

COURSE DETAIL

EARTH AND HUMANITY

Country

Ireland

Host Institution

University College Dublin

Program(s)

University College Dublin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Earth & Space Sciences

UCEAP Course Number

103

UCEAP Course Suffix**UCEAP Official Title**

EARTH AND HUMANITY

UCEAP Transcript Title

EARTH & HUMANITY

UCEAP Quarter Units

4.00

UCEAP Semester Units

2.70

Course Description

This course considers how geological agents have shaped the pattern of human evolution, the development of agricultural and early industrial civilizations, and impact on the general health of these and today's societies. The lectures are supplemented by a comprehensive on-line learning resource. The first part investigates how environmental conditions (e.g. fluctuating climatic conditions, natural resource availability, geohazards, and catastrophic natural events) influenced the evolution, migration, and settlement patterns of hominid and early-modern human populations in the recent geological past. The second part of the course examines how, over the past ten thousand years, geology has influenced the development of agriculture, cities, and an increasingly sophisticated use of metals, water, and other earth resources up to the Industrial Revolution. The increasing effect of humans on the environment over time is explored, including examples of civilizations ended by their own environmental impact; the collapse of civilizations as the result of external geological forces is also considered. The third part of the course focuses on how geological and related environmental factors continue to exert strong effects on the health and wellbeing of billions of people in the 21st century. Medical geology, an emerging discipline in environmental and human health, is introduced. Case studies are used to illustrate the beneficial and harmful effects of metals, metalloids, and mineral dust on human health and their links with geological environments.

Language(s) of Instruction

English

Host Institution Course Number

GEOL10050

Host Institution Course Title

EARTH AND HUMANITY

Host Institution Campus

University College Dublin

Host Institution Faculty

Host Institution Degree

Host Institution Department

Geology

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