UNIVERSITY OF GOTHENBURG

FACULTY OF SCIENCE

BIO401, Alphataxonomical principles, 5,0 higher education credits
Alfataxonomiska principer, 5.0 högskolepoäng

Second Cycle

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1. Confirmation
The course syllabus was confirmed by Faculty of Science on 2012-05-08 to be valid from 2012-09-01.

Field of education: Science 100 %
Department: Department of Biological and Environmental Sciences

2. Position in the educational system

Main field of studies	*Specialization*
Biology	A1N, Second cycle, has only first-cycle course/s as entry requirements

3. Entry requirements
Approved base course in Biology or Environmental Sciences, alternatively 60 ects approved courses with specialization in Biology under the Education program.

4. Course content
Alpha taxonomy is the discipline within biology concerned with delimiting, naming and describing organisms. As such it constitutes the basis for conducting systematic studies on our biodiversity at any level from cell to ecosystem.
The course comprises a thorough discussion on species concepts, in biological terms as well as with a philosophical angle. During the course the main principles for naming taxa within different organism groups will be presented. Examples of the importance of reference specimens and correct labelling for taxonomical work are given. Exercises in taxon description, freely formulated as well as formalised ones, are given. Practicals in identification key construction, also interactive keys, are elements in the course. In addition examples of taxonomical databeses are presented.
A literature or practical work in which the alphataxonomical knowledge gained is used ends the course.

5. Learning outcomes

After completion of the course the student is expected to

Knowledge and Understanding

- be able to account for different species concepts and problems of species delimitation
- be able to account for the most important nomenclatural rules and apply them on real or constructed problems

Skills and Abilities

- use and construct descriptions of organisms in various phylogenetic groups
- use and construct keys for identification of taxa

Judgement and Approach

- discuss the value of species as taxonomic entity
- discuss the roll of individuals in the form of specimens for taxonomy

6. Literature

Winston, J.E. 1999. Describing species: Practical Taxonomic Procedures for Biologists, Columbia University Press

7. Assessment

The course is given as e-learning on the Gothenburg University teaching platform GUL. It comprises two modules:

Module 1 is given as taped or live lectures and practicals that the students must carry out guided by a manual. Reports from practicals must be submitted. There is a written exam based on the course literature testing the learning outcome of module 1.

Module 2 consists of a literature or practical project where the alphataxonomical knowledge gained is used. The work results in a written report that should be made available to the teacher and fellow students on GUL.

8. Grading scale

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

Written exam on module 1 amount to 75% of the grade, the Project report (module 2) to the remaining 25%.

9. Course evaluation

10. Additional information

Language of instruction: English.