

## SCIENCE

### **COURSE: Life Science**

Grades eligible: 9 – 12

Prerequisite: None

Course Number: 3000

Course Description: *A biology course, including lab experiences, which emphasizes human biology and the interactions between man and his environment. Time is given to organizational and study skills.*

*Students will be expected to complete some out-of-classroom work.*

. meets biological science requirement for MSHS

### **COURSE: Life Science ELL**

Grade eligible: 9 – 12

Prerequisite: Concurrent enrollment in an ELD course

Course Number: 3010

Course Description: *(same course description as Life Science) . . . except the class is taught using SDAIE (visual aide, etc.) strategies.*

. meets biological science requirement for MSHS

### **COURSE: Biology I**

Grades eligible: 9 – 12

Prerequisite: Concurrent enrollment or completion of Algebra I

Course Number: 3002

Course Description: *A comprehensive lab course which covers a broad range of topics including cell structure and function, a survey of animals and plants, genetics, and human biology. Students will be expected to work independently on class assignments and out-of-class projects. Critical thinking and writing skills are emphasized.*

. meets biological science requirement for MSHS

.. may be used for CSU or UC entrance

### **COURSE: Biology I – Ag**

Grades eligible: 9 – 12

Prerequisite: Concurrent enrollment or completion of Algebra I

School: **Agriculture**

Course Number: 3019

Course Description: *(same course description as Biology I) . . . except that the class is taught with an agricultural flavor.*

. meets biological science requirement for MSHS

.. may be used for CSU or UC entrance

### **COURSE: Biology ELL**

Grades eligible: 9 – 12

Prerequisite: Concurrent enrollment or completion of Algebra I and an ELD course

Course Number: 3026

Course Description: *(same course description as Biology I) . . . except that the class is taught using SDAIE (visual aide, etc.) strategies..*

. meets biological science requirement for MSHS

.. may be used for CSU or UC entrance

**COURSE: Physical Science**

Grades eligible: 11 – 12

Prerequisite: None

Course Number: 3018

Course Description: *An integrated lab course covering the following topics: motion & forces, energy electromagnetic phenomena, sound, basic concepts of chemistry & astronomy, dynamic earth processes such as weather, volcanoes, earthquakes and waves.. This course is for students who do not plan to go to a 4 year college.*

. meets physical science requirement for MSHS

**COURSE: Physical Science ELL**

Grades eligible: 10 - 12

Prerequisite: Concurrent enrollment in an ELD course

Course Number: 3015

Course Description: *(same course description as Physical Science) . . .except that the class is taught using SDAIE strategies.*

. meets physical science requirement for MSHS

**COURSE: Ag Science I**

Grades eligible: 9 – 12

Prerequisite: Concurrent enrollment in English I

Course Number: 6500

Course Description: *Ag Science is designed for the college preparatory student interested in the field of agriculture. Topics covered include plant science, ornamental horticulture, public speaking, parliamentary procedure, judging competitions, and the Future Farmers of America.*

**COURSE: Ag Science II (Livestock and Crop Production)**

Grades eligible: 10 – 12

Prerequisite: Ag Science I

Course Number: 6501

Course Description: *Class emphasis is on animal husbandry and crop practices.*

. completion of Ag Science I and II meets biological science requirement for MSHS

.. may be used for CSU entrance as an elective

**COURSE: Ag Science III (Advanced Animal Science)**

Grades eligible: 11 – 12

Prerequisite: Ag Sci I and II or Biology

Course Number: 6502

Course Description: *A third-year class that emphasizes advanced animal husbandry and crop practices.*

.. may be used as an elective for CSU or the “g” requirement for UC entrance

**COURSE: Horticulture II**

Grades eligible: 10-12

Prerequisite: Horticulture I

Course Number: 6506

Course Description: This course is a continuation of Horticulture I. Students will learn about plant classification, soils, irrigation and drainage, reproduction, fertilizers, and environmental issues.

**COURSE: Chemistry**

Grades eligible: 10 – 12

Prerequisite: Completed or concurrent Algebra II

Course Number: 3004

Course Description: A comprehensive lab course covering matter – its physical and chemical properties and interactions. Students will be expected to use basic algebraic skills and critical thinking to solve problems both in and out of the classroom.

. meets physical science requirement for MSHS

.. may be used for CSU or UC entrance

**COURSE: Honors Chemistry**

Grades eligible: 11 – 12

Prerequisite: Completed or concurrent with Algebra II

Course Number: 3020

Course Description: An accelerated lab course which includes study of atomic and molecular structure, chemical reactions, equilibria, and nuclear interactions. Students will be expected to use advanced algebraic skills and critical thinking to solve problems both in and out of the classroom.

. meets physical science requirement for MSHS

.. may be used for CSU or UC entrance

**COURSE: Principles of Physics**

Grades eligible: 9 – 12

Prerequisite: passing Algebra I with a “C” or better

Course Number: 3033

Course Description: This is a college preparatory class for students with an interest in science, technology and math. It blends an understanding of fundamental physical laws and concepts with practice in practical applications.

. meets physical science requirement for MSHS

.. may be used for CSU or UC entrance

**COURSE: Honors Physics**

Grades eligible: 11 - 12

Prerequisite: Completion or concurrent enrollment in Trig or Precalculus

Course Number: 3009

Course Description: An accelerated lab course which includes an in-depth study of various forms of energy and their interrelationships. Students will commonly be expected to use high level mathematical and thinking skills to solve problems both in and out of the classroom.

. meets physical science requirement for MSHS

.. may be used for CSU or UC entrance

**COURSE: Human Anatomy and Physiology**

Grades eligible: 10 – 12

Prerequisite: Biology I

Course Number: 3014

Course Description: *A biological lab course that covers the structure and function of the human body*

. meets biological graduation requirement for MSHS

.. may be used for CSU or UC entrance

.

**COURSE: Honors Human Anatomy and Physiology**

Grades eligible: 11 – 12

Prerequisite: Biology I, Chemistry, or concurrent Chemistry

Course Number: 3031

Course Description: *An advanced biology course which takes an in-depth look at the structure and function of the human body. Students in this class will be involved in many lab experiences and will be expected to complete significant amounts of independent work. This class provides a good preparation for students interested in careers in the medical field.*

. meets biological requirement for MSHS

.. may be used for CSU or UC entrance

**COURSE: AP Biology**

Grades eligible: 11 – 12

Prerequisite: Biology I, Chemistry, or concurrent Chemistry

Course Number: 3090

Course Description: *This is a challenging class which is designed to prepare students to pass the College Board AP Biology Exam. Students in this class will be expected to complete significant amounts of independent academic work.*

.. may be used for CSU or UC entrance