Ecology for Fish Management and Conservation

Application code = SLU-20128
Course code = BI1269
Course period = 20161101 – 20170115

Syllabus

BI1269 Ecology for Fish Management and Conservation, 15.0 credits

Ekologi för fiskevård

Syllabus approved: 2015-12-16 (from vt 2016)

Versions: 1. SS 2016 -

Subjects: Biology/Environmental science

Education cycle: Advanced

Advanced study in the main field: Avancerad nivå, har endast kurs/er på grundnivå som förkunskapskrav (A1N)

Marking 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.

Prerequisites:
Equivalent to 120 credits including 60 credits in one of the following subjects: Biology, Agricultural Science, Soil Science, Geo Science, Environmental Science, Forest Science, or Technology. Knowledge corresponding to at least 20 credits in Biology, including 10 credits in Ecology. English language proficiency demonstrated as English 6 (Swedish secondary school) or equivalent.

Objective:
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 encompass current European and national legislation regarding
nature and the aquatic environment (for example the Water Framework
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.

Implementation:

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.

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

- A student who has been admitted to and registered on a course is entitled to receive teaching and/or supervision only for the course date he/she was admitted to.
- A student who for special reasons is unable to participate in compulsory elements, is entitled an opportunity to recover those elements during a course given at a later date. More information is available in the regulations for education.

**Responsible department:**
Department of Aquatic Resources