

# SCIENCE (SCI)

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## **SCI-102: Forensic Science (3 Credits)**

This course treats the capabilities, techniques, and limitations of the crime laboratory, including emission spectrometry, chromatography, atomic absorption spectrophotometry, neutron activation analysis, and x-ray diffraction. A discussion of physical optics, especially as related to the microscope, is included. These basic principles are applied to the detection and identification of hair, paint, fibers and drugs. Forensic serology and fingerprinting are discussed. Applications in the area of firearms and of document and voice examination are included.

*Fulfills Core Requirement in Natural Sciences.*

*Theme: Engaging Creative, Aesthetic and Spiritual Experience.*

## **SCI-103: Physical Science (3 Credits)**

This course combines physics and chemistry in order to better understand our world. Some of the topics discussed are how science views the world, chemistry of the environment and the forces in the physical world as expressed in words, symbol, math and graphs.

*Fulfills Core Requirement in Natural Sciences.*

*Theme: What is Western Heritage?-Ancient and Modern.*

## **SCI-104: Earth Science (3 Credits)**

Earth Science draws on the sciences of geology, oceanography, meteorology and astronomy in order to gain an understanding of the earth and its place in the universe. Topics explored include minerals and rocks, external processes such as weathering, and erosion by water, wind and ice, internal processes as manifested by volcanoes, earthquakes, and plate tectonics, the oceans both in a static and dynamic sense, the earth's atmosphere again in both a static and dynamic sense, and the solar system and beyond to stars and galaxies.

*Fulfills Core Requirement in Natural Sciences.*

*Theme: What is Western Heritage?-Ancient and Modern.*

## **SCI-105: Integrated Science with Computers (3 Credits)**

The course takes a laboratory approach to integrating guided-inquiry techniques with self-directed projects. The goal is to help students acquire a fundamental understanding of the nature of science. Lecture on a large number of topics is replaced with a workshop environment that gives students the necessary time required for constructing a deeper and more permanent understanding.

*Fulfills Core Requirement in Natural Sciences.*

*Theme: Engaging Creative, Aesthetic and Spiritual Experience.*

*Course Fee: \$60.00*

## **SCI-110: Energy and the Environment (3 Credits)**

This course provides students with an in-depth understanding of energy as it is produced and consumed in our nation and the world. Students learn the basic physics of energy generation, the socioeconomic impact of energy and environmental consequences. Energy is an essential commodity for modern society. From the production of potable water and food to the charging of our electronic devices, energy is the essential element to realize modern life on Earth. The generation and delivery of energy is as diverse as the intended use. This course will cover the history of energy as it pertains to humans using it, current methods and challenges and future directions. It investigates the many technologies of energy and consequences on our lives and the environment. Students will take away an appreciation for energy well beyond the expectation that the lights will shine when the switch is flipped!

*Fulfills Core Requirement in Science.*

*Offering Term(s): Fall Only Every Year*