COURSE DETAIL

EARTH SYSTEM SCIENCE
Country Netherlands
Host Institution Leiden University College
Program(s) Leiden University College
UCEAP Course Level Lower Division
UCEAP Subject Area(s) Geography Earth & Space Sciences
UCEAP Course Number 12
UCEAP Course Suffix
UCEAP Official Title EARTH SYSTEM SCIENCE
UCEAP Transcript Title EARTH SYSTEM SCI
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

The primary goal of this course is to understand Earth’s geologic and surface processes with respect to landscape formation, functioning, land degradation, and human impacts to the environment. The course features an integrative systems approach while introducing fundamental concepts from Earth science disciplines (physical geography, geology, geomorphology, hydrology). A guiding principle is to investigate why, how, when, and where materials, landforms, and natural resources are created, degraded, and changed by the action of tectonics, gravity, water, winds, and waves from high-mountain settings to the coastal zone. Introduced concepts are reviewed in the context of a range of potential topics, such as plate tectonics, volcanism, rocks and minerals, soils, climate, mass wasting, karst, water resources, river systems, coastal processes, and associated natural hazards.

The course includes compulsory field trips to the environs of The Hague to learn how concepts reviewed in class apply to what is commonly perceived as "the abiotic environment". Field activities include the training of observational and sampling skills. Basic laboratory analysis of soil and/or sediment samples introduce students to testing methods and reporting on self-produced environmental information.

Language(s) of Instruction
English

Host Institution Course Number

Host Institution Course Title
EARTH SYSTEM SCIENCE

Host Institution Course Details
https://studiegids.universiteitleiden.nl/en/courses/110217/earth-system-science

Host Institution Campus

Host Institution Faculty
Governance and Global Affairs

Host Institution Degree
Earth, Energy & Sustainability

Host Institution Department
Liberal Arts and Sciences: Global Challenges

Course Last Reviewed
2021-2022

Print