



11th Grade Course Descriptions

HUMANITIES

Humanities III (English 11, Medieval History, & Bible III)

Humanities III utilizes the *Omnibus* curriculum (Veritas Press), a Great Books curriculum that grounds students in their faith. The students engage in material from some of the greatest thinkers alive and analyze the ideas presented from a Biblical worldview through a variety of methods such as discussion, debate, and writing. Humanities II combines history, theology, and literature to help students grow in their appreciation of the unity of all knowledge.

Humanities II students engage in readings and discussions focused on the Medieval time period (180 - 1563) using *Omnibus V*. Examples of material covered are *The City of God*, *The Divine Comedy*, and *the Canterbury Tales*.

SCIENCE

Physics

Apologia's *Exploring Creation with Physics*, course is designed to provide students with a foundational understanding of physics while also preparing them for college-level physics. Because the science of physics is an attempt to explain everything that is observed in nature, this text is an overview of the advances made over the last three thousand years! When your student completes Apologia's physics course, your student will be able to relate velocity, acceleration, time, and displacement, use mathematical equations for one-dimensional motion, understand and apply Newton's Laws, and be able to see the strong connection between math and science.

Prerequisite: Students must have earned a C or higher in Algebra I and Geometry.

MATH

Geometry

This course in Geometry will be using the textbook *Geometry* (Prentice Hall Mathematics). Students will focus on several core topics, which include the following: tools of geometry, reasoning and proof, parallel and perpendicular lines, triangles, quadrilaterals, area, similarity, right triangle trigonometry, surface area and volume, circles, and transformations. Lecture with note taking will be followed by class time

working on assignments. Time will be spent investigating and consolidating concepts and procedures. Problem solving strategies are explicitly taught and then used to develop core concepts and solve challenging problems. The concepts developed in this class will carry on in future mathematics courses.

Prerequisite: Students must have earned a C or higher in Algebra I.

Algebra II

This course in Algebra II will be using the textbook *Algebra II* (Prentice Hall Mathematics). Students will focus on several core topics, which include the following: tools of algebra; functions, equations, and graphs; linear systems; matrices; quadratic equations, functions, and relations; polynomials and polynomial functions; radical functions and rational exponents; exponential and logarithmic functions; rational functions; sequences and series; probability and statistics; periodic functions and trigonometry. Lecture with note taking will be followed by class time working on assignments. Time will be spent investigating and consolidating concepts and procedures. Problem solving strategies are explicitly taught and then used to develop core concepts and solve challenging problems. The concepts developed in this class will carry on in future mathematics courses.

Prerequisite: Students must have earned a C or higher in Geometry.

Pre-Calculus

The Shormann Precalculus self-paced e-learning course provides a comprehensive teaching of standard precalculus topics, with a special emphasis on advanced algebra and trigonometry topics found on the CLEP Precalculus Exam. Functions are a priority, with both standard and real-world applications of the following types: linear, quadratic, cubic, polynomial, rational, exponential, logarithmic, absolute value, trigonometric and piecewise-defined. Students learn to work with functions presented in graphic, symbolic, verbal and numeric form. Calculus fundamentals are also presented and practiced, which improves student confidence and success in college-level Calculus I.

Prerequisite: Students must have earned a C or higher in Algebra I, Algebra II, and Geometry.

ELECTIVES AND DUAL ENROLLMENT

Juniors will have the opportunity to participate in offered electives and/or dual enrollment classes. These options will be discussed with the guidance counselor.