

# Syllabus

for course at advanced level

**Conservation Ecology**  
**Bevarandekologi**

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

<b>Course code:</b>	BL8037
<b>Valid from:</b>	Spring 2010
<b>Date of approval:</b>	2009-09-23
<b>Department</b>	Department of Biology Education
<b>Main field:</b>	Biology
<b>Specialisation:</b>	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

Admittance to the course requires knowledge equivalent to Ecology II 15 hp. (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
8A37	Theory	12
8B37	Essay	3

## Course content

a. The course covers typical problems for small and declining populations. Theories for small populations: genetic variation, adaptation, reaction norms and plasticity in relation to conservation problems. Theories for declining populations: models and empirical examples. Population dynamics in theory and practice: population growth, demography, density-dependent processes and species interaction from a conservation perspective. The role of spatial and age structure for the dynamics and abundance of populations. Application of models to conservation problems, eg., viability analysis and management of populations. Human effects on diversity in a longer perspective.

b. The course includes the following moments: 1. Theory 12 hp, 2. Essay 3 hp.

## Learning outcomes

It is expected that the student after taking the course will be able to:

- show basic knowledge on theories in demographic processes and conservation biology
- formulate problems in conservation biology and show experience in analysing these problems
- explain how stochastic and deterministic processes affect population growth
- show an ability for model based analysis of processes in conservation ecology.

## Education

The education consists of lectures, seminars, exercises, case studies and work with essay as well as individual work.

Participation in seminars, exercises, case studies and work with essay as well as individual work 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:

- 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.

### **Limitations**

The course can not be included in a degree together with the courses Theoretical Population Biology, 10 p (BI3400), Theoretical Population Biology 7,5 hp (BL7023), theoretical Population Biology 15 hp (BL7017), Conservation Ecology 7,5 hp (BL8012) or the equivalents.

### **Misc**

The course is a component of the Master's Programme in Biology, Ecology and Biodiversity & Conservation 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.