DEPAUL

HON 225 Honors Lab Science Topics

University Honors Program 2018-2019 (listings subject to change)

AUTUMN QUARTER

Urban Ecology: Plants and Animals in the City – S. Richardson – W 9:40-11:10 and F 9:40-12:40 (lecture and lab)

This course is about the interrelationships among plants, animals, and the environment in the Chicago area. We will explore the natural urban environment on field trips around DePaul and elsewhere in the city, Examples of studies will include investigating the group behavior of waterfowl at the nearby North Pond, studying whether trees are replacing themselves at a nearby forest preserve, and researching which types of trees insects like to eat around DePaul. Students will choose their own research projects and follow the process of scientific investigations from start to finish: generating their own hypotheses, choosing how to investigate them, gathering and analyzing data and interpreting their own results. We also study how serendipity and political events affect what topics scientists choose to study.

WINTER QUARTER

Bioanthropology, R. Scott – LPC TTH 2:40-4:10 (lecture) and TU 4:20-5:50 (lab)

This course will examine the evolution of the human species and explore the nature of human biological variation in the modern world. Students will consider the fossil evidence for human evolution using comparative data from nonhuman primate ecology to help reconstruct prehistoric lifeways. Particular attention will be given to how human populations utilized biological and behavioral mechanisms to adapt to their environments throughout evolutionary history.

Cosmochemistry: Big Bang to Extinction, W. Wolbach – LPC – M 6:00-9:15 – (lecture and lab) – Hybrid course with online component

This course introduces students to basic chemical, geological and astronomical concepts through a discussion of the chemical principles and scientific laws governing the composition of the components making up the Earth and solar system. Major topics include an introduction to the basic principles of matter, chemical reactivity, radioactive decay, mineral geology, and stellar/planetary formation. Applications of geochemistry will include the isotopic dating of geologic processes (e.g., mineral or rock formation, meteorite impacts) and a study of the environmental effects and extinctions triggered by giant meteorite impacts.

SPRING QUARTER

Environmental Science – J. Montgomery – TTH 9:40-11:10 (lecture) and TH 11:30-2:30

This course provides an overview of the interrelationships between humans and their environment from a scientific perspective, focusing on the application of scientific methodology to understanding, evaluating, and solving environmental issues. This interdisciplinary course is designed to provide an understanding of ecological principles and their relation to human populations and how cultural and societal institutions influence the availability and use of resources.

Archaelogy – C. Milan – MW 8:00-9:30 (lecture) and W 9:40-11:10 (lab)

Archaeology is equal parts curiosity, tedium, and excitement for the archaeologist seeking answers about people's past social and economic conditions. Through lectures and lab sessions, students will be introduced to a broad range of methodologies, theories, and practices currently employed by archaeologists who are working around the world to identify and interpret past human behavior.