

SCIENCE

Biology - with Clifford Zeller (ULA Year Long Course)

This hands-on, non-evolutionary class will focus on the amazing diversity of living things. Some of the activities the students will be doing include: using microscopes, dissecting specimens, performing various experiments, going on local field-trips, and learning to debate evolution based on facts. Topics to be covered include: zoology, (classification), genetics, cellular structure and function, ecology, Environmental Science, and in-depth studies of many of the wonderful creatures and plants God made.

This 33 week, full credit course, will meet for 1.5 hours/wk and is for 9th-12th graders.

Course Supplies: Exploring Creation with Biology second edition, by Dr. Jay Wile and Marilyn Durnell, Apologia Educational Ministries.

Course fee: \$190

Chemistry - with Mark Campbell (ULA Year Long Course)

This high school level course will be designed to give a broad sampling of the subject of chemistry and its importance in everyday life. Key aspects of chemistry such as atomic structure, stoichiometry, gas laws, and acids/bases will be covered. The course will also include lab work, lab reports, weekly homework assignments, and quizzes in order to gain a full understanding of the material. The goal for this course will be to give a full sampling of all that Chemistry has to offer to every student, while still preparing any student interested in pursuing a college degree in the sciences with a good base for taking future college courses. We will use PDESAS standards as a guide for content and discuss the compatibility of science and scripture. We will, as much as possible, individualize instruction to meet each student's needs and abilities.

This 33 week, full credit course, will meet for 1.5 hours/wk and is for 9th-12th graders.

Course Supplies: Exploring Creation with Chemistry THIRD edition, second printing, by Dr. Jay Wile, Apologia Educational Ministries.

Course fee: \$210

Fundamentals of Anatomy & Physiology - with Leigh Ann Rohrer and Betsy Kreider (ULB Spring course)

This course is an introduction to the terminology, anatomy, and physiology of the human body as it applies to everyday life. The students will be introduced to the structures and functions of the human body which will provide a basis for understanding how changes in structure and function can lead to injury and disease.

Prerequisite: Biology

This 15 week, half credit course, will meet for 1 hour/wk and is for 10th-12th graders.

Course Supplies: These books are not confirmed so do not purchase until you receive confirmation from the teachers. 1) *Body By Design: An Anatomy and Physiology of the Human Body* by Alan L. Gillen; 2) *Dover Science Book: Human Anatomy Coloring Book*

Course fee: \$60

Intro to Electronics & Magnets - with Mark Campbell (ULA Spring course)

This course will offer an introduction to electronics and magnets. The course will instruct students in the fundamental terms and concepts essential to the basic understanding of electronics and magnetism. To promote this understanding, the course will include instruction about both historical and technical aspects of the subject. There will be two tests to assess individual student learning. There will also be at least one hands-on project that will give students practice conceptualizing, assembling, testing, and operating an electronic circuit intended to perform a specified function.

This 15 week, half credit course, will meet for 1 hour/wk and is for 7th-12th graders.

Course Supplies: Electricity published by Eyewitness Books, 2013 edition (ISBN 978-1-4654-0899-0) plus articles and excerpts assigned by the teacher.

Course fee: \$75

Intro to Meteorology –with Ian Turner (ULA Fall Course)

The course will start with a review of the atmosphere and how it works relating to weather. Then we'll discuss topics such as temperature, humidity, condensation and types of precipitation. The next section will focus on wind and air pressure, and cover topics such as the role of the jet stream and global wind patterns. Subsequent sections of the course will focus on weather fronts, thunderstorms, tornadoes, and hurricanes. We'll conclude with a study of the Earth's climate, weather forecasting, and a review of weather patterns in Pennsylvania.

This 15 week, half credit course, will meet for 1 hour/week and is for 9th – 12th graders.

Course Supplies: "Meteorology Today: An Introduction to Weather, Climate, and the Environment", 9th edition by C. Donald Ahrens. ISBN-10: 0495555738. Available used on www.amazon.com. Please make sure you are buying the 9th edition with a white and blue cover, not the much more expensive later editions.

Course fee: \$75

Physical Science - with Mark Campbell (ULA year long course)

This course teaches students all about the universe in which they live by way of lecture and labs. Topics will include science basics, the atmosphere, the ocean, plate tectonics, weather, motion, forces, electricity, sound, light, matter, the atom and chemical compounds. This course is a basic introduction to earth science, physics and chemistry. We will use PDESAS standards as a guide for content and discuss the compatibility of science and scripture. We will, as much as possible, individualize instruction to meet each student's needs and abilities.

This 33 week, full credit course, will meet for 1 hours/wk and is for 7th-12th graders.

Course Supplies: Exploring Creation with Physical Science (2nd Edition) by Dr. Jay L. Wile ISBN: 9781932012774

Course fee: \$140

Physics - with Clifford Zeller (ULA year long course)

This upper high school level science class will delve into the exciting topic of how and why the world around us works the way it does. If "why?" is your favorite question, this is the class for you! Some of the topics covered in this course will include linear motion, rotational and periodic motion, work and energy, waves, optics, electricity, circuits and magnetism. The class is algebra based and students will be solving "real world" application problems throughout the course.

Prerequisite: Algebra 1

This 33 week, full credit course, will meet for 1hour/wk and is for 10th-12th graders.

Course Supplies: Exploring Creation with Physics (2nd Edition) by Dr. Jay L. Wile

Course fee: \$160