

# Department of Biology Education

# **Syllabus**

for course at advanced level
Marine Ecosystem Dynamics
Marin ekosystemdynamik

7.5 Higher Education Credits 7.5 ECTS credits

 Course code:
 BL7056

 Valid from:
 Spring 2019

 Date of approval:
 2019-03-11

**Department** Department of Biology Education

Main field: Biology

Specialisation: A1N - Second cycle, has only first-cycle course/s as entry requirements

#### **Decision**

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University.

## Prerequisites and special admittance requirements

Admission to the course requires knowledge equivalent to a Bachelor degree in Biology with a minimum of 7,5 credits in ecology. Swedish upper secondary school course English B/English 6 or equivalent.

#### Course structure

Examination codeNameHigher Education Credits7056Marine ecosystem dynamics7.5

# Course content

This course gives a broad overview of theoretical, practical and applied aspects of dynamics in marine ecosystems. This will be accomplished by focusing on ecological processes and modeling. The course will cover collection of field-and experimental data including long-term studies. This will be combined with theoretical questions of ecological processes, interactions between marine ecosystems and global change, and the use of monitoring data in research and human society.

#### **Learning outcomes**

Upon completion of the course, students are expected to be able to:

- select appropriate methods for addressing particular questions based on field and experimental data
- describe the response of marine ecosystems to environmental changes
- describe how ecological theory describes the interplay among organisms and their environment
- describe how long-term environmental monitoring programs are designed and conducted
- describe how monitoring results are used by the society and in research
- present the results for an environmental authority and the propose appropriate decisions and actions for a sustainable environment.

#### **Education**

Instruction consists of lectures, seminars, computer exercises and field studies.

Participation in seminars, computer exercises as well as field studies and any associated integrated instruction is compulsory. In the event of special circumstances, the examiner may, after consultation with the teacher concerned, grant a student exemption from the obligation to participate in certain compulsory instruction.

## Forms of examination

a. The course is examined as follows: Knowledge assessment takes the form of written examination as well as written and oral presentations.

If the instruction is in English, the examination may also be conducted in English.

b. Grades will be set according to a seven-point scale related to the learning objectives of the course:

A = Excellent

B= Very good

C = Good

D = Satisfactory

E = Adequate

Fx = Fail, some additional work required

F = Fail, much additional work required

- c. The grading criteria will be distributed at the beginning of the course.
- d. In order to pass the course, students must receive a passing grade on all course units, and participate in all mandatory instruction.
- e. Students who receive a failing grade on a regular examination are allowed to retake the examination as long as the course is still provided. The number of examination opportunities is not limited. Other mandatory course elements are equated with examinations. A student who has received a passing grade on an examination may not retake the examination to attain a higher grade. A student who has failed the same examination twice is entitled to have another examiner appointed, unless there are special reasons to the contrary. Such requests should be made to the department board.

The course includes at least two examination opportunities per year when the course is given. At least one examination opportunity will be offered during a year when the course is not given.

f. Students awarded the grade Fx are given the opportunity to improve their grade to E. The examiner decides the supplementary assignments to be performed and the pass mark criteria. The supplementary assignments will take place before the next examination session.

#### Interim

Students may request that the examination be conducted in accordance with this course plan even after it has ceased to be valid. However, this may not take place more than three times over a two year period after course instruction has ended. Requests must be made to the departmental board. The provision also applies in the case of revisions to the course plan (and the revisions of the course literature).

#### Limitations

The course may not be included in examinations in combination with courses Marine Environmental Monitoring (BL7010) and Marine Environmental Monitoring and Ecological Risk Assessment (BL8043) or equivalent.

# Misc

The course is a component of the Master's Programme in Marine Biology, and it can also be taken as an individual course.

# Required reading

Course literature is decided by the departmental board and published on the course page in the online course catalogue at least two months before the start of the course.