## FINANCIAL ALGEBRA 12

Financial Algebra is designed for students who have completed Algebra 1 or Geometry by ninth grade. The course would be a bridge to upper-level mathematics such as Algebra 2 and Mathematics for College Readiness. It is targeted for students who need additional instruction in content to prepare them for success in upper-level mathematics. The focus of this course, is to provide a real-life financial literacy framework  that can be applied to upper-level mathematics standards. In our consumer-based society, this course  addresses the results of financial decisions that will result in more fiscally responsible citizens.

## MATH FOR COLLEGE READINESS 12

This course is designed for students who have successfully completed Geometry by eleventh grade, and are interested in learning about some advanced mathematical topics and improving their math proficiency. The course includes Algebra 2 topics, analytic trigonometry, matrices, analytic geometry, and probability. At the end of this course the students will have a better understanding of algebra, as an approach to higher level courses such as Pre-Calculus or Honors Probability and Stats

## ALGEBRA 2 12

This course is designed for students who have successfully  completed Geometry by ninth grade. The fundamental purpose of this course is to  prepare students to take Pre-Calculus and  Statistics. This course is designed to build on algebraic and geometric concepts. It develops advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers, quadratics, and concepts and includes the study of trigonometric functions.

## ANLYSIS OF FUNCTIONS /TRIG 12

This course is designed for students who successfully have completed Algebra 2 Honors by ninth grade. It is designed to prepare students for further study of mathematics at the college level. It prepares students for Pre-calculus. Students learn more  in-depth  topics such as the family of functions (e.g. polynomial, rational, exponential, logarithmic, and trigonometric), limits, derivatives, vectors, matrices, sequences, and series will be undertaken.

## ALGEBRA 2 HONORS

This course is designed for students who have successfully completed Geometry or Geometry Honors by ninth grade. This course is designed for students who have demonstrated exceptional ability and motivation in mathematics and will meet the needs of students who anticipate entering college majors requiring an extensive mathematical background. This provide students with an in-depth level of instruction, an accelerated pace and a cooperative learning environment. Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms.

## HONORS PROBALILITY AND STATS

This course is designed for students who successfully have completed Algebra 2 or Algebra 2 honors by tenth grade. The fundamental purpose of this course is to explore the fundamental concepts of probability and statistics through exercises that require students to interpret results, provide written explanations, find patterns, and make decisions. The main objective is to provide students with the foundations of statistical inference mostly used in a wide variety of disciplines such as business and economics.

## ADVANCED TOPICS

This course is designed for students who have successfully completed Algebra 2 by tenth grade, and are interested in learning about some advanced mathematical topics and improving their math proficiency. The course includes Algebra 2 topics, analytic trigonometry, matrices, analytic geometry, and probability. At the end of this course, the students will have a better understanding of algebra, as an approach to higher level courses such as Pre-Calculus or Honors Probability and Stats

## PRE-CALCULUS

This course is designed for students who successfully have completed Algebra 2 Honors by ninth grade. This course covers topics in Algebra ranging from polynomial, rational, and exponential functions to conic sections. Trigonometry concepts such as Law of Sines and Cosines will be introduced and get students ready for Calculus.

Broward County Public Schools

## AP STATS

This course is designed for students who have successfully completed Algebra 2 Honors by eleventh grade. The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

## AP CALCULUS AB

This course is designed for students who have successfully completed Pre-calculus by tenth grade. AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

## AP CALCULUS BC

This course is designed for students who have successfully completed AP Calculus AB by eleventh grade. AP Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.