Grade 11

Bible 11The Way of the Word

• Teaches methods of Bible study, including principles of interpretation and application; includes exercises that study a passage according to genre and context and apply Scripture to contemporary situations

Beyond the Sun

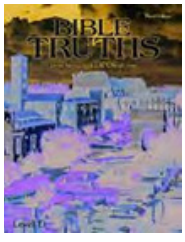
• Presents an expositional view of Ecclesiastes, revealing God's perspective on the meaning of life in a fallen world

What Is Truth?

• Contrasts the Christian worldview with the basic tenets of Hinduism, Buddhism, secular humanism, and postmodernism

Bible Truths

3rd Edition



Bible Content

• Studies of the prison and pastoral epistles, general epistles, and prophecy from Revelation

Applying the Bible to Life

• Focuses on practical principles derived from epistles and prophecies

Special Studies

• Character studies on Cerinthus, Mark, Peter, and John; study of several New Testament cities

Additional Resources

• A chart listing author, date, origin, recipients, and themes of each book

Memory Verses

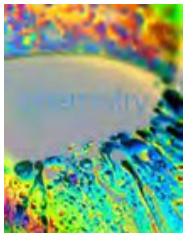
• 94 verses

Number of Lessons

• 57 lessons in four units

Chemistry

5th Edition



Foundations of Chemistry

• Chemistry: modeling matter, chemistry and worldview, chemistry and modeling, chemistry helps people, a biblical worldview of chemistry, doing chemistry, scientific inquiry, thinking like a scientist

Matter

• Classification of matter, organizing our study, properties and changes of matter, classification of matter, energy and matter, work and energy, conservation of mass-energy, the law of entropy, thermal energy, temperature, and heat, states of matter, changes of state

Measurements in Chemistry

• Measurement systems, metric system, unit conversion, measurements, limitations of measurements, accuracy, precision, significant figures, problem solving in chemistry, calculations with measured data

Atomic Structure

• Early thoughts about matter, investigating atoms, Dalton's model, development of atomic models, Thomson's model, Rutherford's model, completing Rutherford's model, useful notations, isotopes

Electron Arrangement

• Bohr model, electron energy levels, the quantum-mechanical model, electron configurations, valence electrons, electron dot notation, ions

Periodic Table and Elements

• Early organization, element periodicity, Mendeleev's periodic table, the modern periodic table, periodic trends, elements by their groups

Chemical Bonds

• Bonding basics, octet rule, types of chemical bonds, polarity and bond character, covalent bonding, diatomic elements, Lewis structures, ionic bonding, the structure of ionic compounds, polyatomic ions, metallic bonding, properties of compounds, using chemistry to solve problems

Bond Theories and Molecular Geometry

• Bond theories, limits of Lewis structures, orbitals and valence bond theory, molecular resonance, when the octet rule doesn't work, molecular orbital theory, molecular geometry, VSEPR and molecular shape, orbital hybridization, a measure of polarity, water molecules designed for usefulness, seeking the perfect bonding model

Chemical Compounds

• Ionic compounds, oxidation numbers, using oxidation numbers, polyatomic ions, covalent compounds, nonmetals with multiple oxidation numbers, writing chemical formulas, naming compounds, acids, binary acids, ternary acids

Chemical Reactions and Equations

• Chemical equations, information in chemical equations, balancing equations, special symbols in equations, limitations of balanced

equations, types of reactions, ionic equations

Chemical Calculations

• The mole, Avogadro's number, molar mass, types of formulas, percent composition, empirical formulas, stoichiometry, limiting reactants, percent yield

Gases

• Properties of gases, kinetic-molecular description of gases, properties of gases, gas laws, standard conditions, Dalton's law of partial pressures: mixtures of gases, gas stoichiometry, gases in reactions, molar volume, ideal gases, ideal gas law

Solids and Liquids

• Intermolecular forces, kinetic description of solids, crystalline and amorphous solids, crystalline structures, kinetic description of liquids, effects of intermolecular attractions, vapor pressure and boiling point, distilling liquids, phase diagrams, using liquids to solve problems

Solutions

• The dissolving process, types of solutions, the dissolving process, solvent selectivity, solution equilibria, rate of solution, solubility, measures of concentration, colligative properties, suspensions and colloids, properties of colloids

