MATHEMATICS

1200370   **Algebra 1 A**   **9th Grade**   **1.0 Credit**

Recommendation: FSA Math Score Level 1

The purpose of this course is to develop the algebraic concepts and processes that can be used to solve a variety of real world and mathematical problems.

1200310   **Algebra 1**   **9th Grade**   **1.0 Credit**

The purpose of this course is to develop the algebraic concepts and processes that can be used to solve a variety of real-world and mathematical problems.

1206310   **Geometry**   **9th – 12th Grades**   **1.0 Credit**

Prerequisite: Algebra 1

The purpose of this course is to develop the geometric relationships and deductive strategies that can be used to solve a variety of real world and mathematical problems.

1206320   **☆Geometry Honors**   **9th – 11th Grades**   **1.0 Credit**

Prerequisite: Algebra 1 or Algebra 1 Honors

The purpose of this course is to develop the geometric relationships and deductive strategies that can be used to solve a variety of real world and mathematical problems.

1208300   **Liberal Arts Mathematics 1**   **9th – 12th Grades**   **1.0 Credit**

Prerequisite: Algebra 1

The purpose of this course is to strengthen mathematical skills necessary for further study of advanced mathematics. The content should include algebra and geometry topics including polynomials, equations and functions, properties of two & three dimensional figures, perimeter, areas and volume.

1200700   **Mathematics for College Readiness**   **10th – 12th Grades**   **1.0 Credit**

Prerequisite: Algebra 1, Geometry

The purpose of the course is to strengthen the skill level of high school students who have completed Algebra 1 and Geometry and who wish to pursue credit generating mathematics courses at the college level.

1200330   **Algebra 2**   **9th – 12th Grades**   **1.0 Credit**

Prerequisite: Algebra 1, Geometry

The purpose of this course is to continue the study of algebra and to provide the foundation for applying algebraic skills to other mathematical and scientific fields.

★Level 3 Course for College Credit – Weighted to the 6.0 Scale | ☆Level 3 Course – Weighted to the 5.0 Scale
▼Performing & Practical Fine Arts Credit

1200340   ☆**Algebra 2 Honors**   **9th – 10th Grades**   **1.0 Credit**

Prerequisite: Algebra 1 or Algebra 1 Honors, Geometry or Geometry Honors

The purpose of this course is to continue the study of algebra and to provide the foundation for applying algebraic skills to other mathematical and scientific fields.

1202340   ☆**Pre-Calculus Honors**   **10th – 12th Grades**   **1.0 Credit**

Prerequisite: Algebra 2 or Algebra 2 Honors

The purpose of this course is to enable students to develop concepts and skills in advanced algebra, analytic geometry, and trigonometry.

1202310   ★**Advanced Placement Calculus AB**   **11th – 12th Grades**   **1.0 Credit**

Prerequisite: Pre-Calculus

This course 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.

1202320   ★**Advanced Placement Calculus BC**   **12th Grade**   **1.0 Credit**

Prerequisite: AP Calculus AB

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses. It extends the content learned in AB to different types of equations (polar, parametric, vector-valued) and new topics (such as Euler's method, integration by parts, partial fraction decomposition, and improper integrals), 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.

1210320   ★**Advanced Placement Statistics**   **11th – 12th Grades**   **1.0 Credit**

Prerequisite: Algebra 2 or Algebra 2 Honors

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students who successfully complete the course and exam may receive credit, advanced placement or both for a one-semester introductory college statistics course.

Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns and Statistical inference.

★Level 3 Course for College Credit – Weighted to the 6.0 Scale | ☆Level 3 Course – Weighted to the 5.0 Scale
▼Performing & Practical Fine Arts Credit

13

| **1201300** | **☆Math Analysis Honors** | **10th – 12th Grades** | **0.5 Credit** |

Prerequisite: Algebra 1, Geometry & College Ready Score

The purpose of this course is to continue to strengthen mathematical skills necessary for further study of advanced mathematics. The content should include algebra, geometry, statistics and finance.

| **MAT1033** | **★Intermediate Algebra** | **10th – 12th Grades** | **0.5 Credit** |

Prerequisite: Algebra 1, Geometry & College Ready Score

3 Hours College Elective Credit (on campus dual enrollment) Plus .5 High School Credit

This course includes the study of real numbers, linear and quadratic equations, linear inequalities, exponents, polynomials, factoring, rational expressions and other mathematical applications. Students must meet LSSC eligibility requirements for dual credit.

*NOTE: These 2 courses link together to give students 1 full credit.

★Level 3 Course for College Credit – Weighted to the 6.0 Scale | ☆Level 3 Course – Weighted to the 5.0 Scale
▼Performing & Practical Fine Arts Credit

14