

## Science Course Descriptions

### Comprehensive Science 1

This course takes a comprehensive approach to science, meaning that students will explore several major scientific disciplines.

Specific topics of study will include: Practice of Science, Characteristics of Science Knowledge, The Role of Theories, Laws, & Models, Earth Structures, Earth Systems & Patterns, Energy Transformations, Forces & Motion, Organization & Diversity of Living Organisms

This curriculum is intended to be accessible to students at all achievement levels. Instruction will place special emphasis on scientific inquiry and argumentation.

### Comprehensive Science 1 Advanced

This course teaches 6th and 7th grade life science and Earth science topics, including: Characteristics of Scientific Knowledge, Diversity & Classification of Living Organisms, Cell Theory, Body Systems, Heredity & Evolution, Interdependence, Earth Systems, Weather, & Climate, Earth's Interior, Plate Tectonics

This curriculum is taught at an accelerated pace and is intended for students with advanced achievement levels.

Instruction will place special emphasis on scientific inquiry and argumentation; and participation in the science fair is required.

### Comprehensive Science 2

This course takes a comprehensive approach to science, meaning that students will explore several major scientific disciplines.

Specific topics of study will include: Practice of Science, The Characteristics of Science Knowledge, The Role of Theories, Laws, and Hypotheses, Earth Structures, Forms of Energy, Energy Transfer and Transformations, Diversity & Evolution of Living Organisms, Heredity & Reproduction, Interdependence

This curriculum is intended to be accessible to students at all achievement levels. Instruction will place special emphasis on scientific inquiry and argumentation.

### M/J Physical Science Advanced

This course teaches physical science standards from the 6th, 7th, and 8th grade curricula, including: The Practice of Science, The Characteristics of Scientific Knowledge, The Role of Theories, Laws, & Models, Properties of Matter, Changes in Matter, Forms of Energy, Energy Transformations, Forces & Motion

This curriculum is taught at an accelerated pace and is intended for students with advanced achievement levels.

Instruction will place special emphasis on scientific inquiry and argumentation; and participation in the science fair is required.

### Physical Science Honors

This course teaches physical science standards from the 9-12<sup>th</sup> grade curriculum, including: The Practice of Science, The Characteristics of Scientific Knowledge, The Role of Theories, Laws, & Models, Properties of Matter, Changes in Matter, Forms of Energy, Energy Transformations, Forces & Motion

This curriculum is taught at an accelerated pace and is intended for students with advanced achievement levels.

Instruction will place special emphasis on scientific inquiry and argumentation; and participation in the science fair is required. This course requires an Algebra 1 co-requisite.

### Comprehensive Science 3

This course takes a comprehensive approach to science, meaning that students will explore several major scientific disciplines.

Specific topics of study will include: The Practice of Science, The Characteristics of Scientific Knowledge, The Role of Theories, Laws, & Models, Earth in Space & Time, Properties of Matter, Changes in Matter, Matter & Energy

## Transformations

This curriculum is intended to be accessible to students at all achievement levels. Instruction will place special emphasis on scientific inquiry and argumentation.

## Comprehensive Science 3 Advanced

This course supplements standards from the 8th grade curriculum with some 9-12<sup>th</sup> grade standards.

Topics include: The Practice of Science, The Characteristics of Scientific Knowledge, The Role of Theories, Laws, & Models, Earth in Space & Time, Properties of Matter, Changes in Matter, Matter & Energy

This curriculum is taught at an accelerated pace and is intended for students with advanced achievement levels.

Instruction will place special emphasis on scientific inquiry and argumentation; and participation in the science fair is required.

## Earth/Space Science Honors

This course teaches Earth and space science standards from the 9-12<sup>th</sup> grade curriculum, including: The Practice of Science, The Characteristics of Scientific Knowledge, Astronomy, Geology, Meteorology, Oceanography

This curriculum is taught at an accelerated pace and is intended for students with advanced achievement levels.

Instruction will place special emphasis on scientific inquiry and argumentation; and participation in the science fair is required. This course requires an Algebra 1 co-requisite.

## Biology 1 Honors

This course teaches biological science standards from the 9-12<sup>th</sup> grade curriculum, including: The Practice of Science, The Characteristics of Scientific Knowledge, Ecology, Chemistry of Life, Cell Structure and Function, Cell Reproduction, Genetics, Biological Diversity

This curriculum is taught at an accelerated pace and is intended for students with advanced achievement levels.

Instruction will place special emphasis on scientific inquiry and argumentation. This course requires students to pass an End of Course Exam (EoC), and participation in the science fair is also required. Students must be enrolled in Geometry as a co-requisite.