Calculus Test. **Graphing calculators are required technology. The TI-84 Plus is used for instruction.**