

# Syllabus

for course at advanced level

**Environmental Risk Assessment and Management**  
**Ekologisk riskbedömning och miljöförvaltning**

**15.0 Higher Education**  
**Credits**  
**15.0 ECTS credits**

<b>Course code:</b>	BL8014
<b>Valid from:</b>	Autumn 2007
<b>Date of approval:</b>	2006-09-27
<b>Department</b>	Department of Biology Education
<b>Subject</b>	Biology

## Decision

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

## Prerequisites and special admittance requirements

Admittance to the course requires knowledge equivalent to Ecotoxicology 15 credits. (Three credits corresponds to approximately two weeks full-time studies). Swedish upper secondary school course English B or equivalent or one of the following tests. Cambridge CPE och CAE: Pass. IELTS : 6.0 (with no part of the test below 5.0). TOEFL (paper based): 550 (with minimum grade 4 on the written test part). TOEFL (computer based): 213. TOEFL (internet based): 79.

## Course structure

Examination code	Name	Higher Education Credits
8A14	Theory	7.5
8B14	Project	7.5

## Course content

- The course covers theory and implementation of methods used in ecological risk assessment (ERA). ERA consists in assessing the likelihood that adverse effects of human actions on the environment will occur (predictive) or have occurred (retrospective). Predictive ERA methods are used for example to assess the risk for the environment from new chemical emissions, and retrospective ERAs are used to assess the effects of from past actions e.g. released contaminants, or other anthropogenic actions that have occurred e.g. industrial spills, eutrophication, habitat destruction. The course is based on real case studies, where the course students learn how to apply both predictive and retrospective ERA methods for evaluating environmental risks in anthropogenically disturbed areas in temperate and in tropical ecosystems, as well as how to propose appropriate remedial actions for environmental managers.
- The courses includes following elements: theory: 7.5 hp and a project: 7.5 hp.

## Learning outcomes

After course completion the students will be able to implement ecological knowledge and ecotoxicological principles for weighing the risks associated with adverse human actions for the environment and propose adequate remedial and management strategies.

## Education

The education consists of lectures, case studies, seminars, modelling exercises and written as well as oral presentations.

Participation in case studies, seminars, modelling exercises, oral presentations and group education associated with this is compulsory. An examiner may rule that a student is not obliged to participate in certain compulsory education if there are special grounds for this after consultation with the relevant teacher.

### **Forms of examination**

a. Examination for the course is in the following manner: measurement of knowledge takes place through: Written and/or oral examination as well as written and oral presentations.

b. Grading is carried out according to a 7-point scale related to learning objectives:

A = Excellent

B = Very Good

C = Good

D = Satisfactory

E = Sufficient

Fx = Fail

F = Fail

c. Grading criteria for the course will be distributed at the start of the course.

d. A minimum grade of E is required to pass the course, together with:

- activity at seminars
- participation in all compulsory education

e. Students who fail to achieve a pass grade in an ordinary examination have the right to take at least further four examinations, as long as the course is given. The term “examination” here is used to denote also other compulsory elements of the course. Students who have achieved a pass grade on an examination may not retake this examination in order to attempt to achieve a higher grade. Students who have failed to reach a pass grade on two occasions have the right to request that a different teacher be appointed to set the grade of the course. A request for such appointment must be sent to the departmental board.

### **Interim**

Students may request that the examination is carried out in accordance with this syllabus even after it has ceased to apply. This right is limited, however, to a maximum of three occasions during a two-year-period after the end of giving the course. A request for such examination must be sent to the departmental board.

### **Misc**

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

### **Required reading**

Course literature is decided by the departmental board and is described in an appendix to the syllabus.