# **COURSE DESCRIPTIONS**

#### Grade 8

### English 8<sup>th</sup> (36 Lessons)

8th Grade English is a literature-based language arts course. The course contains six genre units: Fiction and nonfiction, 8 www.acedigitalacademy.net short stories, types of nonfiction, poetry, drama, and themes in American literature.

### Math 8 - Pre-Algebra (36 Lessons)

This course provides students with a solid preparation for algebra and geometry. Students will build on previously developed arithmetic skills to expand their algebraic thinking skills. Students will cover topics including solving equations and inequalities containing fractions and decimals, ratios, linear functions, graphing, spatial thinking, finding area and volume of geometric figures, and right triangles.

#### Math 8 - mastery-based (36 Lessons)

Math 8 mastery-based uses artificial intelligence to build individualized courses for each student based upon his/her current knowledge level. The system "knows," with respect to each individual topic, whether each individual student has mastered that topic. If not, the student is offered a selection of only the topics he/she is ready to learn at the current time. This builds student confidence and learning momentum. Course topics include: whole numbers and integers; rational numbers; proportion, percent, data and probability; variable expressions and equations; functions and graphs; exponents; and polynomials.

### Science 8 - Physical Science (36 Lessons)

Students will learn about physical science, which encompasses a broad range of phenomena, generally focusing on nonliving things. How does a ball bounce? Is yeast alive or not? Which way do comet tails point? Can you make a shadow disappear? What happens when you breathe on a mirror? Can water and oil mix? What makes an object move in a circle? These are only a few questions to which students will be learning the answers.

## Social Studies 8 (36 Lessons)

This course focuses on the political, cultural and social development of the United States. The course begins with a brief review of early exploration and settlement,

beginning with the prehistoric migration of Asiatic tribes, and concluding with the arrival of European settlers.

8th Grade Health & Physical Education Portfolio (36 Lessons)

The Eighth Grade Physical Education and Health Portfolio combines a semester of PE with a semester of Health, all in a fun format. Students choose their own physical education activities while studying the important health topics appropriate to the eighth grade. (Not for high school credit)