

## Science 9

## I. Course Description

Science 9 will cover a wide range of topics to introduce the beginning high school student to chemistry, geology, health, astronomy, oceanography, and space exploration.

## II. Instructional Materials

*Lifepac Science 900* by Alpha Omega Publications, Oct. '04 printing

## III. Goals and Objectives

The student should have a working understanding of the basics of each of the above areas of scientific study.

## IV. Course Outline

1. Our atomic world- Structure of matter, radioactivity, atomic nuclei, nuclear energy
2. Volume, mass and density- measure of matter, volume, mass and density
3. Physical geology- Earth structures, weathering and erosion, sedimentation, earth movements
4. Historical Geology- Sedimentary rock, fossils, crustal changes, measuring time
5. Body health I- microorganisms, bacterial infections, viral infections, other infections
6. Body health II- Body defense mechanisms, treating disease, preventing disease, community health
7. Astronomy- Extent of the universe, constellations, telescopes, space explorations
8. Oceanography- history of oceanography, research techniques, geology of the ocean, properties of the ocean
9. Science and tomorrow- The land, waste and ecology, industry and energy, new frontiers

## V. Teaching Methods

1. Daily lessons and included worksheets with periodic self-tests and nine section tests.
2. Parent/student interaction/conversation

## VI. Evaluation

1. Components
  - a. Self tests
  - b. Middle tests
2. Grading
  - a. 90-100    A
  - b. 80-89    B
  - c. 70-79    C
  - d. 60-69    D