**Advanced Science**

* + Atoms
	+ Elements
	+ Periodic Table
	+ Ions
	+ Isotopes
	+ Radioactivity
	+ Mixtures and Compounds
	+ Bonds
	+ Balancing Equations
	+ Solutions

**Earth Science**

**Fall Semester Topics:**

* **Plate Tectonics**
	+ Structure of the Earth
	+ Convergent, Divergent & Transform Plate Boundaries
	+ “Continental Drift”
* **Earthquakes**
	+ Primary, Secondary and surface waves
	+ Seismogram
	+ Richter and Mercalli Scales
	+ Locating the Epicenter
	+ Hazards
* **Volcanoes**
	+ Structure
	+ Case studies
	+ Hazards
* **Minerals**

**Spring Semester Topics:**

* **High School Proficiency Review**
	+ Geologic Time
	+ Atmosphere
	+ Star Overview
	+ Gravity
	+ Light
	+ Atomic Theory
	+ Chemistry Basics
	+ Cells
	+ Genetics
	+ Population Dynamics
	+ Evolution & Natural Selection
	+ Electricity & Magnetism
* **Rocks**
	+ Rock Cycle
* **Astronomy**
	+ Sun
	+ Solar System
	+ Stars
	+ Galaxies
	+ The Universe

**Physical Science**

* **Force and Motion**
	+ Inertia
	+ Momentum
	+ Roller Coaster Physics
	+ Potential & Kinetic Energy
	+ Speed Problems
	+ Unit Conversions
* **Simple Machines**
	+ Mechanical Advantage
	+ Pulley, Lever, Inclined Plane, Wedge, Wheel & Axel, Screw
* **Electricity & Magnetism**
	+ Static Electricity
	+ Magnets
	+ Alternating & Direct Current
	+ Circuits
	+ Circuit Diagrams
	+ Wiring Household Objects
	+ Electric Motors
	+ Hazards
* **Artificial Intelligence**

**Spring Semester Topics:**

* **High School Proficiency Review**
	+ Geologic Time
	+ Atmosphere
	+ Star Overview
	+ Gravity
	+ Light
	+ Atomic Theory
	+ Chemistry Basics
	+ Cells
	+ Genetics
	+ Population Dynamics
	+ Evolution & Natural Selection
	+ Electricity & Magnetism

**Chemistry**

* + Atoms
	+ Elements
	+ Periodic Table
	+ Mixtures and Compounds
	+ Bonds
	+ Balancing Equations

**Natural Science**

**Fall Semester Topics:**

* **The Hydrosphere**
	+ The Water Cycle
	+ Water Conservation
	+ The Truckee River Watershed
	+ Water Pollution
	+ Challenges for the Future
* **The Atmosphere**
	+ Composition
	+ Wind Patterns
	+ The Greenhouse Effect
	+ Air Pollution
* **Weather and Climate**
	+ Patterns
	+ Hazards
	+ Climate Change
	+ Case studies
* **Artificial Intelligence**

**Fall Semester Topics:**

* **The Hydrosphere**
	+ The Water Cycle
	+ Water Conservation
	+ The Truckee River Watershed
	+ Water Pollution
	+ Challenges for the Future
* **The Atmosphere**
	+ Composition
	+ Wind Patterns
	+ The Greenhouse Effect
	+ Air Pollution
* **Weather and Climate**
	+ Patterns
	+ Hazards
	+ Climate Change
	+ Case studies
* **Artificial Intelligence**

**Spring Semester Topics:**

* **Cells**
	+ Structure and Functions
	+ Cell Division
	+ Reproduction
	+ Respiration
	+ Photosynthesis
* **Genetics**
	+ DNA
	+ Mendelian Genetics
* **Linnaean Taxonomy**
* **Evolution**
	+ Natural and Artificial Selection
* **Population Ecology**
	+ Limiting Factors
	+ Biogeochemical Cycles

**Health**

* Health and Wellness
* Mental Health
* Healthy Relationships
* Violence and Abuse
* Self-Defense
* Drug Use, Misuse & Abuse
* Cancer
* Cardiovascular Disease
* Allergies
* Noninfectious Diseases
* Infectious Diseases
* Sexually Transmitted Diseases & AIDS
* Human Reproduction
* Nutrition
* Fitness & Exercise
* Weight Management & Body Image
* Stress