EAGLE HEIGHTS CHRISTIAN ACADEMY

Isaiah 40:31 eagle-heights.org

12th Grade Course Goals

Bible: This course is taught from the absolute belief that God is who He says He is according to His Scriptures. The goal of the class is to develop students' love for Jesus Christ, building a Christian Worldview. This will be accomplished by means of the study of the Bible, discussion of contemporary issues, and teaching on the disciplines of Christianity.

Government/ Economics: Government and Economics is a comprehensive survey of American government and economics and is intended to give the high school student a solid foundation of knowledge. The primary purpose of this Christian course of study is to produce students who are conformed to Christ's image and possess a Christian worldview as they develop an understanding of America's government, how it works, and his/her responsibilities to this government.

English: Subject matter for twelfth grade English includes writing, grammar, literature and vocabulary. Students will expand their knowledge and skills of grammar, sentence structure and vocabulary. Students will implement these skills through their own writing. Twelfth grade English students will reinforce writing skills by creating the following pieces: research paper; analytical essay; in-class essay; and critical response to literature. Experiencing these forms of writing will enable them to demonstrate their growth as children of God. The course will focus on reading grade level appropriate novels and other forms of British Literature to improve comprehension skills; analyzing literature and interpreting literature's meaning; analyzing character development and making inferences about motivation; and comparing and contrasting types of literature. Students will be able to define and identify literary elements (such as setting, point of view, characterization, etc.) and respond to literature on a personal level. Students will utilize the vocabulary within novels. Students will understand the value of language and literature and see the importance of communication.

Mathematics: In Pre-calculus, as students learn mathematical concepts such as number systems, operations, geometry, and functions, they will begin to understand and appreciate the perfection of God and his creation, especially His created order in mathematics. In this course, students will develop critical thinking and reasoning skills in problem-solving situations as well as develop speed and accuracy in computation. This course will help equip students as they understand the value of mathematics for their Christian growth and service.

Science: Physics will be taught from a Christian perspective as students learn about forces, movement, mechanics, and energy. The course will focus on the foundations of electricity, magnetism, and optics. It will stress a logical problem solving approach to solving problems. In addition, students will recognize that science is a tool to be used under the authority of the Word of God.

Computer: Students will acquire a solid understanding of business computer technology. The first semester will cover an in-depth study of personal and business computer skills, including communication in the workplace, business technology, keyboarding review, word processing, spreadsheets, and database applications, as well as understanding software and hardware. The second semester will examine electronic communications, desktop publishing, presentation guidelines, computer networks, and operating systems.

Elective: 11th and 12th grade students will take two ½ credit courses each year that will be offered in a non-traditional format. Students will work independently on course-work with the teacher acting as facilitator to guide, monitor and evaluate work, answer questions, and give instruction as needed. Courses are from a biblical perspective. Students will be given the opportunity to choose courses from a specified list. Students may choose to take dual-credit courses in an online format through an accredited Christian University. Dual-credit courses must be approved by Administration. Parents are responsible for enrollment and additional tuition costs through the university.

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12th Grade Curriculum

English IV (BJUP):

Approach
Historical
Organization
Four major literary divisions: the Middle Ages; the Renaissance; the Age of Revolution; the Age of Reform
Content
The Middle Ages: the Old English period; the Middle English period
The Renaissance: the Tudor period; the Stuart period
The Age of Revolution: the Neoclassic period; the Romantic period
The Age of Reform: the Victorian period; the Modern period
Features
The units are arranged according to major literary periods. The material provided through the unit introductions, headnotes, and timelines enables the student to analyze individual authors and their works in a historical and cultural context. Such analysis serves to broaden the student's world, enabling him to understand the ideas and writings of noted literary and historical figures and to apply biblical criteria when evaluating the beliefs espoused by such figures. The questions for thought and discussion, which follow the selections, progress from factual to evaluative and are valuable both for class discussion and for providing students with an opportunity to develop further literary and moral discernment.

