

Biology: 9th grade (with approval)-
College Credit Available

OR

Physical Science- 9th

Biology- College Credit Available

After successful completion of Biology Science Elective Choices:

Forensic Science- Honors Credit Available

Environmental Science- College Credit Available

Human Anatomy & Physiology- College Credit Available

Chemistry- Honors Credit Available (Advanced Math Required)

Physics-Honors Credit Available (Advanced Math Required)

Earth Science

Science on the Screen

Zoology- Honors Credit Available

Animal Science- College Credit Available

Physical Science:

Physical Science is a course designed for 9th graders that seeks to introduce students to Chemistry and Physics. The first part of the course will focus on Chemistry, the science of matter; and the second part of the course will focus on Physics, the science of energy and energy transformations. During the introduction to Chemistry, students will become skilled in safe laboratory practice, and begin to understand the basic operations of scientific inquiry and reporting. After introducing students to theories and principles of chemical reactions, the course will focus on an introduction to Physics. Students will learn to apply Newton's Laws of Motion, distinguish between potential and kinetic energy, and study sound and light waves.

NCES Code	Course Number	Credit	Grade	Prerequisite
		1.0	9	None

Biology:

This course is an exciting look into the study of life sciences. Students will begin the year focused on life science at the cellular level and progress on to studying whole organisms and their interactions with the environment. This is a sophomore level class and will address the next generation science standards as adopted by the state of Oregon as well as compiling scientific inquiry and engineering work samples, in addition to required state electronic testing.

NCES Code	Course Number	Credit	Grade	Prerequisite
	LBCC- BIO 102	1.0	9-12	Physical Science or Teacher Approval

Animal Science:

This course is designed to introduce students to the livestock production industry. Students will study all forms of livestock including health care, feed management, reproduction, genetics, industry specifics, anatomy and physiology.

NCES Code	Course Number	Credit	Grade	Prerequisite
	LBCC- ANS 121	1.0	9-12	

				Completion of Biology or Beginning Ag
--	--	--	--	---------------------------------------

Forensic Science:

This course is designed to introduce students to the focusing on the use of science as it applies to police work in order to solve crimes, establish identities and/or recreate events. We will discuss legal procedures, precedence, scientific study and techniques to solve crimes.

NCES Code	Course Number	Credit	Grade	Prerequisite
		1.0	10-12	Completion of Biology

Human Anatomy & Physiology:

This course is designed to introduce students to the study of the human body structure and function. Students will learn basic terms associated with the body and the general organization of body parts. Students will also investigate the delicate balance between health and disease of the human body. Students will participate in various dissections as well as whole organism dissection.

NCES Code	Course Number	Credit	Grade	Prerequisite
	LBCC- BIO 103	1.0	10-12	Completion of Biology

Environmental Science:

This course is an exciting look into the study of the effects of humans in the environment and looking for sustainable balance.

NCES Code	Course Number	Credit	Grade	Prerequisite
	WOU- BIO 101		10-12	Completion of Biology

Zoology:

This course is designed to introduce students to the major taxa of the animal kingdom and provides an introduction to animal anatomy, physiology, ecology and evolution.

NCES Code	Course Number	Credit	Grade	Prerequisite
		1.0	10-12	Completion of Biology

Science on the Screen:

This course is an exciting look into the connection of film to science. Students will view movies and reflect the science behind the films through written reflections and unit projects.

NCES Code	Course Number	Credit	Grade	Prerequisite
		.50	9-12	

Earth Science:

This course studies the scientific origins of the earth and looks at its place in the universe. We will cover the history of the Earth, rocks and minerals, Earth's natural resources, weather and climate systems, and how the Earth fits into our solar system. It is a lab based course with possible field trips to visit local

geological sites in Oregon. This is meant as a course for juniors and seniors needing additional science credit, but sophomores may be allowed with permission from the instructor.

NCES Code	Course Number	Credit	Grade	Prerequisite
		1.0	10-12	None

Chemistry:

Chemistry is the science of matter and is intended as a junior or senior level course in high school. Before entering Chemistry, students should have completed a course in Physical Science unless participating in the accelerated Science program, and have a working knowledge of simple mathematics and algebraic functions. The course will begin by reviewing the sub-atomic and atomic structures of matter. From atoms, students will advance towards a working understanding of molecules, compounds and solutions. Once the foundation has been laid, students will develop an understanding of various types and properties of chemical reactions. Students should expect to complete an independent research project in the last quarter of the year if they choose to receive honor credit.

NCES Code	Course Number	Credit	Grade	Prerequisite
		1.0	10-12	Completion of Biology & co-enrolled or completion of Algebra 2

Physics:

Physics is an upper-level science course that focuses on various forms of energy and energy transformations. Students should have a strong knowledge of algebra and trigonometry before entering the course, and should have completed a course in Physical Science unless participating in the accelerated Science program.

Much of Physics is lab-focused and hands-on, and students will be involved in designing, performing and analyzing scientific experiments. Over the course of year, students will develop conceptual and mathematical understandings of motion, vibrations and wave phenomena, optics, and electromagnetism. Students should expect to complete an independent research project in the last quarter of the year if they would like to receive honors credit.

NCES Code	Course Number	Credit	Grade	Prerequisite
		1.0	10-12	Completion of Biology & co-enrolled or completion of Algebra 2