

COURSE DETAIL

CLIMATE CHANGE AND ITS IMPACTS ON THE ENVIRONMENT

Country

Sweden

Host Institution

Lund University

Program(s)

Lund University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Geography Environmental Studies Earth & Space Sciences

UCEAP Course Number

168

UCEAP Course Suffix**UCEAP Official Title**

CLIMATE CHANGE AND ITS IMPACTS ON THE ENVIRONMENT

UCEAP Transcript Title

CLIMATE CHANGE

UCEAP Quarter Units

12.00

UCEAP Semester Units

8.00

Course Description

This course covers the climate system and climate models. Modelling scenarios are used to study global and regional climate change and their potential effects on: hydrology, ecosystems and ecosystem processes, biodiversity, biogeography, extreme events, the cryosphere, atmospheric chemistry, the oceans. Methods of detecting climate change are also covered. The two focus points for the course are: 1) understanding the causal links that can explain variations and changes in climate, both in the past and in the future, with particular attention to greenhouse gases, the carbon cycle and climate feedbacks, and 2) understanding the impact of these variations and changes in climate on other components of the Earth system, at local, regional and global scales. Observational data, climate models, ecosystem models and modelling scenarios are used to practice the critical analysis of e.g. data representativity, modelling assumptions and validation against independent information.

Language(s) of Instruction

English

Host Institution Course Number

NGEN01

Host Institution Course Title

CLIMATE CHANGE AND ITS IMPACTS ON THE ENVIRONMENT

Host Institution Campus

Science

Host Institution Faculty

Host Institution Degree

Host Institution Department

Physical Geography and Ecosystem Science

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