

Syllabus

for course at advanced level

Ecosystem Management
Ekosystemförvaltning

7.5 Higher Education
Credits
7.5 ECTS credits

Course code:	BL8015
Valid from:	Autumn 2007
Date of approval:	2006-09-27
Department	Department of Biology Education
Subject	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 Resilience, Vulnerability and Adaptability 7,5 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
8015	Ecosystem Management	7.5

Course content

The course covers theories of resilience, complexity and dynamics in natural ecosystems, as well as concepts such as ecosystem services, functional biodiversity, threshold effects and mobile links. The course includes the following elements: examples from different parts of the world, where natural variability and human exploitation of natural resources have resulted in sudden and dramatic impacts on ecosystems and their capacities to generate ecosystem goods and services. Methods used to map functional diversity and to value natural resources and ecological processes. The impacts of global economic driving forces on local natural resource management. Quantitative tools to highlight humans' dependence on natural systems, such as simulations and ecological footprint. The theoretical concepts and methods are applied to 2-3 case studies, of which at least one is in a low-income nation and one in Sweden or another high-income nation.

Learning outcomes

It is expected that the student, after taking the course, will be able to: • explain and discuss the components of concepts like ecosystem management, adaptive management, resilience and complex adaptive systems as well as relate these to one another; • describe and discuss the latest theories regarding the importance of biodiversity for ecosystem functioning and resilience; • motivate why both social and economic as well as ecological processes must be integrated into management structures and in ecosystem dynamic models; • apply methods for quantifying and valuing ecosystem services.

Education

The education consists of lectures, group exercises and seminars. Participation in group exercises, seminars

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, written and/or oral presentations and activity at seminars.

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 Natural Resource Management, Governance and Globalization 40 p (BI4660) and Natural Resources and Society 10 p (BI3560) or the equivalents.

Misc

The course is a component of the Master's Programme in Ecosystems, Governance and Globalisation, 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.