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

3.30

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 Campus
Soil, Water, Atmosphere

Host Institution Faculty

Host Institution Degree

Host Institution Department
Meteorology and Air Quality

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