

Syllabus

for course at advanced level

Baltic Sea Ecosystem: Applications, Modeling and Management
Östersjöns ekosystem: tillämpade studier, modellering och förvaltning

**15.0 Higher Education
Credits**
15.0 ECTS credits

Course code:	BL7050
Valid from:	Autumn 2016
Date of approval:	2016-05-16
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's degree in any of the disciplines biology, chemistry, earth science or environmental science. Swedish upper secondary school course English B/English 6 or equivalent.

Course structure

Examination code	Name	Higher Education Credits
DEL1	Theory and practice	7.5
DEL2	Modelling and analysis	7.5

Course content

a. The course covers the following topics:

- The Baltic Sea's environmental challenges and how society works with them
- The state of knowledge regarding the Baltic Sea coastal zones and open seas with regard to anthropogenic disturbance from a policy perspective. Field work at a marine biology laboratory (Askö) including data collection and experiments on the biodiversity of the Baltic Sea, fisheries issues and the effects of anthropogenic disturbance.

Own and existing data is translated into models that then form the basis for proposals for measures. Finally, the course participants' conclusions are communicated to decision-making authorities.

b. The course consists of the following course units: 1. Theory and practice 7.5 credits 2. Modeling and Analysis 7.5 credits

Learning outcomes

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

Unit 1. Theory and practice

- demonstrate an understanding of the Baltic Sea's environmental challenges and how researchers and authorities work to deal with these
- demonstrate the ability to discuss Baltic Sea management from an ecosystem perspective
- carry out own data collection in the field
- be able to draw conclusions about what the results achieved mean for the management of the Baltic Sea's natural resources

- communicate scientifically based action proposals to the relevant authorities.

Unit 2. Modeling and analysis

- use own and existing data in ecosystem-based models
- draw conclusions about what results have been achieved for the management of the Baltic Sea's natural resources
- be able to communicate scientifically based action proposals to the relevant authorities.

Education

Instruction consists of lectures, group work, field work, modelling and seminars. Participation in group work, study visits and seminars 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 of unit 1 and 2 takes the form of written tests 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. Grading criteria for the course will be distributed at the start of the course.

d. In order to pass the course, students must receive a passing grade on all course units, approved group discussions, hand-ins 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 for each course unit 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).

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.