Thermochemistry

• Thermodynamics and physical changes, measuring heat and temperature, enthalpy of phase changes, specific heat, thermodynamics and chemical changes, reaction tendency, chemical bonds and enthalpy, entropy and reaction tendency, entropy changes, free-energy change, worldview conflict in thermodynamics

Chemical Kinetics

• Reaction rates, kinetics, energy diagrams, collision theory, activation energy and the activated complex, rates of reactions, reaction mechanisms, rate laws and reaction orders, kinetics in the real world

Chemical Equilibrium

• Equilibrium, equilibrium constants, le Châtelier's principle, equilibria and industry, solution equilibrium, ionic equilibria, common-ion effect, precipitation reactions

Acids, Bases, and Salts

• Defining acids and bases, properties of acids and bases, models of acids and bases, acid-base equilibria, self-ionization of water, pH and pOH scales, acid-base strength, amphoteric substances, polyprotic acids, measuring pH, neutralization, salts, titration, buffers

Oxidation and Reduction

• Redox reactions, oxidation, reduction, oxidizing and reducing agents, using oxidation to solve problems, balancing redox reactions, electrochemical reactions, electrochemical cells, electrolytic cells, voltaic cells

Organic Chemistry

• Organic compounds, unique carbon atom, classification of hydrocarbons, substituted hydrocarbons, alcohols, ethers, aldehydes and ketones, carboxylic acids, esters, amines and amides, organic reactions

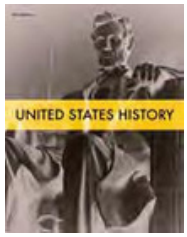
Biochemistry

• Chemistry of life, chemical reactions in cells, biochemistry and ultimate questions, carbohydrates, lipids, proteins, polypeptide chains, enzymes, nucleic acids, amino acids, worldview conflict in biochemistry

Nuclear Chemistry

• Inside the nucleus, nuclear stability, energy and nuclear changes, measuring radiation, radioactive decay, predicting types of decay, radioactive decay series, half-life, using nuclear chemistry, nuclear reactions, fission, fusion, using nuclear chemistry to solve problems

United States History
5th Edition



Topic

• United States history

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 and effects of government involvement

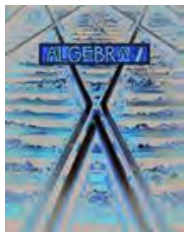
Religion

• Contributions of various religions, especially Christianity, to America's heritage

Culture

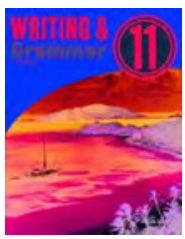
• Integration of various facets of American culture; cultural change

Algebra 2
3rd Edition



- **Basic algebra:** real numbers; solving equations and inequalities; absolute value equations and inequalities; distance on number lines; word problems; compound inequalities
- **Linear relations:** graphs of linear functions; slopes; special functions; linear inequalities; distances and midpoints; modeling with linear regressions
- **Systems:** solved graphically and algebraically; systems of inequalities; systems of three variables; problem solving; linear programming
- **Matrices:** organizing data; operations; determinants; solving systems using Cramer's rule and inverse matrices; transformations
- **Quadratic equations:** solving by factoring, taking roots, complex numbers, completing the square, and the quadratic formula; using the discriminant; complex roots; quadratic inequalities
- **Polynomial functions:** roots, graphing, and modeling with quadratic and polynomial functions; problem solving; rational root, remainder, and factor theorems; fundamental theorem of algebra
- **Radicals and exponents:** rational exponents; inverse functions, simplifying expressions; solving equations, graphing and modeling with radical and exponential functions
- **Exponential and logarithmic functions:** operations, inverse relations and functions, using exponential and logarithmic functions, natural logarithms
- **Rational expressions:** simplifying; solving equations; graphing; variations
- **Trigonometry:** right triangle and coordinate plane trigonometry; special triangles and the unit circle; radians; graphs of trigonometric functions, inverse functions
- **Trigonometric identities:** law of sines; law of cosines; problem solving; proving identities; trigonometric equations
- **Sequences and series:** explicit and recursive formulas; arithmetic and geometric sequences and series; summation notation
- **Probability and statistics:** counting principles; theoretical and experimental probabilities; independent, dependent, and mutually exclusive events; binomial distribution, descriptive statistics, representing data; normal distributions; making inferences
- **Conic sections:** circles; parabolas; ellipses; hyperbolas; systems of quadratic relations

