

COURSE DESCRIPTIONS

Science 9-12

Anatomy & Physiology I.....(18 Lessons) 0.5 Credits

Starting with the relationship between anatomy and physiology, students will then learn about cell structure and their processes. Learners will also discover the functions and purposes of the skeletal, muscular, nervous, and cardiovascular systems, as well as diseases that affect those systems. Focusing on terminology, this course is essential to students pursuing the health sciences or wanting to gain a greater sense of how the human body works. 855-246-4223 (Aim-4ACE) 15

Anatomy & Physiology II.....(18 Lessons) 0.5 Credits

Students will learn about the structure, function, and interrelation between the lymphatic, immune, respiratory, digestive, urinary, and the endocrine systems. The reproductive system is also discussed along with hereditary traits and genetics. Finally, students will explore the importance of accurate patient documentation as well as technology used in the industry.

Agriscience I.....(18 Lessons) 0.5 Credits

Students will learn about the development and maintenance of agriculture, animal systems, natural resources, and other food sources. Students will also examine the relationship between agriculture and natural resources and the environment, health, politics, and world trade.

Agriscience II.....(18 Lessons) 0.5 Credits

In Agriscience II, you'll build on your existing knowledge of plant science and delve deeper into important areas such as soil science and weed management. You'll learn more about horticulture and plant science trends from creating hybrid species to growing edible plants in unlikely places.

Astronomy.....(18 Lessons) 0.5 Credits

This course will introduce students to the study of astronomy, including its history and development, basic scientific laws of motion and gravity, the concepts of modern astronomy, and the methods used by astronomers to learn more about the universe. Additional topics include the solar system, the Milky Way and other galaxies, and the sun and stars.

Biology.....(36 Lessons) 1.0 Credits (10th Grade Science)

This course teaches students the fundamental concepts of biology. Topics include: the characteristics of life, basic chemistry, animal life, plant life, reproduction and development, genetics, evolution, diversity, and ecology. Biology includes weekly thought-provoking questions answered in essay form. Students also complete semester term papers on a chosen topic.

Biology - Honors.....(36 Lessons) 1.0 Credits (9th or 10th Grade Science)

Honors Biology is a research and writing-intensive version of our regular Biology course. (See the Biology description for detailed information.).

Chemistry.....(36 Lessons) 1.0 Credits

This course includes: math and algebra; atomic theory and atomic structure; chemical bonding; states of matter; reactions and stoichiometry; kinetics and equilibrium; thermodynamics; descriptive chemistry; and laboratory.

Criminology.....(18 Lessons) 0.5 Credits

In this course, students will study the field of Criminology – the study of crime. Students will look at possible explanations for crime from the standpoint of psychological, biological, and sociological perspectives, explore the categories and social consequences of crime, and investigate how the criminal justice system handles not only criminals, but also their misdeeds. 16 www.acedigitalacademy.net

Earth Science.....(18 Lessons) 0.5 Credits

Students learn the critical importance of scientific developments in today's world through gaining basic knowledge of earth science. Topics include early Earth, geological history, fossils, minerals and rocks, plate tectonics, earthquakes, volcanoes, the carbon and nitrogen cycles, the atmosphere, the ozone layer, the greenhouse effect, weather, climate, air and ocean circulation patterns, the solar system, our galaxy, and beyond.

Environmental Science.....(18 Lessons) 0.5 Credits

Study of the Environment examines the interrelationships among humans and the natural world. Main topics include: ecosystems, land resources, water resources, biodiversity, pollution, waste and waste reduction, energy, and sustainable development.

Forensic Science I.....(18 Lessons) 0.5 Credits

This course focuses on some of the techniques and practices used by forensic scientists during a crime scene investigation (CSI). Starting with how clues and data are recorded and preserved, the student will follow evidence trails until the CSI goes to trial, examining how various elements of the crime scene are analyzed and processed.

Forensic Science II.....(18 Lessons) 0.5 Credits

This course focuses on the analysis of evidence and testing that takes place within this setting. Students will examine some of the basic scientific principles and knowledge that guides forensic laboratory processes, such as those testing DNA, toxicology, and material analysis.

General Science.....(36 Lessons) 1.0 Credits

General Science offers students a fun, introduction to the world of science. The course covers several different branches of science, including topics such as: hurricanes, weather stations, lasers, magnets, hummingbirds, polar bears and botanical gardens.

Great Minds in Science.....(18 Lessons) 0.5 Credits

This course focuses on 10 of today's greatest scientific minds. Each unit takes an in-depth look at one of these individuals, and shows how their ideas may help to shape tomorrow's world.

Oceanography.....(18 Lessons) 0.5 Credits

Students study the ecology and diversity of the world's oceans, with particular attention paid to the complex interactions among all marine life, from the smallest microorganism to the largest sea mammal. Topics include: life in the sea, deep sea exploration, marine mammals, coastal ecosystems, and the sea floor.

Physical Science.....(36 Lessons) 1.0 Credits (9th Grade Science)

This inquiry-and lab-based course is designed to support modern science curriculum and teaching practices. Content topics include structure and properties of matter, chemical reactions, forces and motion, force fields, energy, and waves. Each lesson includes one or more inquiry-based activities that can be performed online within the context of the lesson. In addition, the course includes a significant number of hands-on lab activities. 855-246-4223 (Aim-4ACE) 17

Physics.....(36 Lessons) 1.0 Credits

This course introduces students to the fundamental principles of physics. Each lesson provides comprehensive coverage of a specific concept or topic. Some of the concepts and laws of physics covered include: mechanics, properties of matter, heat, sound and light, electricity and magnetism, and atomic and nuclear physics.

Veterinary Science.....(18 Lessons) 0.5 Credits

As animals play an increasingly important role in our lives, scientists have sought to learn more about their health and well-being. Students will examine pets that live in our homes, on our farms, and in zoos and wildlife sanctuaries. This course will examine some of the common diseases and treatments for domestic animals. Toxins, parasites, and infectious diseases impact not only the animals around us, but at times...we humans as well! Through veterinary medicine and science, the prevention and treatment of diseases and health issues is studied and applied.