

Integrated Science Course Sequence

The integrated science Program at RenArts presents advanced and complex material based on the Next Generation Science Standards (NGSS) and aligned with the California Science Framework’s integrated model “to coordinate and blend biology, chemistry, physics and geoscience into a unified science curriculum that promotes the development and application of reasoning skills and concepts within, between, and beyond traditional curricular boundaries.” At each grade level students have the opportunity daily to explore their world and apply their developing literacy skills to the study of the Life, Earth, Space, and Physical Science and Engineering. Through experiential-based learning, small group instruction and investigation, and content reading and writing, students explore phenomena, create investigations, communicate about their learning, and develop those science and engineering practices outlined in NGSS including:

- Asking questions and defining problems
- Analyzing and interpreting data
- Developing and using models
- Planning and carrying out investigations (with various methodologies)
- Using mathematics and computational thinking
- Constructing explanations and designing solutions
- Engaging in argument from evidence
- Obtaining, evaluating and communicating information
- Refining and revising understanding in light of new evidence

The Integrated Science sequence is a four-course pathway providing students the opportunity to develop expertise over time. The course examines the relationship between scientific disciplines through both laboratory exercises and theoretical work. It is designed to help students create an understanding of the world around them through investigation over time with increasing depth and complexity. Students work in ensemble settings, developing collaborative skills necessary for college and career readiness. The four-course sequence is based on four themes - Water, Life, Earth, and Cosmology.

Course Sequences	9	10	11	12
	● - UCOP A-G Approved ● - UCOP A-G and "UC Honors" Approved			
Integrated Science	● Int. Sci. 1	● Int. Sci. 2 or ● Honors Biology	● Int. Sci. 3	● Int. Sci. 4
	● Interdisciplinary Biological Science	● Int. Sci. 1	● Int. Sci. 2	● Int. Sci. 3