

# COURSE DETAIL

## THE CLIMATE SYSTEM

**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**

157

**UCEAP Course Suffix****UCEAP Official Title**

THE CLIMATE SYSTEM

**UCEAP Transcript Title**

THE CLIMATE SYSTEM

**UCEAP Quarter Units**

12.00

**UCEAP Semester Units**

8.00

## Course Description

This course provides students with the basics about the global climate system. It covers climate variations and climatological processes and how those affects the global and local climate. During the course students consider the global and regional climatology and what causes the largescale differences in the energy budget. Topics covered include: are the different components of the global climate system; the physical characteristics and the chemical composition of the atmosphere; the global and regional energy flows in the atmosphere. Students also learn about the general atmospheric circulation and the coupling between oceans and atmosphere with its role in the energy exchange. After this course students have an improved understanding of: the components affecting the energy balance of the atmosphere on different spatial- and time scales the relationship between the composition of weather-systems and their variations; natural and antropogenetic causes to variation in weather; basic climatological analysis methods; how to adapt and evaluate climate analysis to environmental and social applications.

## Language(s) of Instruction

English

## Host Institution Course Number

NGEA21

## Host Institution Course Title

THE CLIMATE SYSTEM

## Host Institution Campus

Science

## Host Institution Faculty

## Host Institution Degree

## Host Institution Department

Physical Geography and Ecosystem Science

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