EAGLE HEIGHTS CHRISTIAN ACADEMY

Isaiah 40:31 eagle-heights.org

11th 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.

History: This course is a comprehensive study of United States history, and is intended to give students a solid foundation about the heritage of this country. Studies will reveal God's providence in the shaping of this country. Units covered include: exploration and colonization, post-Civil War development, the post-World War II era, and the contemporary United States.

English: Subject matter for eleventh 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. Eleventh 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 American 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 Algebra II, 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: Chemistry will include a comprehensive study of chemistry through classroom discussion to help solidify the topics introduced. It will be taught from a Biblical worldview that stresses spiritual and academic growth.

Health: In this semester course, students will gain a deeper knowledge of total health: physical, mental, social, and spiritual wellness. This knowledge will lead to a greater appreciation of the human body as a beautiful creation designed by God.

Speech: The purpose of this one semester course is to introduce public speaking with the goal of students becoming competent communicators. Students will understand the communication process and improve communication skills. They will learn to create and perform different styles of speeches including informative speech, persuasive speech, and debate.

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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11th Grade Curriculum

English III (BJUP):

Approach
Historical
Organization
Four major literary divisions: early American literature; American romanticism; American realism and naturalism; modern American literature
Content
Early American literature: settlement; religious experience; revolution
American romanticism: Knickerbockers; New England School; transcendental optimists; transcendental pessimists
American realism and naturalism: regionalists; realists; naturalists; anti-naturalists
Modern American literature: modern poetry; modern prose; short fiction; essay; drama
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.

United States History (BJUP):

Geography
Influence of physical geography on American history
History
Chronological survey of American history from European discovery to the present
Government
Structure of American government; the Constitution
Economics
Development of free-enterprise system
Religion
Contributions of various religions, especially Christianity, to America's heritage
Culture
Integration of various facets of American culture; cultural change

Chemistry (BJUP):

Foundations of chemistry
history, role, and potential of chemistry; a Christian perspective on studying science
Matter
states of matter, interactions with energy, phase changes
Measuring and calculating
measurement systems, SI units, significant digits in measurement and calculation, organized problem solving
Atomic structure
Historical development of atomic models, subatomic particles, orbitals, quantum numbers, orbital notation, electron configuration and isotopic notation
Elements
development of the modern periodic table, descriptive chemistry, periodic trends of atomic and ionic radius, electronegativity, electron affinity, ionization energy
Chemical bonds
causes and types of bonding, Lewis structures, formula units, properties of different kinds of compounds
Molecular Geometry
valence bond theory, molecular resonance, molecular orbital theory, valence shell electron pair repulsion theory, molecular shapes, polar covalent bonds
Chemical composition and reactions
oxidation numbers, writing formulas, chemical nomenclature, polyatomic ions, balancing chemical equations, types of reactions
Chemical calculations
the mole; structural, molecular, and empirical formulas; percent composition; stoichiometric conversions; limiting reactants; percent yield
Gases
properties of gases, measuring pressure, gas laws, partial pressures, stoichiometric conversions with gases
Solids and liquids
Intermolecular forces, properties of solids and liquids, phase changes, crystalline solids, phase diagrams
Solutions
solution types, solvation, solubility, rate of solution, measuring concentration, colligative properties, colloids
Chemical thermodynamics
thermochemistry, enthalpy, specific heat, reaction tendency, entropy, free-energy change
Chemical kinetics
energy diagrams, rates of reactions, reaction mechanisms, rate laws
Chemical equilibrium
Reversible and irreversible reactions, equilibrium concentrations, equilibrium constants, Le Châtelier's principle, applications of equilibrium chemistry
Acids, bases, and salts
Properties of acids and bases, acid and base definitions, pH and pOH scales, neutralization, titrations, buffers
Oxidation-reduction
redox reactions, electrochemistry, electrolytic cells, electrolysis, voltaic cells
Organic chemistry and biochemistry
organic compounds, hydrocarbons, functional groups, organic reactions, carbohydrates, proteins, lipids
Modern materials
ceramics, polymers, plastic recycling, nanotechnology
Nuclear chemistry
nuclear reactions; alpha, beta, and gamma radiation; measuring radiation; nuclear equations; induced reactions

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Algebra II (Holt):

Operations
Real numbers
Polynomial operations
Factoring
Linear equations and functions
Solving equations and inequalities
Absolute value equations and inequalities
Compound inequalities
Graphs
Linear functions
Slope
Operations on functions
Linear inequalities
Distance
Midpoint
Quadratic equations and functions
Factoring
Completing the Square
Quadratic formula
Quadratic inequalities
Quadratic functions
Transformations
Zeros of a function
Remainder and factor theorem
Graphing polynomial functions
Systems
Graphing
Substitution
Addition Method
Systems of inequalities
Linear programming
Radical and exponential functions
Simplification
Operations
Equations
Functions
Complex numbers
Operations
Solutions to quadratic equations
Graphs of complex numbers
Vectors
Rational expressions
Simplifying
Operations
Functions and equations
Direct and indirect variation
Trigonometry
Right triangle trigonometry
Special triangles
Radians
Trig functions and graphs
Amplitude and period
Identities
Law of Sines
Law of Cosines
Trigonometric equations
Analytical geometry
Circles
Parabolas
Ellipses
Hyperbolas
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

Speech (NTC):

The communication process
Elements of communication
Speaking and listening
Communicating competently
Communication with others
Communication in groups
Forms of group discussion
Introduction to public speaking
Finding and using information
Constructing speeches
Delivering speeches
Informative speech
Persuasive speech
Debate
Interpretive communication

Health (ACSI):

Human anatomy and physiology
Nutrition
Fitness and Exercise
Infectious and Noninfectious Diseases
Mental Health
Social Health
Basic First Aid
Spiritual Health

BJUP – Bob Jones University Press
ACSI – Association of Christian Schools International

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11th Grade