

# Syllabus

for course at advanced level

**Management of Aquatic Resources in the Tropics**  
**Tropisk vattenvård**

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

<b>Course code:</b>	BL7018
<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
<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 a minimum of 120 credits, including Cell and Molecular Biology 15 credits, Diversity and Phylogeny of Organisms 15 credits, Physiology 15 credits and Ecology, Floristics and Faunistics 15 credits. Swedish upper secondary school course English B or equivalent.

## Course structure

Examination code	Name	Higher Education Credits
7018	Management of Aquatic Resources in the Tropics	15

## Course content

The course covers aquatic ecology in tropical ecosystems, tropical ecotoxicology and natural resources in the tropics. From a marine perspective the course deals with coral reefs, mangroves and seagrass ecosystems including pollution problems and changes in productivity and fishery production as a result of coastal zone exploitation such as urbanisation, aquaculture, agriculture, deforestation, mining, tourism etc. The course also covers effects from changes in land use, irrigation and hydroelectric power plants etc. on fisheries and on different fresh water ecosystems. The development of fisheries and the risk of overfishing in different regions are discussed in relation to the production capacity of the local ecosystem.

Possibilities for-, conflicts from- and environmental effects of aquaculture in dams, lakes and oceans are discussed. The course also addresses the use and effects of pesticides in tropical ecosystems versus temperate areas. The discussed problems are put in a context of education level, development and research conditions in tropical developing countries.

## Learning outcomes

It is expected that the student after taking the course will be able to: • demonstrate solid knowledge about aquatic environmental problems in the tropics • explain the importance of the environmental status for development in the tropics.

## Education

The education consists of lectures, group discussions, case studies and seminars.

Participation in group discussions, case studies, 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, activity at seminars 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 course Tropical Marine Biology 5 p/7,5 hp, Management of Aquatic Resources in the Tropics (BI3260) or the equivalents.

### **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.