



High School Science

Earth Science

From geothermal energy deep within its core to the rocks and minerals that lie on its surface, the earth is the focus of this engaging high school science course. Students will enjoy digging into interactive lessons that examine the changing face of the planet. Lessons include the study of geochemical cycles, earthquakes and volcanoes, the earth's resources, the effects of weather, atmospheric cycles, and the earth's place in the solar system. The course units include text-based lessons, on and off-computer exercises, special projects, learning games, quizzes, and tests that appeal to today's digital generation and help teachers to evaluate progress and mastery of the materials. Earth Science enriches the educational experience for homeschool students and sparks a passion for learning.

Throughout the course, students will explore the following topics:

- The Dynamic Structure of Earth
- Features and Forces of Earth
- Rocks and Minerals
- Shaping Earth's Crust
- Earth's Water
- Earth's Atmosphere
- Weather and Climate
- Astronomy

Biology

This course is a scientific method for success, sure to engage your students through the delivery of online lessons and interactive media. A complete study of living things, this biology course includes lessons about plant and animal classification, habitats, the human body, cells and reproduction, ecology, microbiology, and biotechnology. The course units include text-based lessons, on and off-computer exercises, special projects, learning games, quizzes, and tests that appeal to today's digital generation and help teachers to evaluate progress and mastery of the materials. Biology enriches the educational experience for homeschool students and sparks a passion for learning.

Throughout the course, students will explore the following topics:

Taxonomy
Chemistry of Life
Cells
Cell Division and Reproduction
Genetics: God's Plan of Inheritance
Microbiology
Plants: Green Factories
Human Anatomy and Physiology
Ecology, Energy, and Stewardship
Principles and Applications

Chemistry – 11th Grade

Let the mysteries of chemistry unfold for your student with this online course designed to introduce them to the atoms, molecules, elements, and compounds. Students in the course will explore metrics, measurement, equilibrium, chain reactions, organic compounds, and the chemist's toolbox with on and off-computer lessons and experiments. The course units include text-based lessons, on and off-computer exercises, special projects, learning games, quizzes, and tests that appeal to today's digital generation and help teachers to evaluate progress and mastery of the materials. Chemistry enriches the educational experience for homeschool students and sparks a passion for learning.

Throughout the course, students will explore the following topics:

Estimation and Measurement
Elements, Compounds, and Mixtures
Gasses, Mass, and Moles
The History of Chemistry
Atomic and Molecular Structure
Chemical Bonding and Stoichiometry
Chemical Changes and Reactions
Equilibrium
Chemistry Tools
Organic Chemistry and Hydrocarbons

Physics

This high level science course combines cutting-edge technology with challenging academics, helping prepare high school students for rigorous college instruction. During the course, students will explore the physical world and the universe including light, motion, energy, electricity, magnetism, waves, nuclear energy, and thermodynamics. Through on and off-computer lessons, the course encourages critical thinking and higher level problem solving from a Christ-centered perspective. The course units include text-based lessons, on and off-computer exercises, special projects, learning games, quizzes, and tests that appeal to today's digital generation and help teachers to evaluate progress and mastery of the materials. Physics enriches the educational experience for homeschool students and sparks a passion for learning.

Throughout the course, students will explore the following topics:

The Language of Physics
Newton, Motion, and Momentum
Work and Energy
Introduction to Waves
Light
Static Electricity
Electric Currents
Magnetism
Atomic and Nuclear Physics

General Science III

High school students in your Christian school will continue their exploration of God's world, the universe, and scientific principles and laws as they learn with this interactive course. Beginning with the atomic structure and measurement of matter, students will learn about the physical geology of the earth, fossils, absolute time, the biology of the ocean, space exploration, human body systems and health, ecology, and the environment. The course units include text-based lessons, on and off-computer exercises, special projects, learning games, quizzes, and tests that appeal to today's digital generation and help teachers to evaluate progress and mastery of the materials. Ignitia General Science III enriches the educational experience for Christian school students and sparks a passion for learning.

Throughout the course, students will explore the following topics:

Our Atomic World
Volume, Mass, and Density
Physical Geology

Historical Geology
Oceanography
Astronomy
Body Health
Science and Tomorrow

Integrated Physics and Chemistry

Created as an entry level science course, Integrated Physics and Chemistry encourages careful observation God's world and stimulates learning with interactive tools. Lessons include the study of matter, motion and forces, work and energy, electricity and magnetism, and waves. Students will also learn how to integrate this knowledge into everyday situations on a personal and global level. The course units include text-based lessons, on and off-computer exercises, special projects, learning games, quizzes, and tests that appeal to today's digital generation and help teachers to evaluate progress and mastery of the materials. Integrated Physics and Chemistry enriches the educational experience for Christian school students and sparks a passion for learning.

Throughout the course, students will explore the following topics:

Explorations in Physical Science
Structure of Matter
Matter and Change
States of Matter
Motion and Forces
Work and Energy
Heat Flow
Electricity and Magnetism
Waves
Chemistry and Physics in our World