NATURAL SCIENCES (NAT-SCI)

Courses

NAT-SCI 101P Changing Life On Earth Credits: 4
This course presents an overview of issues relating to our ever changing world. It is research oriented with papers required on topics dealing with behavior, environmental issues, and aspects of evolution.
Co-requisites: NAT-SCI 102P.

NAT-SCI 102P Fundamentals Of Life Science Credits: 4
This course emphasizes the essential properties of biological systems through four major themes: diversity, the chemical and physical basis of life, continuity, and the organismal nature of life.
Co-requisites: NAT-SCI 103P.

NAT-SCI 103P Applications Of Life Sciences Credits: 4
This course is designed to provide students with laboratory exercises, field trips, films and discussions that help apply biological principles from 102P. New concepts are introduced throughout the course.
Co-requisites: NAT-SCI 102P.

NAT-SCI 130 Physics of Sports Credits: 3
A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.
Cross Listings: PHYSICS 130, PHY-SCI 130.

NAT-SCI 140 How Things Work Credits: 3
A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.
Co-requisites: NAT-SCI 140L.
Cross Listings: PHYSICS 140, PHY-SCI 140.

NAT-SCI 140L How Things Work Laboratory Credit: 1
Simple experiments based on everyday experiences are analyzed in terms of conceptual physics. The material includes elements of mechanics of a rigid body, elastic properties of matter, fluid dynamics, thermodynamics, electromagnetism, optics and modern physics.
Co-requisites: NAT-SCI 140.
Cross Listings: Physics 140L and Phy-Sci 140L.

NAT-SCI 150 Astronomy: Motions of the Cosmos Credits: 3
An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion crucial to the formation of stars and planetary systems, the growth of black holes and galaxies, and the evolution of cosmic structure.
Cross Listings: ASTR 150, PHYSICS 150, PHY-SCI 150.

NAT-SCI 153L Introductory Astronomy Laboratory Credits: 2
An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors. Concurrent enrollment in either Nat-Sci 150 or Nat-Sci 155 is encouraged but not required.

NAT-SCI 155 Astronomy: Starlight and Star Stuff Credits: 3
An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter crucial to the life and death of stars, the analysis of starlight and interstellar chemistry, and the interpretation of cosmic history.
Cross Listings: ASTR 155, PHYSICS 155, PHY-SCI 155.

NAT-SCI 171 Physics For Future Presidents Credits: 3
A course intended for liberal arts students focusing on the physics they need to be informed citizens in a democracy. Energy, global warming, terrorism, and health are examples of the important topics examined from the perspective of how science should inform policy.
Cross Listings: PHYSICS 171, PHY-SCI 171.

NAT-SCI 375P Nature Of Science Credits: 4
Selected topics from the natural sciences. Provides students fundamental principles and concepts of various physical and mathematical sciences. Lectures, demonstrations and discussions provide an integrated approach to the natural sciences.
NAT-SCI 425P Introduction To Quantitative Methods Credits: 3
Topics addressed are the scientific approach to study of behavior (goals of science, research terminology, variables, distributions, measures of central tendency, confidence intervals, use of research methods and ethics in research), experimental design (validity, reliability, design and sampling techniques), and interpretation of research results. Course includes in-class computer data entry and analysis.

Prerequisites: COMP-SCI 101 and MATH 110 or MATH 116