

PHYSICAL SCIENCE (PHSC)

PHSC 101 - PHYSICAL GEOGRAPHY I

Earth materials, structure and landforms; interaction between human beings and landscapes in the context of natural resources and human activity.

Credits: 3

Attributes: Natural Science

Course Notes: Satisfies general education physical science requirement.

PHSC 103 - GLOBAL CLIMATE CHANGE

Application of basic principles of science to atmospheric chemistry and climate change. Principles and topics covered include: atoms and molecules, what energy is and why it is conserved, alternative energy, absorption of light, the difference between climate change and the ozone hole, and possible solutions to environmental problems. Lecture and optional laboratory. Appropriate for nonscience majors with little or no science background; education students, or for intended science majors wishing to review elementary physical scientific principles. Meets General Education requirements for laboratory physical science (if laboratory taken; otherwise meets physical science lecture course requirement). Not for majors credit in the sciences.

Credits: 3

Attributes: Natural Science

PHSC 104 - SEVERE AND UNUSUAL WEATHER

This course will focus on the meteorological processes that lead to severe and unusual weather events and patterns. This course will examine thunderstorms, tornadoes, hurricanes, flash floods, drought and winter storms. Whenever possible, real-time weather data will be incorporated and severe weather events that occur in the United States during the course of our study will be examined. The societal impact of severe and unusual weather will also be studied.

Credits: 3

Attributes: Natural Science

PHSC 105 - INTRODUCTION TO ENVIRONMENTAL SCIENCE

A study of the basic principles of geology, chemistry, biology and ecology behind important environmental issues that include pollution, biodiversity, conservation and sustainability. Special emphasis will be placed on the unique challenges posed by urban environments. Discussions will include social issues such as environmental philosophy, economics, ethics and policy.

Credits: 3

Attributes: Natural Science

PHSC 107 - HOW THE WORLD WORKS

This course provides an introduction to the basic principles and concepts of physics as it relates to the world around us and how it works. It will deal with mechanics, heat, sound, matter, fluids, gases, electromagnetism, circuits, optics, atomic and nuclear physics. For example, it will explain the connection with the blue color of the sky and the red sunset. Laboratory investigations will allow students to explore the fundamental properties of the physical world, including matter, energy and electromagnetism.

Credits: 3

Attributes: Natural Science

Course Notes: Open to freshmen. Not for science major credit.