

# COURSE DETAIL

## SYSTEM EARTH: SCALE DEPENDENCE, FEEDBACKS, AND GLOBAL CHANGE

**Country**

Netherlands

**Host Institution**

Wageningen University and Research Center

**Program(s)**

Wageningen University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Earth & Space Sciences

**UCEAP Course Number**

100

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

SYSTEM EARTH: SCALE DEPENDENCE, FEEDBACKS, AND GLOBAL CHANGE

**UCEAP Transcript Title**

SYSTEM EARTH

**UCEAP Quarter Units**

5.00

**UCEAP Semester Units**

**Course Description**

This course is an introduction to the mechanisms that determine the dynamics of the Earth system in the past, present, and future. The course uses disciplinary knowledge from hydrology, meteorology, and biogeochemistry. It introduces the systems approach to studying Earth system dynamics involving different temporal and spatial scales in process interactions and feedback mechanisms that explain observed climate and global change. Emphasis is on Earth system interactions associated with dynamical, physical, and biogeochemical processes affecting the state of the atmosphere, biosphere, and hydrosphere under natural and anthropogenic conditions. The course's lectures are complemented with an intensive modeling activity, including the search for information on the Earth system and an introduction into the ethical and philosophical context of global and climate change issues.

**Language(s) of Instruction**

English

**Host Institution Course Number**

MAQ-23306

**Host Institution Course Title**

SYSTEM EARTH: SCALE DEPENDENCE, FEEDBACKS AND GLOBAL CHANGE

**Host Institution Course Details****Host Institution Campus**

Soil, Water, Atmosphere

**Host Institution Faculty****Host Institution Degree****Host Institution Department**

Meteorology and Air Quality

## Course Last Reviewed

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