

COURSE DETAIL

CLIMATE SYSTEM DYNAMICS

Country

Hong Kong

Host Institution

Chinese University of Hong Kong

Program(s)

Chinese University of Hong Kong

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Physics Earth & Space Sciences

UCEAP Course Number

20

UCEAP Course Suffix**UCEAP Official Title**

CLIMATE SYSTEM DYNAMICS

UCEAP Transcript Title

CLIMATE SYSTEMS

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course presents an integrated introduction to the climate system, stressing the dynamics of the atmosphere and its physical and chemical interactions with the hydrosphere, biosphere and geosphere. The course applies basic scientific and mathematical principles to explain the history, current state and future projection of weather and climate, natural hazards (e.g., typhoons, floods), and global climate change in the context of natural variability and anthropogenic influence. Topics include Earth's energy balance, climate feedback, convection and clouds, general circulation of the atmosphere and ocean, biogeochemistry and global carbon cycle, roles of vegetation and ecosystems, and historical and future climate change.

Language(s) of Instruction

English

Host Institution Course Number

ESSC2020

Host Institution Course Title

CLIMATE SYSTEM DYNAMICS

Host Institution Course Details**Host Institution Campus****Host Institution Faculty****Host Institution Degree****Host Institution Department**

Earth Space and Science

Course Last Reviewed

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