

- **Mathematics For College Readiness**

- 1200700

- 1 year, Grades 11-12

- This course is targeted for grade 12 students, whose test scores on the Postsecondary Educational Readiness Test (PERT) are at or below the established cut scores for mathematics, indicating that they are not yet “college ready” in mathematics or simply need some more additional instruction in content to prepare them for success in college level mathematics. This class incorporates the Common Core Standards for Mathematical Content: Expressions and Equations; the Number System; Function; Algebra; Geometry; Number and Quantity; Statistics and Probability; and the Common Core Standards for High School Modeling. The standards align with the Mathematics Postsecondary Readiness Competencies deemed necessary for entry-level college courses.

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- **Trigonometry**

- 12113005

- ½ year, Grades 11-12

- Prerequisites: Algebra II or Algebra II Honors

- The purpose of this course is to provide students with the study of circular and trigonometric functions and their applications. Topics shall include, but not be limited to, circular functions; trigonometric identities; graphs of trigonometric functions; particular and general solutions of trigonometric equations; and solutions of right and oblique triangles.

- **SPECIAL NOTE:** The Earning of Credit in this course precludes the Earning of Credit in Analysis of Functions.

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- **Mathematics for College Success**

- 1200410

- 1/2 year, Grade 12

- This course is targeted for Grade 12 students, whose test scores on the Postsecondary Educational Readiness Test (P.E.R.T.) are below the established cut scores for mathematics, indicating that they are not yet “college ready” in mathematics. This course incorporates the Florida Standards for Mathematical Practices as well as the following Florida Standards for Mathematical Content: Expressions and Equations, The Number System, Ratios and Proportional Relationships, Functions, Algebra, Geometry, Number and Quantity, Statistics and Probability, and the Florida Standards for High School Modeling. The standards align with the Mathematics Postsecondary Readiness Competencies deemed necessary for entry-level college courses.

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- **Math Analysis Honors**
- *12013005*
- *1/2 year, Grades 11-12*
- *Prerequisites Trigonometry*
- Meets requirements Graduation requirements for mathematics. This course will enable students to extend their knowledge of functions, acquire additional modes of mathematical reasoning at an introductory level, and develop the skills necessary for the study of calculus.

- **Algebra I**
- *12003104*
- *1 year, Grades 9-12*
- Prerequisite: Test Scores
- Meets requirements: Graduation requirements for mathematics
- This course provides the foundation for more advanced mathematics courses and develops the skills needed to solve mathematical problems.

- **Algebra II**
- *12003304*
- *1 year, Grades 10-12*
- Prerequisites: Geometry or Geometry Honors
- Meets requirements: Graduation requirements for mathematics
- The purpose of this course is to continue the study of the structure of algebra and to provide the foundation for applying these skills to other mathematical and scientific fields. Topics shall include, but not be limited to, the review and extension of the structure and properties of the real number system; relations, functions and graphs; polynomials and rational expressions; quadratic equations and inequalities; polynomial functions; rational and irrational exponents; logarithms; complex numbers; and word problems. The earning of credit in this course precludes the earning of Credit in Algebra II Honors.

- **Algebra II Honors**
- 12003405
- 1 year, Grades 10-11 Prerequisites: Geometry or Geometry Honors / Gifted Placement
- Meets requirements: Graduation requirements for mathematics
- The purpose of this course is to present an in-depth study of the topics of Algebra II with emphasis on theory, proof, and development of formulas, as well as their application. Topics shall include, but not be limited to, algebraic structure; first degree equations in one and two variables solved algebraically and graphically; systems of equations and inequalities; functions and relations; polynomials and rational expressions; exponents and radicals; logarithms; complex numbers; conic sections; polynomial equations; sequences and series; permutations, combinations and probability; and matrices. The earning of Credit in this course precludes the earning of Credit in Algebra II.
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- **Pre-Calculus Honors**
- 12023405
- 1 year, Grades 11-12
- Prerequisites: Algebra II or Algebra II Honors
- Meets requirements: Graduation requirements for mathematics
- The purpose of this course is to study mathematics using functions as a unifying theme. Content shall include, but not be limited to, polynomial and rational functions, statistical and probability functions, exponential and logarithmic functions, and trigonometric and circular functions. This course is designed to follow Algebra II or Algebra II Honors. A Credit in this course precludes a Credit in Trigonometry or Trigonometry IB.
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- **Advanced Topics**
- 1298310
- 1 year, Grades 11-12
- Prerequisites: Geometry and Algebra II
- The purpose of this course prepare students who are interested in learning about advanced mathematical topics and improving their math proficiency. A course designed for students who have completed three years of high school mathematics including Algebra 2. The course includes discrete math topics, probability and statistics, and a survey of algebra 2 topics. For a student who desires college but has a “D” average in Algebra 2.

- **Advanced Placement Calculus AB**
- 12023109
- 1 year, Grades 11-12
- Prerequisite: Pre-Calculus
- Meets requirements: Graduation requirements for mathematics
- The purpose of this course is to provide a study of elementary functions and the general theory and techniques of calculus. The content should include, but not be limited to, that content determined in the Advanced Placement Program. It is required that the student takes the Advanced Placement Examination in Calculus BC or Calculus AB. It is required that the student take the National Advanced Placement exam at the end of the course.

- **Advanced Placement Computer Science**
- 0200320
- 1 year, Grade 11-12
- Prerequisite: Algebra II Honors with a grade “C” or higher
- This course emphasizes object-oriented computer programming methodology with a concentration on problem solving and algorithm development and is the equivalent of a first semester college level course in computer science. It is required that the student takes the Advanced Placement Examination in Computer Science A.

- **Advanced Placement Statistics**
- 12103209
- 1 year, Grades 11-12
- Prerequisite: Algebra II or Algebra II Honors
- Meets requirements: Graduation requirements for mathematics
- The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, evaluating, and drawing conclusions from data. Topics include exploratory analysis, planning a study, anticipating pattern, and statistical inference. It is required that the student takes the Advanced Placement Examination in Statistics. Credit in this course precludes credit in Probability and Statistics with Application and Using Probability and Statistics. It is required that the student take the National Advanced Placement exam at the end of the course.