

COURSE DETAIL

INTRODUCTION TO EARTH SYSTEM SCIENCE

Country

Taiwan

Host Institution

National Taiwan University

Program(s)

National Taiwan University

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Earth & Space Sciences

UCEAP Course Number

14

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTION TO EARTH SYSTEM SCIENCE

UCEAP Transcript Title

EARTH SYSTEMS

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course introduces and covers the fundamental yet significant topics on the basic workings of Earth System Science, the interactions between its sub-systems, the past, current, and future conditions of Earth's environments, as well as modern human activities and its interactions with Earth's environment. Topics include: Global Change, Daisyworld: An Introduction to Systems, Global Energy Balance: Greenhouse Effect, Atmospheric Circulation System, Circulation of the Oceans, Circulation of the Solid Earth: Plate Tectonics, Recycling of the Elements, Focus on the Biota, Origin of Earth and of Life, Effects of Life on the Atmosphere: The Rise of Oxygen and Ozone, Long-term Climate Regulation, Pleistocene Glaciations, and Global Warming: Recent and Future Climate, Impacts, Adaptation, and Mitigation

Language(s) of Instruction

Host Institution Course Number

AtmSci1004

Host Institution Course Title

INTRODUCTION TO EARTH SYSTEM SCIENCE

Host Institution Course Details

https://nol.ntu.edu.tw/nol/coursesearch/print_table.php?course_id=209%2010120&c...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Atmospheric Sciences

Course Last Reviewed

2022-2023

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