

<u>COURSE NAME</u>	<u>DESCRIPTION</u>
--------------------	--------------------

**Physical Science  
(Required)**

This freshman level class, consisting of lectures and labs, focuses on the fundamental of physical science. Topics include energy, matter, motion, chemical changes, electricity and the scientific method. Additional topics include the periodic table, atomic structure, thermodynamics and the history of science.

*Prerequisites: None*  
*Graduation Credit: 1*

---

**Biology  
(Required)**

This is a sophomore level class focused on the study of all forms of life. Students will learn about multi-cellular plants and animal cells from their earliest life forms to most complex. Units are based on life, organisms, physiology, development, evolution, and ecology.

*Prerequisites: Physical Science recommended*  
*Graduation Credit: 1*

---

**Chemistry  
(Elective)**

This upper level science course focused on lab experimentation and an introduction to mathematical equations. Students will learn about different chemical reactions, atomic structure, bonding and gas laws, and the periodic table.

*Prerequisites: Physical Science, Biology*  
*Graduation Credit: 1*

---

<b>COURSE NAME</b>	<b>DESCRIPTION</b>
--------------------	--------------------

<b>Anatomy &amp; Physiology (Elective)</b>	This semester class will allow students to explore all elements of the human body. Topics of study will include the skeletal, nervous, muscular, and circulatory systems of the human body. This course will benefit any student who is considering a career in medicine, or for students who want to be challenged at a high level in regards to science. This course can be taken in sequence with Physiology.
--	--

*Prerequisites: Physical Science, Biology*  
*Graduation Credit: 1/2*

---

<b>Forensic Science (Elective)</b>	This semester class will introduce different methods and applications that are used in forensics. Topics may include fingerprint analysis, analysis of physical evidence, DNA analysis, and forensic entomology.
--	--

*Prerequisites: Physical Science, Biology, Anatomy & Physiology (recommended)*  
*Graduation Credit: 1/2*

---

<b>Earth Science (Elective)</b>	This semester class includes units of Energy and Natural Resources, Earth's History, and Astronomy. Additional topics covered are: the Scientific Method and the history of science.
-------------------------------------	--

*Prerequisites: None*  
*Graduation Credit: 1/2*

---

<b>COURSE NAME</b>	<b>DESCRIPTION</b>
--------------------	--------------------

**Environmental Science  
(Elective)**

This semester class will focus on ecology, hydrosphere, atmosphere, agriculture, conservation, and the scientific method. The class will be made up of lectures and labs. Additional topics covered are bioethics, biodiversity, and pollution.

*Prerequisites: None*

*Graduation Credit: 1/2*

---

**Advanced Chemistry  
(Elective)**

This course is taken in conjunction with Missouri Western's dual credit program and will earn high school credit as well as three hours college credit. Topics covered include atomic theory and the periodic system, chemical calculations, oxidation-reduction reactions, states of matter, chemical bonding theory, and atomic structure.

*Prerequisites: Chemistry, ACT score of 20 or higher on Math sub score*

*Graduation Credit: 1*

*College Credit Hours: 5*

---

<b>COURSE NAME</b>	<b>DESCRIPTION</b>
--------------------	--------------------

**Advanced Biology  
(Elective)**

This course is taken in conjunction with Missouri Western's dual credit program and will earn high school credit as well as three hours college credit. Students will study all forms of life at an advanced level through lectures and labs. Topics of study include: molecular, organismal, and population levels of complexity.

*Prerequisites: Physical Science, Biology*

*Graduation Credit: 1*

*College Credit Hours: 4*

---