

# COURSE DETAIL

## TERRESTRIAL ECOSYSTEM PROCESSES AND GLOBAL CHANGE

**Country**

Denmark

**Host Institution**

University of Copenhagen

**Program(s)**

University of Copenhagen

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Biological Sciences

**UCEAP Course Number**

105

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

TERRESTRIAL ECOSYSTEM PROCESSES AND GLOBAL CHANGE

**UCEAP Transcript Title**

TERRESTRIAL ECOSYST

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course provides a comprehensive understanding of processes in terrestrial ecosystems, and of effects of global change on processes and organisms. The focus is on carbon, water, and nutrient cycling between plants, soil organisms, soil, and atmosphere. This includes lessons in radiation and energy balance, photosynthesis, respiration, water use efficiency, and measures of stress, at leaf, plant, and canopy level. Belowground processes as plant nutrient uptake and microbial turnover, mobilization and immobilization of nutrients, plant-microbe-animal interactions, plant-soil-atmosphere interactions, rhizosphere processes and mycorrhizal function are also addressed, with focus on the importance of climate and anthropogenically induced climatic changes. Species/community effects on ecosystem processes and temporal dynamics are also addressed. Field and laboratory studies are performed and the results are presented orally and in reports. Participants present one or two journal papers with relation to the subjects taught in the lectures, including effects of global change on ecosystems.

## Language(s) of Instruction

English

## Host Institution Course Number

NBIK14018U

## Host Institution Course Title

TERRESTRIAL ECOSYSTEM PROCESSES AND GLOBAL CHANGE

## Host Institution Campus

## Host Institution Faculty

Science

## Host Institution Degree

Master

## Host Institution Department

Biology

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