SCI: SCIENCE

Courses

SCI 100. Climate Change. 3 Credits.
This course provides an introduction to the science of climate change. Core topics include albedo, the greenhouse effect, the carbon cycle, and feedback mechanisms between these phenomena. Students will study past climates, climate models, and the impacts of modern climate change. Near the end of the semester students will discuss efforts to mitigate climate change. They conclude by briefly discussing the most widely adopted climate change policies. No previous experience with these subjects is assumed.
Gen Ed Attribute: Science Distributive
Distance education offering may be available.

SCI 101. Earth and Its Systems. 3 Credits.
This is a phenomenon-based science course, conveyed through interactive lectures, demonstrations, collaborative activities and investigations. Content is centered on a theme of systems: the solar system, the Earth-Moon-Sun system, Earth systems, and ecosystems, including how these systems interact with and impact each other.
SCI 101 Prerequisite: Must be an Education major.
Gen Ed Attribute: Science Distributive

SCI 102. Life, Matter, and Energy. 3 Credits.
This is a phenomenon-based science course, conveyed through interactive lectures, demonstrations, collaborative activities and investigations. Content is focused on concepts from the life and physical sciences, examining the structure and function of living things, heredity, evolution, adaptations, and physical and chemical properties of matter, energy, light, sound, forces and motion.
SCI 102 Prerequisite: Must be an Education major.
Gen Ed Attribute: Science Distributive

SCI 103. Science in the Arts: Color and Music. 3 Credits.
This class will be geared towards how science shows up in art and music. Students will initially study some basic physics principles such as force and motion, electric and magnetic fields, periodic oscillations, and wave properties. They will then introduce some biological and neuropsychological concepts as they begin to focus on light, optics and color, and the human eye. Next, students will focus on sound, sound production, sound perception, and the organization of sound into musical scales such that "music" can be constructed.
Gen Ed Attribute: Science Distributive
Distance education offering may be available.

SCI 111. Applications of Math and Reasoning in Nanoscience. 1 Credit.
This 3-week course will expose the students to basic problem-solving skills involving polynomial, rational, exponential, logarithmic, and trigonometric functions, where an emphasis will be placed on understanding function properties, models, and graphs applied to nanoscience situations. Little to no prior knowledge of physics, biology, chemistry, or engineering is assumed. There will be a hands-on component to this course that will utilize inquiry-oriented activities with Arduinos and other experimental interfaces. An example of a hands-on activity will be the synthesis and analysis of gold nanoparticles, focusing on their use in applications such as sensory probes, drug delivery, and catalysis.

SCI 199. Science Transfer Credits. 1-10 Credits.
Transfer Credits
Repeatable for credit.