COURSE DETAIL

WATER QUANTITY AND QUALITY
Country Netherlands
Host Institution Wageningen University and Research Center
Program(s) Wageningen University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Environmental Studies
UCEAP Course Number 129
UCEAP Course Suffix
UCEAP Official Title WATER QUANTITY AND QUALITY
UCEAP Transcript Title WATER QUANT & QUAL
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

In this course, aspects of quantity and quality of water are studied at the sub-catchment scale both in theory and in field and laboratory practices. Students learn to apply computational methods in hydrology and chemical & biological measuring techniques as applied in analyses of surface water systems and water quality. The course covers definitions, concepts, processes, flow equations, systems analysis, and (sub-)catchment modeling approaches, measuring methods, and quantification of elements. Specific topics are relationships between landscape morphology and water quality, hydrological cycle (precipitation, evapotranspiration, soil moisture, groundwater), the interaction of groundwater and surface water, (drainage theory, design discharge, dimensioning of drainage and discharge systems, rainfall-runoff relationships in catchments), characterization of water types and aquatic ecosystems by chemical and biological field measurements (nutrients, chloride, alkalinity, oxygen, light absorption, composition of macro-fauna), experimental analysis of eutrophication processes in the laboratory.

Language(s) of Instruction
English

Host Institution Course Number
SLM20806

Host Institution Course Title
WATER QUANTITY AND QUALITY

Host Institution Campus
Wageningen University

Host Institution Faculty

Host Institution Degree

Host Institution Department
Soil Physics and Land Management

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