

Physical Science (PHS)

PHS 100 Environmental Conservation

IAI – L1905

3 Hours

Prerequisites: None

3 hours weekly (3-0)

The Environmental Conservation course introduces the major environmental issues that humans have created as well as evaluating possible solutions and appropriate courses of action to sustain our environment. It emphasizes elements of the human environment including atmospheric, climatic, hydrologic and geological processes and the environmental problems that have an impact on our planet.

PHS 101 Environmental Technology

IAI – LP 900

3 Hours

Prerequisites: None

3 hours weekly (3-0)

A consumer-user course oriented toward the economics and wise use of man's energy and machines; various up-to-the-minute scientific topics will be discussed; scientific versus environmental trade-offs will be analyzed.

PHS 102 Astronomy

IAI – P1 906

3 Hours

Prerequisites: None

3 hours weekly (3-0)

A general education course in astronomy. Textbook principles as well as observations of the night sky are brought together in this course. Intense discussions follow such questions as, "Are we alone?"

PHS 103 Earth Science

IAI – P1 905L

3 Hours

Prerequisites: None

4 hours weekly (2-2)

A general education lecture-laboratory course that covers the entire field of geology. No formal instruction in science is expected. Emphasis will be placed on the configuration of the earth, the dynamic processes that change the configuration, and the origin and history of the earth.

PHS 104 Contemporary Chemistry for Non-Science Majors

IAI – P1 903

3 Hours

Prerequisites: None

3 hours weekly (3-0)

A general education course introducing basic chemistry together with elementary studies related to the structure of matter from the atomic and nuclear standpoints.

PHS 105 Physics for Non-Science Majors

IAI – P1 900

3 Hours

Prerequisites: MAT 051

3 hours weekly (3-0)

A conceptual introduction to physics for the non-science major. The topics of motion, work, power, energy, waves, and electricity, and magnetism are emphasized.

PHS 106 Energy, Environment and Society

IAI – P1 901

3 Hours

Prerequisites: None

3 hours weekly (3-0)

PHS 106 is a general education science course intended for students having little or no background in science or mathematics. ENERGY, ENVIRONMENT AND SOCIETY deals with the core subjects of energy availability and generation, and impact on the environment and society. With respect to energy, the course covers basic concepts of energy, work and power, energy resources, applications, and problems of current interest. With respect to the environment it deals with most of the major current concerns. With respect to society it addresses the history of availability and utilization of energy resources and their implications for society and economic policies.

PHS 107 Weather & Climate

IAI – P1 905

3 Hours

Prerequisites: None
3 hours weekly (3-0)

A first course in the atmospheric sciences, for both science and non-science majors, which integrates an exposure to current atmospheric events with an understanding of current scientific thinking of atmospheric processes. The course covers topics ranging from basic atmospheric composition, structure and motions to an introduction to climatology. The course will also emphasize scientific literacy and qualitative reasoning applied to atmospheric behavior.

PHS 108 Intro. to Environmental Chemistry

IAI – P1 903

3 Hours

Prerequisites: None
3 hours weekly (3-0)

PHS 108, Intro. to Environmental Chemistry, is a general education science course. This course introduces basic concepts in chemistry and explores a wide range of environmental concerns in our society. Environmental topics may include ozone layer depletion and green house effect, air pollution and acid rain, water pollution, and energy sources and their impact on society.

PHS 111 Environmental Technology II

IAI – LP 901

3 Hours

Prerequisites: None
3 hours weekly (3-0)

This is an interdisciplinary physical and life science course that focuses on the study of humankind's relationship with other organisms and the nonliving environment, combining information from biology, chemistry, geography, geology, physics, economics, sociology, cultural anthropology, agriculture, engineering, law, politics, and ethics. Water, land, and food resources, biodiversity, hazardous wastes, and regional and global atmospheric changes are some of the topics that are covered in this course.

PHS 220 Physical Geology

IAI – P1 907L

4 Hours

Prerequisites: CHM 151 or equivalent
5 hours weekly (3-2)

Physical Geology is an intensive study of earth materials and processes designed for the beginning geoscience major and others seeking a strong background in earth sciences. Topics will include minerals, rock types, surficial processes, landscape evolution, structural geology, and plate tectonics. One Saturday field trip (date to be arranged) is also required.

PHS 222 Environmental Geology

IAI – P1 908L

3 Hours

Prerequisites: None
4 hours weekly (2-2)

An introduction to geologic processes and how they interact with people and society. An understanding of earth's systems and materials will provide the foundation for investigating current local and global environmental issues. The scientific analysis of natural hazards, geologic resources, and the sources of environmental pollution are among the topics of this course.