# **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**

PHYSICAL GEOGRAPHY: CLIMATE CHANGE AND ITS IMPACTS ON THE ENVIRONMENT

#### **Host Institution Course Details**

#### **Host Institution Campus**

Science

### **Host Institution Faculty**

### **Host Institution Degree**

## **Host Institution Department**

Physical Geography and Ecosystem Science

# **Course Last Reviewed**

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