

# Syllabus

for course at advanced level

**Systematic Zoology**  
**Zoologisk systematik**

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

<b>Course code:</b>	BL7004
<b>Valid from:</b>	Autumn 2007
<b>Date of approval:</b>	2006-09-11
<b>Department</b>	Department of Biology Education
<b>Subject</b>	Biology
<b>Specialisation:</b>	AXX - Second cycle, in-depth level of the course cannot be classified

## 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 Cell and Molecular Biology 15 credits, Diversity and Phylogeny of Organisms 15 credits, Physiology 15 credits (including experimental animals) and Ecology, Floristics and Faunistics 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
7004	Systematic Zoology	15

## Course content

The course covers: •The vast diversity of animal life and its evolution with emphasis on modern systematics and its methods. •Reconstruction of evolutionary relationships between groups of animals using morphological and/or molecular data, as well as character evolution. •All major taxa of animals are discussed concerning systematics, phylogeny, and comparative morphology. •Demonstration of tools in systematic research (TEM, SEM, light microscopy, molecular methods), and collection and preparation techniques. •Species concepts, taxonomy and, zoological nomenclature. •Biological collections in museums, databases, and collection management.

## Learning outcomes

It is expected that the student after taking the course will be able to: •Describe the evolution and phylogenetic relationships of the multicellular groups of animals. •Recognize major animal groups (recent and extinct), and describe characteristics of each group. •Be able to explain how to reconstruct hypotheses of phylogenetic relationships with morphological and/or molecular data. •Understand the use of phylogenies for other issues, e.g., evolutionary processes and biogeography. •Recognize and understand basic concepts of taxonomy and zoological nomenclature.

## Education

The education consists of lectures, group work with oral presentations, demonstrations, laboratory exercises

and field studies.

Participation in group work, laboratory exercises, written presentation as well as field studies 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

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:

- approved laboratory exercises and group work
- 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 Systematic Zoology 10 p (BI3360) or the equivalent.

### **Misc**

The course includes compulsory elements in field, which may entail additional cost for the student. The course is a component of the Master's Programme in Biology and Marine 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.