Writing & Grammar*
3rd Edition



Parts of Speech (and Verbals)
- Review of all from Grade 10 plus the following new material: verb—verb-adverb combinations; adverb—indefinite relative, interrogative; conjunction—phrasal subordinating; verbals—perfect participle, passive gerund, perfect infinitive, progressive infinitive, elliptical infinitive

Sentence Structure
- Review of all from Grade 10 plus the following new material: sentence patterns—retained object in passive sentence

Mechanics
- Capitalization; punctuation; appendix of spelling rules

Usage
- Review of all from Grade 10 plus the following new material: pronoun shift; verb tense consistency and sequence

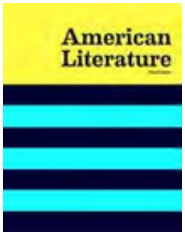
Writing Skills
- Review of all from Grade 10 plus the following new material: paragraph organization—cause-and-effect order, comparison-and-contrast order; sentence energy—pauses for breath; parallelism—clarity; sentence logic—direct expression, logical predication, avoiding mixed constructions, using noun clauses when needed, ending in strength, linking with new information

Examples of Writing Projects
- Description: interview
- Exposition: formal-research paper, analytical essay, critical response to literature
- Narration: narrative poem, folktale
- Persuasion: letter to editor
- Poetry: hymn

Study and Reference Skills
- Review of all from Grade 10 plus the following new material: reference tools—literary index, literary sources

*The English 11 video course is a yearlong course that covers both *American Literature* and *Writing & Grammar* every day. Daily lessons will focus on literature and writing while covering grammar in review. Material in the books that is not covered in the video course is represented in italics. Please feel free to supplement the course with the material not covered as necessary.

American Literature*
3rd Edition



Approach
• Historical

Organization
• Five major literary divisions: early American literature, American romanticism, American realism and naturalism, modern American literature, contemporary American literature

Content
• Early American literature: settlement, religious experience, revolution
• American romanticism: minor romantics (Knickerbockers, New England School), major romantics (transcendental optimists, transcendental pessimists), voices of conflict
• American realism and naturalism: regionalists, realists and naturalists
• Modern American literature: modern poetry, modern prose and drama
• Contemporary American literature: contemporary poetry, contemporary prose

Features
• The units are arranged according to major literary periods. Timelines, unit and chapter introductions, author biographies, and brief headnotes help students build necessary background knowledge of the historical and cultural context from which a literary work arises.
• A before-reading page precedes each selection and introduces students to three reading tasks: analyzing a work for its technical features, employing a reading strategy to aid comprehension, and evaluating a work's ideas from a biblical worldview. These three tasks help students develop critical-thinking skills and a deep understanding of the ideas and writings of literary and historical figures.
• During-reading questions, which appear throughout each selection in the margin, guide students through the three reading tasks.
• After reading, students answer "Think and Discuss" questions, many of which require them to demonstrate a high level of understanding of the concepts traced throughout their reading and lesson.

*The English 11 video course is a yearlong course that covers both *American Literature* and *Writing & Grammar* every day. Daily lessons will focus on literature and writing while covering grammar in review. Material in the books that is not covered in the video course is represented in italics. Please feel free to supplement the course with the material not covered as necessary.

Vocabulary
Level E
3rd Edition

Approach
• Uses context as a major means of learning

Plan
• Includes 15 two-part lessons, 15 cumulative reviews, and a supplement containing various types of reinforcement and vocabulary-building exercises (games, puzzles, contests, etc.)

Features
• Uses a variety of learning methods, including word stories and spelling helps; lessons that incorporate biblical stories with a focus on character building and often relate to other subjects students may be learning

Content
• Focuses on sources of English words, coined words, French words, Greek and Latin loan words, allusions, back-formation, and folk etymology

Exploring Cration with Advanced Biology

Apologia's award-winning Advanced Biology curriculum is written to your student in a conversational tone and cultivates independent learning. The lessons and illustrations are also designed to engage them both analytically and creatively. This course will provide them with an advanced understanding of biology while also preparing them for college-level biology and the ACT. They'll learn about the body's organ systems, ranging from the digestive and respiratory systems to the endocrine and lymphatic systems. It also covers the reproductive system in detail, but is done so with respectful illustrations and descriptions.

