



*Course syllabus*

# Vattenvård Water Management

**EXTN25, 15 credits, A (Second Cycle)**

**Valid for:** 2023/24

**Faculty:** Faculty of Engineering, LTH

**Decided by:** PLED W

**Date of Decision:** 2023-03-27

## General Information

**Elective for:** W4

**Language of instruction:** The course will be given in English

## Aim

The aim is to give students an integrated view on water as a natural resource.

## Learning outcomes

### *Knowledge and understanding*

For a passing grade the student must

- account for the fundamental features of the EU water directive and its regulatory framework
- describe how the EU water directive is implemented at municipality and county administrative board level
- account for the overall view on water management and restoration, including potential problems with different stakeholders

### *Competences and skills*

For a passing grade the student must

- plan and carry out independent work in water management
- search and compile relevant information from different sources
- apply knowledge in water management in professional situations

### *Judgement and approach*

For a passing grade the student must

- evaluate and assess information from different sources
- argue for consideration to multiple stakeholders in water management issues

## Contents

The course starts with a part about the EU water directive, with a study visit at the county administrative board in Skåne to learn how it is implemented. After that, general processes in water are studied, such as water treatment, pollutants, acidification, eutrophication, and the effects of humic substances. The next part of the course has both theoretical and practical elements and deals with the administration of water, biomanipulation of lakes, management of fish and crayfish, wetland construction for nutrient reduction, and lake, river, and coastal marine restoration. During the practical parts, GIS is used for map material and investigations. During the course, an individual literature project is conducted. The course ends with a two week group project, where the content of the course is applied on realistic water management cases.

## Examination details

**Grading scale:** TH - (U,3,4,5) - (Fail, Three, Four, Five)

**Assessment:** Examination takes place continuously during the course through compulsory parts including oral and written presentations, participating in discussions at seminars, individual literature project, and through a written examination. For students who have not passed the regular examination, an additional examination occasion in close connection to this is offered.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

## Admission

**Admission requirements:**

- 105 ECTS credits program studies
- EXTA01 Terrestrial Ecology
- VVRA01 Hydrology and Aquatic Ecology

**The number of participants is limited to:** No

**The course overlaps following course/s:** BIO787, BIOR33

## Reading list

- According to a list determined by the department, available at least eight weeks before the start of the course, see the web page for Undergraduate Studies in Biology.

## Contact and other information

**Course coordinator:** Per Carlsson, per.carlsson@biol.lu.se

**Further information:** The teaching consists of lectures, exercises, seminars, study visits, and projects. Participation in exercises, seminars, study visits, projects, and thereby integrated teaching, is compulsory.