GHENT UNIVERSITY

Course Specifications

From the academic year 2020-2021 up to and including the academic year

Ecology (I700218)

Course size *(nominal values; actual values may depend on programme)*

Credits 3.0 **Study time 90 h** **Contact hrs** 20.0h

Course offerings and teaching methods in academic year 2022-2023

A (semester 2)	Dutch	Gent	lecture	6.0h
			demonstration	2.0h
			group work	12.0h

Lecturers in academic year 2022-2023

Calders, Kim	LA20	lecturer-in-charge

Offered in the following programmes in 2022-2023	**crdts**	**offering**
Bachelor of Science in Bioscience Engineering Technology	3	A

Teaching languages

Dutch

Keywords

Ecology, interactions, biodiversity, ecosystems

Position of the course

The student gains insight into the basic concepts of ecology. The student gains insight into the functioning of ecosystem and the interactions between biotic and abiotic components. The student understands the dynamics and complexity of ecosystems and the influence of anthropogenic activity on ecosystems.

Contents

The students work in group on an integrated project (coached group work), consisting of a case study in which an ecosystem is characterized and discussed concerning biotics and abiotics and the relations within and among. The students will work autonomously in the field and consult different sources of information (library, internet, soil maps, vegetation maps, ...). Each group will write a report to present the data and conclusions.
The task consists of a description and discussion of

- soil samples
- influence of the landscape
- ecological value of the vegetation
- links between vegetation and abiotic characteristics using Ellenberg values and plant strategies
- food web and evolution in fauna

The work results in an integrated analysis and discussion of the steering factors on a site. In addition to the project work, some lectures will treat general principles of ecology.

Initial competences

Final competences

1 The student has insight in the principal concepts of ecology.
2 The student can describe and analyze ecosystems and the relations among organisms and between organisms and their environment and can interpret the value of ecosystems.
3 The student has insight into dynamics and complexity of ecological patterns and processes and can value the relevance of these patterns and processes in an anthropogenically influenced landscape .
4 Recognising and explaining the dynamic character and complexity of ecological patterns and processes

5 Being aware of the importance of ecology in a landscape under strong anthropogenic influence
6 Working together in group, communicating within the group and to peers and tutors

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Demonstration, Group work, Lecture

Extra information on the teaching methods

Students will elaborate an integrated group project in a confined ecosystem. Lectures and seminars will provide information additive to this project.

Learning materials and price

Project syllabus, presentations on Ufora, www, video

References

Course content-related study coaching

Coached group project
Opportunity for questioning the lecturers during the lectures, through email, personal contact and in an e-learning environment

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written examination with open questions

Examination methods in case of periodic assessment during the second examination period

Written examination with open questions

Examination methods in case of permanent assessment

Report, Participation, Peer assessment

Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

Extra information on the examination methods

Non-periodical evaluation: quality of results and report of project, performance during group project, peer evaluation.
If there is a clear difference in input from the different group members, the final score may differ per student belonging to the same group.

Calculation of the examination mark

project: 70%
theory: 30%
If one does not participate in the evaluation of one or more course units, or if one obtains less than 8/20 (not rounded) on one or more course units, one can no longer pass the course. If the final score calculation would still be 10 (or more) out of 20, this is reduced to 9/20.