

Physical Science Foundations

COURSE DESCRIPTION:

Physical science is the introductory course to high school science courses and beyond. Students will expand on their middle science experiences to prepare them for biology, chemistry, and physics. This course will emphasize scientific thinking as a way of understanding the natural phenomenon that surrounds us. In this regard there will be numerous opportunities to dialog with other students about scientific theory and practice. In addition, there will be both simulated and real world laboratory experiences to further expand your scientific horizons.

COURSE OBJECTIVES:

Upon completion of this course students will be conversant in a number of scientific topics, understand how science is used in our daily lives, and be comfortable with solving simple algebraic equations that support scientific laws.

The course content has been appropriately grouped into smaller topics to increase retention and expand opportunities for assessment. With each topic, quizzes are presented to the student. Audio readings are included with every portion of content, allowing auditory learners the opportunity to engage with the course. Test pools and randomized test questions are utilized in quizzes as well as unit exams, ensuring that students taking the course will not be presented with the same exams. Additionally, the course includes additional practice activities (such as cloze activities), as well as pre-topic vocabulary lists, that introduce key vocabulary in English and in Spanish.

PREREQUISITES: None

COURSE LENGTH: Two semesters

REQUIRED TEXT: None

COURSE OUTLINE:

Semester 1

- Introduction to physical science
- Energy and motion
- Newton's laws
- Energy
- Simple machines
- Waves
- Electricity

Semester 2

- Matter
- Atomic structure and periodic table
- Chemical bonds
- Elements and their properties
- Interaction of matter

(E) = ELL – Assistive Content Included in this Course