



## DEPARTMENT OF BIOLOGICAL AND ENVIRONMENTAL SCIENCES

### **BIO502 Ornithological identification methodology, 5 higher education credits**

Ornitologisk bestämningsmetodik, 5 högskolepoäng

*Second Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Department of Biological and Environmental Sciences on 2014-09-14 and was last revised on 2015-09-14 to be valid from 2015-09-14, autumn semester of 2015.

*Field of education:* Science 100%

*Department:* Department of Biological and Environmental Sciences

#### **Position in the educational system**

The course can be part of the following programme: 1) Biodiversity and Systematics, Nordic Master's Programme (N2BIS)

*Main field of studies*

Biology

*Specialization*

A1N, Second cycle, has only first-cycle course/s as entry requirements

#### **Entry requirements**

University studies of a minimum of 60 hec in Biology. Applicants must prove their knowledge of English: English 5/English A from Swedish Upper Secondary School or the equivalent level of an internationally recognized test, for example TOEFL, IELTS.

#### **Learning outcomes**

After completion of the course the student is expected to

*Knowledge and understanding*

- be familiar with avian external morphology
- understand moult patterns and how it leads to intraspecific variation and how this may be applied to ageing and sexing of birds.

#### *Skills and abilities*

- be capable of describing a bird in a standardized and consistent way, based on external morphology.
- be familiar with methods for ageing and sexing of birds
- be able to identify birds that occur in Scandinavia from a predefined list of species.
- have acquired basic skills in handling live birds for scientific sampling, biometry or ringing, and how biometrics are collected.

#### *Judgement and Approach*

- have acquired basic understanding of ethical principles relevant to handling and studying live birds, and appreciate their own impact on their avian study objects.

### **Course content**

The course is given as e-learning on the Gothenburg University teaching platform GUL.

#### **1. Basic identification skills**

The course will review avian external morphology, with particular attention on plumage and proportions. The different feather tracts are described and labelled, and methods for verbally describing a bird in a consistent manner are discussed. Moult patterns are outlined. Methods for determining the age of a bird are presented, particularly those based on differences in plumage, moult patterns and soft parts. Methods for sexing of birds are presented, particularly those based on differences in plumage and soft parts.

Different types of vocalizations are presented.

Ethical principles are discussed.

#### **2. Identification of birds**

Identification to species, ageing and sexing is described for a selection of representative Scandinavian species. Vocalizations for a selection of representative Scandinavian species will be presented.

#### **3. Handling of birds**

Basic methods for catching, ringing and sampling of birds are presented during a field course. Identification to species, ageing and sexing is practiced IRL.

### **Form of teaching**

The course is given as e-learning on the Gothenburg University teaching platform GUL. It includes one session at a field station, with practical exercises and species

identification.

Students must participate successfully in the practical sessions

*Language of instruction:* English

### **Assessment**

There is a written exam, consisting of two parts:

methodology and theory

species identification

### **Grades**

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

Written exams on learning outcome for methodology amounts to 50% of the grade. The exam on species identification amounts to 50% of the grade.

To pass, 60% of the maximum points on the written methodology exam is required. For pass with distinction 85% of the maximum points on the written methodology exam is required. In addition participation in the field course is required.

Students who fail the tests are offered further test opportunities.

### **Course evaluation**

null

### **Additional information**

The course comprises travelling to and accomodation at a field station which may infer a cost on the student.