American Government (BJUP):

Geography
References to political geography
History
Historical perspective of the phases of American government
Government
Thorough analysis of all levels and all branches of American government
Economics
Taxation, bureaucratic funding, and foreign policy impact on U.S. economy
Religion
Scriptural foundation for law and government; influence of Christianity in early America
Culture
Interest groups; mass media; American political behavior

Economics (BJUP):

Geography
Case studies of economic issues in eighteen nations
History
Biographies of eighteen influential economists
Government
Comparative economic systems; business and competition; money and banking; national economic concerns such as productivity, unemployment, and inflation
Economics
Survey of basic economic topics, including supply and demand and the circular flow of income and products
Religion
Scriptural principles applies to all areas of economics
Culture
Analysis of personal economic concerns such as budgeting, managing credit, saving, and financial planning

Physics (BJUP):

Framework: the Christian worldview in which we do science in obedience to God's commandment to exercise good stewardship over the earth for His glory and for the benefit of our fellow humans; the structure and limitations of science; overview of physics; scientific methodology and modeling; the metric (SI) system of measurement as well as principles of measurement; rules for determining and using significant digits in measurements and calculations
Classical Mechanics: mathematical description of motion in one and two dimensions (kinematics of motion); vectors and scalars in graphical and analytical solutions; forces and the causes of motion according to Newton's laws (dynamics); friction; motion in a plane, including circular motion; motion of multi-body systems; work, energy, and total mechanical energy; conservation of energy and simple machines; momentum and its conservation, collisions, center of mass, and angular momentum; periodic and simple harmonic motion, the pendulum, damped and driven oscillations, and physical waves
Thermodynamics and Matter: Kinetic-molecular theory of matter and the states of matter; thermal properties of matter, measuring temperature, and the gas laws; theories of heat, thermal energy, mechanisms for heat transfer; the four laws of thermodynamics; entropy and its consequences; fluid mechanics (hydrostatics and hydrodynamics)
Electromagnetics: electrostatics and charges; electric fields and capacitors; current, voltage, resistance, and basic DC circuits; transistor theory; magnetism and its relationship to current and conductors; electromagnetism and alternating currents; AC circuit characteristics
Geometric Optics and Light: the electromagnetic spectrum, sources and propagation of light; reflection and mirrors; refraction and lenses; wave interference, diffraction, and polarization; intensity and color of light; optical instruments (telescopes, microscopes, etc.)
Modern Physics: Relativity: Galilean relativity, special relativity, and general relativity; Quantum Physics: quantum theory, quantum mechanics, the atom, and modern atomic models; Nuclear Physics: radiation and radioactivity, radioactive decay, nuclear reactions, and elementary/subatomic particles

Pre-Calculus (Holt):

Trigonometry: reference angles; Law of Sines; Law of Cosines
Polynomials: linear, quadratic, and polynomial functions; factoring higher degree polynomials; zeros; graphing
Functions: power; exponential; piece; periodic; trigonometric; reciprocal; rational
Inverse functions: increasing and decreasing functions; checking and finding inverses; radical functions; inverse trigonometric functions; logarithms
Equations: polynomial; rational; radical; logarithmic; exponential functions; identities; trigonometric equations
Conic sections and polar graphs: circles; ellipses; parabolas; hyperbolas; variation; polar coordinates; polar equations
Complex numbers: graphs; polar form; powers and roots; vectors; dot products; applications
Matrix algebra: Gaussian elimination; determinants; Cramer's rule; inverses
Statistics: central tendency; variability; bell curve; linear correlation; hypothesis testing
Sequences: recursive and explicit formulas; arithmetic and geometric sequences; mathematical induction; summation
Limits and calculus: limits of sequences; series; limits of functions; continuous functions; asymptotes; limit theorems
Differential calculus: definition; graphs, properties; chain rule; quotient rule; motion applications

BCIS: Business Computer Information Systems (Alpha Omega):

- Communication in the workplace
- Business technology
- Keyboarding review
- Word processing
- Spreadsheets
- Database Applications
- Understanding Software and Hardware
- Electronic Communications
- Desktop Publishing
- Presentation Guidelines
- Computer Networks
- Operating Systems

Bible:

In-depth study of the books of Nahum and Habakkuk
In-depth study of the books of Zechariah and Malachi
In-depth study of the book of 2 Corinthians
Character study of Joseph – Genesis 37-50

BJUP – Bob Jones University Press