

## COURSE DETAIL

### BIOSPHERE-ATMOSPHERE INTERACTIONS

**Country**

Sweden

**Host Institution**

Lund University

**Program(s)**

Lund University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Geography Environmental Studies

**UCEAP Course Number**

160

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

BIOSPHERE-ATMOSPHERE INTERACTIONS

**UCEAP Transcript Title**

BIOSPHERE-ATMOSPHER

**UCEAP Quarter Units**

12.00

**UCEAP Semester Units**

8.00

## **Course Description**

This course covers the processes regulating states and flows of mass and energy in the soil-vegetation-atmosphere system. The course emphasizes the energy exchange and water cycle. It also offers an in-depth overall picture of the system as well as the interactions between the various physical and biological processes. Students learn measuring techniques for relevant variables and parameters in an ecosystem. This knowledge is crucial for developing sustainable ways to manage land-based ecosystems. The course provides broad and advanced theory of the most important energy exchange processes in the interface between the atmosphere and the vegetation/land mass. In order to analyze the interplay between different processes within ecosystems, students use a simulation model of the energy exchange and the water-balance. The course also instructs students on how to use sensor technology and methods to measure and store abiotic and biotic variables and parameters using data logs and other instruments.

## **Language(s) of Instruction**

English

## **Host Institution Course Number**

NGEN16

## **Host Institution Course Title**

PHYSICAL GEOGRAPHY: BIOSPHERE-ATMOSPHERE INTERACTIONS

## **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

[Print](#)