



## DEPARTMENT OF BIOLOGICAL AND ENVIRONMENTAL SCIENCES

### **BIO468 International biodiversity resource management, 5 credits**

Internationell hantering av biologiska naturresurser, 5 högskolepoäng

*Second Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Faculty of Science on 2011-11-14 and was last revised on 2020-03-09 by Department of Biological and Environmental Sciences to be valid from 2020-03-09, spring semester of 2020.

*Field of education:* Science 100%

*Department:* Department of Biological and Environmental Sciences

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

This is a course at the advanced level, given within NABiS - Masters in Biodiversity and Systematics, but it is also available as a stand-alone course.

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

#### *Main field of studies*

Biology

#### *Specialization*

A1F, Second cycle, has second-cycle course/s as entry requirements

#### **Entry requirements**

Bachelor of Science in Biology or Environmental Sciences. Minimum of 10 credits in Systematics (Classification) of any organism group or corresponding competence.

#### **Learning outcomes**

After completion of the course the student is expected to be able to:

*Knowledge and Understanding*

- account for the global networks of decision-making in the field of biodiversity conservation
- account for the content of international conventions concerning biodiversity

#### *Skills and Abilities*

- describe the red list classification system and its scientific background
- account for EU directives and regulations on biological diversity and their implementation
- read and assimilate the technical language used in acts related to the protection of biodiversity

#### *Judgement and Approach*

- describe how you, as a biologist, can contribute to a sustainable use of natural resources with emphasis on biological diversity

The course is sustainability-focused, which means that at least one of the learning outcomes clearly shows that the course content meets at least one of the University of Gothenburg's confirmed sustainability criteria. The content also constitutes the course's main focus.

### **Course content**

The course presents an overview of biodiversity management in an international perspective. It is divided into three modules:

1. Introduction to international environmental management, with emphasis on biodiversity
  - 2a. International conventions aiming to protect biodiversity including EU work related to nature conservation
  - 2b. Other agreements and conservation tools which are available to nature protection including red lists
3. Case study on species, species group or area under protection by environmental agreements

### **1. Introduction to International Biodiversity Management**

Governmental and non-governmental organisations (NGOs) across the globe interact to conserve the Earth's biodiversity. This module concerns the networks of decision-making and implementation in the field of biodiversity. Among the questions covered are: What are the implications of individual state legislation, EU legislation and international treaties? What is the role of NGOs such as IPCC (International Panel on Climate Change) and IPBES (International Panel on Biodiversity and Ecosystem Services)? What is the difference between a treaty, other types of international agreements, and EU directives and regulations? What is the implication of a state

signing and ratifying a treaty? What is the relationship between biodiversity conservation and management of natural resources?

## 2a. Treaties

The contents of the following treaties will be studied and their implications discussed:

- o Convention on Biological Diversity (CBD) including the Global Taxonomy Initiative (GTI)
- o Convention on International Trade with Endangered Species (CITES)
- o Ramsar and the World Heritage Conventions
- o Convention on Migratory Species
- o Convention to Combat Desertification
- o The Bern Convention and its implications for EU legislation
  - EU Habitats Directive (Natura 2000)*
  - EU Birds Directive*

## 2b. Other agreements and conservation tools

This module will address the issue of intellectual property of biodiversity and a number of practical approaches to avoid loss of biodiversity.

- o TEED report on intellectual properties
- o Redd+ (Restriction of Emissions from Deforestation and Forest Degradation - native species; UNEP)
- o Red lists (IUCN)
- o *In situ* and *ex situ* conservation, gene banks, museum collections

Links are made to the 17 UN Sustainability Development Goals

## 3. Case study

In the individual project the focus is on species or areas highlighted in international conventions. For the species or area selected, the student describes the biological background and the particular aspects leading to its position under threat, as well as account for the protection provided by international legislation and agreements. This module is meant to give students an understanding of how scientific knowledge is used in environmental conservation work.

## Form of teaching

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

Available to the students are a course guide explaining how the different parts of the

course are supposed to be performed, recorded lectures, literature that mainly is available on the Internet, study questions available on Canvas, as well as a dialogue with the teachers through a discussion forum on Canvas. To obtain a pass on the course the students should perform two multiple-choice tests to monitor their learning, submit a short paper with reflections on the red list system, an individual project which is made available to all students on the course, and a written examination.

*Language of instruction:* English

### **Assessment**

The course has two parts that are assessed:

Written examination 3,5 credits

Project and compulsory elements 1,5 credits

To obtain a pass on Project and compulsory elements, it is required that the student has performed the two multiple-choice tests, and has submitted the red list task as well as the individual project.

The student has the possibility to change examiner, if it is practically possible, after failing twice on the same examination. Such a request is directed to the department in written form.

### **Grades**

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

Pass with Distinction on the Written examination requires 85% correct answers, and for Pass 60% is required.

On Project and compulsory elements only the grades Pass and Fail is given, but the students can obtain up to 2 additional points for the red list task and 3 additional points for the individual project depending on the quality of the submitted work. These bonus points are added to the points on the written examination to set the grade for the whole course where 85% is required for Pass with Distinction and 60% for Pass.

### **Course evaluation**

A course evaluation is performed at the end of the course. The result is published on the Canvas site of the course, is used for course development and is communicated to the students of next year's course.

