

Arthropoda (C003181)

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

Credits 3.0 **Study time 90 h**

Course offerings and teaching methods in academic year 2026-2027

A (semester 2)	Dutch	Gent	lecture
			practical

Lecturers in academic year 2026-2027

De Troch, Marleen	WE11	lecturer-in-charge
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Offered in the following programmes in 2026-2027

	crdts	offering
Bachelor of Science in Biology	3	A
Preparatory Course Master of Science in Biology	3	A

Teaching languages

Dutch

Keywords

Biodiversity, insects, spiders, crabs, Arthropoda, ecology, evolution, morphology

Position of the course

To gain insights in the morphology, diversity in species and structures, ecology and evolution of the Arthropoda

Contents

Detailed discussion on the major arthropod groups (Crustacea, Arachnida, Hexapoda, Myriapoda). The different structures of the above mentioned groups are compared with each other from an evolutionary point of view. Special attention is given to adaptations to the biotope (as well from a morphological as from a physiological point of view) and to the behavior and ecology of these species. Newest insights in the evolutionary relationships within the Arthropoda are discussed. The position of the Arthropoda within the animal kingdom is evaluated. The Classis Hexapoda: detailed discussion on the Insecta with emphasis on the different anatomical structures. A detailed discussion on all the ordines is presented with special attention for the structure, life cycle and morphological adaptations, effects on man and environment..

Practical exercises: recognition of the diagnostic features of the different groups, identification of species. Practical sessions will focus on the morphology of Crustacea (determination, dissection *Astacus*). The students will also collect and identify insects and arachnids. This will be reported in a logbook.

Initial competences

General knowledge about invertebrate relationships (Biodiversity of animals, bachelor 1)

Final competences

- 1 The student has insights into the evolution and ecology of Arthropoda.
- 2 The student is able to identify and recognize European species through means of keys and a stereo microscope
- 3 The student understands the adaptations to different ecological conditions.

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

Lecture, Practical

Study material

Type: Syllabus

Name: Terrestrische Arthropoda

Indicative price: Free or paid by faculty

Optional: no

Available on Ufora : Yes

Online Available : No

Available in the Library : No

Available through Student Association : Yes

Type: Syllabus

Name: Inleiding en Aquatische Arthropoda

Indicative price: Free or paid by faculty

Optional: no

Language : Dutch

Available on Ufora : Yes

Online Available : No

Available in the Library : No

Available through Student Association : Yes

Type: Slides

Name: slides

Indicative price: Free or paid by faculty

Optional: yes

Language : Dutch

Available on Ufora : Yes

Online Available : No

Available in the Library : No

Available through Student Association : Yes

Type: Other

Name: determinatiesleutels in bioruimte

Indicative price: Free or paid by faculty

Optional: yes

Language : Other

Available on Ufora : No

Online Available : No

Available in the Library : No

Available through Student Association : No

Usability and Lifetime within the Course Unit : regularly

Usability and Lifetime within the Study Programme : regularly

Usability and Lifetime after the Study Programme : occasionally

References

Course content-related study coaching

Individual help by instructor and assistants on request; Continuous guiding during the practicals.

Assessment moments

end-of-term and continuous assessment

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

Written assessment with open-ended questions

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

Written assessment with open-ended questions

Examination methods in case of permanent assessment

Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

Theory: written examination

Students are expected to demonstrate a thorough understanding of the basic concepts and fundamental insights into the morphology, evolution, and ecology of arthropods (see course content). In addition, they must be able to report on and communicate about these organisms within an ecological context. Identification questions must be answered at the taxonomic level covered in the lectures.

Practicals:

The score for the practical component is determined based on the lab notebook and the compulsory practical sessions.

Calculation of the examination mark

theory 80 %; practicals 20 %

mathematical average of both parts (aquatic, terrestrial) but passing (min 10/20) for each part in 1 exam session is required