COURSE DESCRIPTIONS
Mathematics 9-12

Algebra I………(36 Lessons) 1.0 Credits
This course teaches the concepts of introductory algebra in a visually captivating, interactive learning environment. Innovative activities relate mathematics to the real world and include sound, animation, and instant feedback. Topics include: absolute values, rational and irrational numbers, the four basic arithmetical operations, graphs, the point-slope formula and solving word problems as algebraic expressions.

Algebra I – mastery-based………(36 Lessons) 1.0 Credits – enrollment is based on the recommendation of a teacher/counselor
This course uses artificial intelligence (AI) to map the details of each student's knowledge. The course "knows," at each moment, with respect to each individual topic, whether each individual student has mastered that topic. The course uses this knowledge to make learning more efficient and effective by continuously offering the student a selection of only the topics he/she is ready to learn at the current time. This builds student confidence and learning momentum. Algebra I is a standards-based course that provides comprehensive coverage of the Common Core and State Standards (CCSS). It focuses on the algebra concepts and prerequisites typically covered in an Algebra 1 course including arithmetic readiness; real numbers; linear equations; linear inequalities; functions and lines; systems; exponents; polynomials and factoring; quadratic functions and equations; radicals; rational expressions; data analysis and probability. 855-246-4223 (Aim-4ACE) 13

Algebra II………(36 Lessons) 1.0 Credits
Elaborating on the lessons learned in Pre-Algebra and Algebra I, Algebra II broadens its scope to include the essential topics needed to be successful in College Algebra, PreCalculus, or Trigonometry. Topics include: functions, logarithmic functions, exponential functions, complex numbers, and more.

Algebra II Equivalent………(36 Lessons) 1.0 Credits (equivalent to Math 4)
This course meets the "equivalent" requirements for graduation. Elaborating on the lessons learned in Pre-Algebra and Algebra I, Algebra II equivalent broadens its scope to include the essential topics needed to be successful in Algebra II, Pre-Calculus, or Trigonometry. Topics include: functions, logarithmic functions, exponential functions, complex numbers, and more.

Basic Math/Integrated Math………(36 Lessons) 1.0 Credits
This course is designed for students who need to gain skills in Basic Math and Pre-Algebra. The course covers all the essential topics needed to be successful in future algebra courses. Topics include: fractions, order of operation, decimals, conversion of units, word problems, topics from geometry, and more.

Basic Math/Math Intervention………(36 Lessons) 1.0 Credits – enrollment is based on recommendation from teacher/counselor
This course uses artificial intelligence (AI) to map the details of each student's mastery-based knowledge. The course "knows," at each moment, with respect to each individual topic, whether each individual student has mastered that topic. It uses this knowledge to make learning more efficient and effective by continuously offering the student a selection of only the topics he/she is ready to learn at the current time. This builds student confidence and learning momentum. Basic Math/Math Intervention provides effective intervention for math students at almost any level. Topics of Intervention include: whole numbers; fractions; decimals; geometry; measurement and data; and algebra.

Calculus………(36 Lessons) 1.0 Credits
This course includes: algebra and geometry review; functions and graphs; polynomial and rational functions; exponential and logarithmic functions; trigonometry; systems of linear equations and matrices; sequences, series, and probability; conic sections; limits; and continuity.

Foundations of High School Math………(36 Lessons) 1.0 Credits
This course uses artificial intelligence (AI) to map the details of each student's knowledge. The course "knows," at each moment, with respect to each individual topic, whether each individual student has mastered that topic. It uses this knowledge to make learning more efficient and effective by continuously offering the student a selection of only the topics he/she is ready to learn at the current time. This builds

student confidence and learning momentum. This course is intended to develop mastery of the full breadth of middle school math concepts to facilitate success in high school mathematics, including algebra and geometry courses. Topics covered include whole numbers and integers; rational numbers; measurement, proportion, percents, and probability; variable expressions and equations; functions and graphs; and geometry.

Geometry………(36 Lessons) 1.0 Credits
Plane Geometry presents concepts of Euclidean space, proofs using deductive reasoning, an introduction to three-dimensional space, and applications of two- and three-dimensional spaces. Topics include: logic and proof; properties of triangles, polygons and circles; area and perimeter; surface area; and volume.

Geometry – mastery-based ………(36 Lessons) 1.0 Credits (equivalent to Math 3)
This course uses artificial intelligence (AI) to map the details of each student's knowledge. The system "knows," at each moment, with respect to each individual topic, whether each individual student has mastered that topic. It uses this knowledge to make learning more efficient and effective by continuously offering the student a selection of only the topics 14 www.acedigitalacademy.net he/she is ready to learn at the current time. This builds student confidence and learning momentum. Geometry offers comprehensive, standards-based coverage, and includes reporting against the Common Core Standards. Topics covered in geometry include: algebra and deductive reasoning; lines and angles; triangles; polygons and circles; similarities and transformations; volumes and surface areas; and coordinate geometry.

Introduction to Statistics………(36 Lessons) 1.0 Credits
Students navigate learning paths based on their level of readiness. This course mastery-based covers the following topics shown below: numbers, algebraic expressions, linear equations, lines in the coordinate plane, descriptive statistics, counting, and probability.

Math for College Success………(36 Lessons) 1.0 Credits
Math for College Success prepares students to achieve success in college mathematics mastery-based by developing thorough mastery of the algebra topics necessary for students to progress into Intermediate Algebra and to transition to the rigors of college mathematics.

Math Proficiency………(18 Lessons) 0.5 Credits
Topics include: arithmetic, measurement, geometry, data analysis and basic algebra. The course also provides test-taking strategies and sample test problems.

Pre-Algebra………(36 Lessons) 1.0 Credits
Pre-Algebra is an engaging blend of animated and interactive learning activities, graphically enhanced instruction, and written explanation. The course covers the following areas in detail to prepare students for Algebra 1: types of numbers, estimation, order of operations, negatives and absolute values, calculating with negative numbers, fractions, decimals and percent basics (applying to real-world situations), algebraic reasoning (inductive and deductive), sequences and patterns, how to approach and solve complex problems, working with exponents, and powers and working with roots.

Pre-Calculus………(36 Lessons) 1.0 Credits
Students navigate learning paths based on their level of readiness. This course includes the following topics: algebra/geometry review, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometry, systems of linear equations and matrices, sequences, series, and probability, conic sections, limits and continuity.

Survival Math………(18 Lessons) 0.5 Credits
Students identify and practice skills essential to independent living. Exercises provide challenges in day-to-day living, including purchases, living expenses, health care decisions, and future planning to improve real-world knowledge and build self-confidence.

Trigonometry………(36 Lessons) 1.0 Credits
Course topics include: angles, sides of triangles, right triangles, circular functions, degree/radian measures of angles, trigonometric functions of angles, inverse functions, identities, graphic representations of trigonometric functions, solutions of right and oblique triangles equations, vectors, complex numbers, and polar coordinates.