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 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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