



# Physical Science

Honors & Academic

The purpose of this course is to provide students with an introduction to the basic unifying concepts and processes of science. This includes the structure of atoms, structure and properties of matter, chemical reactions, force and motion, conservation of energy, interactions of energy and matter, and interactions between science and technology. This course is traditionally taken by ninth graders.



# Biology

AP, Honors & Academic

Biology is a survey course that takes a glimpse at the many different aspects of living things. The Biology journey carries students through biochemistry, cells, cell processes, genetics, evolution, ecology, classification of organisms and ends in the systems of the human body. This is a required course for high school graduation that commences with a state developed and mandated End of Course Exam. Depending on an individual student's progression, Biology is typically offered to 9th or 10th grade students.



# Chemistry

AP, Honors & Academic

Chemistry is the study of matter in the world around us. In this course you will use math to solve problems and conduct various experiments to reinforce concepts learned in class. We explore matter, energy, compounds, and MUCH more. All students interested in pursuing a science degree are strongly encouraged to enroll and a successful completion of algebra is also important. Depending on a student's individual sequence, this course may be available for grades 10 - 12.

## River Ridge High School Science Course Offerings

2017  2018



# Earth/Space Academic

This course is recommended for students that are interested in learning about the structure of the earth, climate, weather, resource management, space exploration, our solar system and beyond. This class is open to students that have completed Biology and are full filling their 3rd science credit. It can also taken as an elective for those interested in taking more science classes.



# Marine Science

Honors & Academic

The Marine Sciences are a dynamic area of study with great potential for opportunity in the years ahead. This class is open to juniors and seniors who are full filling their 3rd science credit. It is also taken as an elective for those interested in taking more advanced science classes. We need motivated, science-oriented individuals to help explore and find solutions for challenging issues that exist today and threaten to expand well into the future.



# Environmental Science

AP & Academic

Environmental Science is a fun and exciting class that has many local and current events that we discuss. Topics usually focus on the impact that humans are having on the environment. We use several sciences to determine these effects like biology, ecology and chemistry. There are several field labs and hands on experiments to further our understanding of these issues. This class is typically taken by juniors or seniors that are meeting the 3rd science requirement.



# Anatomy and Physiology

Honors

Anatomy & Physiology is a course that is designed for those students pursuing a health related career. The focus of this class is the internal components of the human body, where they are located, how they work and their interactions with other organs. Several labs are performed throughout the year with a grand finale of dissection of the fetal pig. This course is typically taken by honors level students that have already successfully taken Biology.



# Physics

Honors

In Physics you can expect to study concepts such as mechanics, waves, thermodynamics, electricity and much more. A strong honors math background is very important as there are math concepts in each and every chapter. Lab experiments are conducted in order to explore classroom topics. Students interested in pursuing degrees in engineering or pre-medicine programs are strongly encouraged to take Physics in high school. Students should have completed or be enrolled in pre-calculus before enrolling in physics.