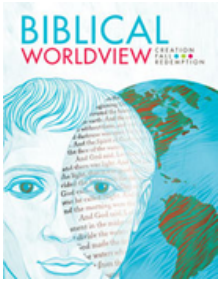
Curriculum Overview:

From the smallest, most imperceptible parts to the largest, and most familiar ones, this course focuses on the anatomy and physiology of the human body and its organ systems. In this course, your student will be intellectually challenged but also supported as they work through science concepts and thought-provoking (and fun!) experiments. Guided through a personalized format, they methodically learn, self-check, and master difficult concepts before moving on.

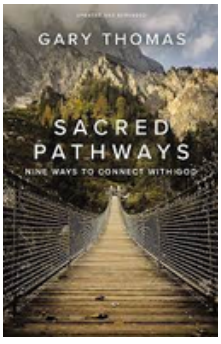
In this course they will learn:

Foundational Anatomy and Physiology concepts
Histology (the study of tissues)
Integumentary and Skeletal systems
Skeletal Systems Histology and Movement
Muscular System Histology and Physiology
Skeletal Muscle System
Nervous System
Central Nervous System
Peripheral Nervous System
Endocrine System
Cardiovascular System
Lymphatic System
Respiratory System
Urinary System
Reproductive System

Biblical Worldview: Creation, Fall, Redemption



Sacred Pathways



Philosophy

We believe "that the Bible is the unique, inspired, inerrant Word of God and that God's Word is fundamental to every aspect of the Christian home, church, and school. As such, all subjects are taught from a biblical perspective and are interwoven with scriptural principles and examples."

Our motto, "Educating Minds; Transforming Hearts for Christ," applies across the four major areas of human growth. As Luke 2:52 states, "...and Jesus increased in wisdom (intellectual) and stature (physical), and in favor with God (spiritual) and man (social)." RCCA seeks to develop godly character and to enhance the student's appreciation of knowledge and beauty in all facets of life

ASPECTS OF BIBLE AND SPIRITUAL FORMATION:

Similarly, we can group several complementary aspects of learning in the scope of Bible and Spiritual Formation:
-Knowledge and Understanding – This includes:
-Knowledge of God's truth revealed in the Bible;
-Background and context of the Bible;
-Knowledge about spiritual growth;
-Biblical and Christian history;
-Current state of the Kingdom: churches, denominations, missionary progress, various kinds of ministries.
- Reasoning and Responding– This includes:
-How to study and apply the Bible;
- How Biblical truths fit together ("theology");
- Responding to God personally through Jesus Christ – faith and spiritual growth;
-Developing a Biblical worldview and Christian approach to life;
-Discerning how to respond to a variety of issues in society around us from that Biblical worldview.
-Personal Application and Engagement with Others – This includes:
-Developing habits of seeking God and growing spiritually in Christ;
-Growing in private prayer as well as praying with others, for others, and for other kingdom concerns;
-Developing habits of sacrificially serving others for Christ's sake;
-Growth in building godly relationships and how to resolve conflicts;
-Stimulating dreams and aspirations of how to make an impact for Christ in relationships, family, church, workplace, society, and the world.

SEQUENCE AND CURRICULUM

11th grade & 12th grade Bible (presently taught concurrently and alternated each year)

Year #1 Biblical Worldview / Ethics/ Philosophy

Main Curriculum: Biblical Worldview: Creation, Fall, Redemption by BJU Press (student text; printed teacher text; presentation slides; memory verse schedule; suggested applications).

Other:

Peacemakers 2-week refresher and deeper emphasis on how to resolve conflict Biblically.
Mere Christianity by C.S. Lewis: 2-week mini-study of key portions of this book.
Worship: Rediscovering the Missing Jewel by Ronald Allen & Gordon Borror
Other topics at teacher's discretion

Year #2 Spiritual Formation

Main Curriculum: Sacred Pathways by Gary Thomas. Use this as a skeleton for discussing and trying out various paths for continual spiritual growth over a lifetime.

Other:

Chasing Love: Sex Love, and Relationships in a Confused Culture by Sean McDowell
Missions:
·excerpts from Perspectives on the World Christian Movement, by Ralph Winter and Steve Hawthorne (eds).
·Missionary stories and connections as time allows
Other topics at teacher's discretion