

## **MATHEMATICS DEPARTMENT**

### **ALGEBRA I HONORS**

This semester course in algebra is designed for students who have above-average ability in mathematics. This course will focus on algebraic properties, linear equations, slope, factoring, simplifying algebraic expressions, as well as some probability and statistics. There is an emphasis on addressing the RI State GSE's.

Prerequisite: Teacher Recommendation from teacher in previous math course and NECAP scores.

Credit: 1

### **ALGEBRA PART I and PART II CP STANDARD**

This course will focus on algebraic properties, linear equations, slope, factoring, simplifying algebraic expressions, as well as some probability and statistics. There is an emphasis on addressing the RI State GSE's

Year Course

Prerequisite: Teacher Recommendation from teacher in previous math course and NECAP scores.

Credit: 2

### **ALGEBRA I INTEGRATED CP ESSENTIAL**

This course will focus on algebraic properties, linear equations, slope, factoring, simplifying algebraic expressions as well as some probability and statistics. There is an emphasis on addressing the RI State GSE's. This course will also include a math lab that will reinforce numeracy skills, computation facility, and problem-solving. The focus is on skill building through a variety of activities and exercises.

Year Course

Prerequisite: Teacher Recommendation from teacher in previous math course and NECAP scores.

Credit: 2

### **GEOMETRY HONORS**

This honors course will focus on the geometry RI State GSE's for math. Topics include congruence, similarity, triangles, polygons, circles, area and volume. An introduction to trigonometry and geometric proof. The course requires an excellent mastery of the skills and concepts from Algebra I.

Prerequisite: Teacher recommendation from teacher in previous math course and Algebra I.

Credit: 1

### **GEOMETRY CP STANDARD**

This course will focus on the geometry RI State GSE's for math. Topics include congruence, similarity, triangles, polygons, circles, area, and volume. An introduction to trigonometry and geometric proof. This is a full year course that meets every other day

Prerequisite: Teacher Recommendation from teacher in previous math course and Algebra I

Credit: 1

### **GEOMETRY INTEGRATED CP ESSENTIAL**

This course will focus on the geometry RI State GSE's for math. Topics include congruence, similarity, triangles, polygons, circles, area and volume. An introduction to trigonometry and geometric proof. This course will also include a math lab that will reinforce numeracy skills, computation facility, and problem-solving. The focus is on skill building through a variety of activities and exercises.

Year Course

Prerequisite: Teacher recommendation from teacher in previous math course and Algebra I

Credit: 2

### **ALGEBRA 2 & TRIGONOMETRY HONORS**

This second year algebra course puts an emphasis on RI State GSE's for math. Topics covered in depth include linear equations and inequalities, systems of equations, matrices, polynomials, factoring, radicals, rational numbers, sequence and series, matrices, logarithms, and analytical geometry.

Prerequisite: Teacher recommendation from teacher in previous math course and Geometry

Credits: 1

### **ALGEBRA 2 & TRIGONOMETRY CP STANDARD**

This course is a continuation of the Algebra I and Plane Geometry sequence. Topics include the study of functions, matrices, transformations and modeling real-world data.

Prerequisite: Teacher recommendation from teacher in previous math course and Geometry

Credit: 1

### **ALGEBRA 2 & TRIGONOMETRY CP ESSENTIAL**

This course is for those students who want to attend a 2 year college or technical school. The focus of this course is on functions, sequence and series, and trigonometry applications.

Prerequisite: Algebra I & Geometry Credit: 1

### **PRE-CALCULUS HONORS**

This is a highly rigorous study of functions to prepare students for Advanced Placement Calculus. Topics also include an extensive study of trigonometry, polar coordinates, sequences, probability, and limits. Students are required to purchase a programmable graphing calculator for this course.

Prerequisite: Honors Algebra 2 & Trigonometry or Advanced Math

Credit: 1

### **ADVANCED MATH CP STANDARD**

Students enrolled in this course complete the college preparatory sequence of math courses. This presents in-depth topics in functions, statistics and trigonometry. Juniors completing this sequence are eligible to take Pre-Calculus in their senior year. Students are urged to purchase their own programmable graphing calculator.

Prerequisite: College Prep Algebra 2 & Trigonometry

Credit: 1

### **CALCULUS AP/EEP**

This course is part of the College Board AP Calculus program and follows its syllabus. Students will study differential and integral calculus and complete topics studied in a college calculus course. Preparation for Advanced Placement Test in Calculus is included. . If a student wishes to enroll in the Early Enrollment Program through Rhode Island College, he/she must register at the beginning of the course and pay a \$135 fee to the college. The course instructor will determine whether or not a student deserves to receive college credit at the end of the course. To assure college credit, students are urged to attain a "B" or better average.

Year Course

Prerequisite: Honors Pre-Calculus

Credit: 2

### **CALCULUS HONORS/EEP**

A semester course designed for those college-bound students who desire a solid foundation in calculus. Emphasis is on depth of understanding of calculus prerequisites, limits, differential calculus, and an introduction to integral calculus. . If a student wishes to enroll in the Early Enrollment Program through Rhode Island College, he/she must register at the beginning of the course and pay a \$135 fee to the college. The course instructor will determine whether or not a student deserves to receive college credit at the end of the course. To assure college credit, students are urged to attain a "B" or better average.

Prerequisite: Pre-Calculus

or teacher recommendation Credit: 1

### **APPLIED MATH CP ESSENTIAL**

Enrollment in this course is limited to juniors and seniors.

Students who have had difficulty in meeting the math standards in algebra and geometry will be introduced to real world applications of integrated algebra and geometry concepts.

Prerequisites: Successful completion of Algebra I and Geometry

Credit: 1

## **ELECTIVE COURSES**

### **PROBABILITY AND STATISTICS I EEP**

A semester course intended for those college-bound students planning to pursue a career in mathematics, computer, or business applications; or who desire a more intense program in the study of probability and statistics. Topics include the collection, organization, analysis, and interpretation of data; the study of patterns/outcomes in probability, and the process of statistical inference. If a student wishes to enroll in the Early Enrollment Program through Rhode Island College, he/she must register at the beginning of the course and pay a \$135 fee to the college. The course instructor will determine whether or not a student deserves to receive college credit at the end of the course. To assure college credit, students are urged to attain a "B" or better average.

Prerequisite: Honors or College-Preparatory Algebra II and Trigonometry; CP Advanced Math or Teacher Recommendation.

Credit: 1

### **NECAP PREP COURSE**

This course is to prepare students to be ready to take and be successful on the NECAP math portion of the test. Students will be taught test taking strategies and key math concepts that are measured on the NECAP assessment.

Open to Grade 10

Prerequisite: None

Credit: .5 Meets Every Other Day For 1 Sem.

### **SAT PREP COURSE**

This course is to prepare students to be ready to take and be successful on the SAT math portion of the test. Students will be taught test taking strategies and key math concepts that are measured on the SAT assessment.

Open to Grade 10 and 11

Prerequisite: None

Credit: .5 Meets Every Other Day For 1 Sem.