

# Bridgemont High School Course Descriptions

## Science

### **Purpose**

Students are exposed to components and mechanisms of the natural world in order to better understand one's responsible use of environmental resources and technology. It is taught from a Christian perspective that God is the creator and is the only reasonable explanation why the physical world has ingenious structure and orderly function. This perspective gives purpose and dignity to life processes.

**Course:** Earth Science

**Type of Course:** Elective

**Grade:** 9<sup>th</sup>–12<sup>th</sup> grade

**Prerequisites:** None

Earth science is a yearlong college preparatory lab science course. It is taught from a Christian perspective that God is the creator and therefore the physical world has ingenious structure and function. Topics covered in the course include geology, oceanography, plate tectonics, weather, climate, and astronomy. The lab component of the course focuses on measurement, observation, identification, graphing and analyzing data as well as interpreting maps.

**Course: Biology**

**Type of Course: Required**

**Grade Level: 10**

**Prerequisites: None**

This is a college-preparatory course. It is taught from a Christian perspective that God is the creator and therefore gives order, purpose, and dignity to life processes. Through this course, students will learn that science is not at odds with the Bible, but that science clearly supports the belief that the universe has a Divine Creator. Students will spend the fall semester covering Cellular and Molecular Biology and the Evolution/Creation debate. The second semester is spent studying the Structure and Function of Plants, Zoology, and Human Anatomy and Design. Lab work emphasizes careful observations and measurements, graphing, and microscope techniques.

**Course: Chemistry**

**Type of Course: Required**

**Grade Level: 11**

**Prerequisites: C or better in Biology**

This is a college-preparatory, lab science course and is centered around (1) the roles of chemistry in topics that are part of one's everyday life and (2) learning how to make informed decisions about technological events. Within this framework, students are instructed in the standard aspects of chemistry. Lab work emphasizes lab techniques and safety as students learn and perfect quantitative and qualitative reasoning skills.

**Course: Physics**

**Type of Course: Required**

**Grade Level: 12**

**Prerequisites: C or better in Chemistry and Geometry**

This course is taught from a Christian perspective that God is the creator and that physics allows us to see the design and structure of matter and energy. Topics to be studied include mechanics, heat, sound and light, electricity, and magnetism. Labs make up a large part of this course.