

## 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 Course Details

<https://wur.osiris-student.nl/onderwijscatalogus/extern/cursus>

### Host Institution Campus

Wageningen University

### Host Institution Faculty

### Host Institution Degree

**Host Institution Department**

Soil Physics and Land Management

**Course Last Reviewed**

2024-2025

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