

## Syllabus

### **BI1340.1 Ecology for Fish Management and Conservation, 15.0 credits**

#### **Ekologi för fiskevård**

The course is given EnvEuro - European Master in Environmental Science and Sustainable Food Systems – Master´s Programme

Version 1 in Slukurs. Corresponds to version 1 in Ladok

#### **Syllabus approved**

26 November 2018

The version applies to students admitted from autumn 2019

The version is not a module version

#### **Subjects**

Biology/Environmental science

#### **Education cycle**

Second cycle

#### **Modules**

<b>Title</b>	<b>Code</b>	<b>Credits</b>
Single module	0101	15.0

#### **Advanced study in the main field**

Second cycle, only first-cycle courses as entry requirements (A1N)

#### **Grading scale**

5:Pass with Distinction, 4:Pass with Credit, 3:Pass, U:Fail

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

## **Language**

English

## **Prior knowledge**

Equivalent to 120 credits including 60 credits in Natural Science or Technology. Knowledge corresponding to at least 20 credits in Biology, including 7.5 credits in Ecology. English language proficiency demonstrated as English 6 (Swedish secondary school) or equivalent.

## **Objectives**

The course aims at training students in fish ecology and its applications in aquatic resource management and conservation of fish populations in freshwater, coastal and marine environments. This course gives students skills for working with national and international water and fisheries management issues.

After completing the course, students should be able to:

1. Describe essential ecological terms and theory as well as legislation and management goals relevant for fish management and conservation
2. Identify and apply ecological knowledge to current real-life issues in fish management and conservation
3. Evaluate fish management and conservation plans or measures from a fish ecological perspective
4. Summarise and communicate relevant ecological knowledge on aquatic resource management to stakeholders and fish management and conservation organisations

## **Content**

A major part of the course consists of a project work with case studies regarding actual fish management and conservation projects. Students work in groups with representatives of on-going management projects. The students' task is to formulate the management problem, find and compile ecological knowledge in order to solve management questions, as well as presenting ecological knowledge and proposals for management improvement to stakeholders. Students discuss in seminars the ecological knowledge on fish ecology obtained from scientific literature and how it relates to the identified management problems in the case studies.

In a series of lectures students gain a deeper understanding of essential aspects of fish ecology such as fish migration, fish life cycles, spatial ecology, and population genetics, and broaden their fish management perspectives, which subsequently and

where suitable will be implemented in their project work.

The course also encompasses current European and national legislation regarding nature and the aquatic environment (for example the Water Framework Directive, Habitat Directive, Marine Directive, Swedish environmental management goals). It also covers fisheries resource aspects (such as commercial and recreational fisheries, the Common Fisheries Policy) that build the frameworks and are the main driving forces for most fish management and conservation activities.

Students will also receive training in efficiently communicating ecological knowledge and information in applied management settings.

### **Formats and requirements for examination**

Completed and approved oral and written presentation of project work and active participation in mandatory seminars.

Grading is based on written report on a case study (groupwise), compilation of a poster, as well as oral presentation of the case study. Grade 4 and 5 requires additional individual written and oral reporting.

- If the student fails a test, the examiner may give the student a supplementary assignment, provided this is possible and there is reason to do so.
- If the student has been granted special educational support because of a disability, the examiner has the right to offer the student an adapted test, or provide an alternative assessment.
- If changes are made to this course syllabus, or if the course is closed, SLU shall decide on transitional rules for examination of students admitted under this syllabus but who have not yet passed the course.
- For the examination of a degree project (independent project), the examiner may also allow the student to add supplemental information after the deadline. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

### **Additional information**

Field trips to fish management and conservation projects are included and will be organised as day trips from Ultuna.

- The right to take part in teaching and/or supervision only applies to the course date to which the student has been admitted and registered on.

- If there are special reasons, the student may take part in course components that require compulsory attendance at a later date. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

**Responsible department**

Department of Aquatic Resources

**Supplementary Information**

*Finalized by:* Programnämnden för utbildning inom naturresurser och jordbruk  
(PN - NJ)

*Biology Area:* Other Biology Courses