

History and Philosophy of Biology (C004083)

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 2023-2024

A (semester 1)	English	Gent	lecture independent work seminar
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Lecturers in academic year 2023-2024

Braeckman, Johan	LW01	lecturer-in-charge
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Offered in the following programmes in 2023-2024

	crdts	offering
Master of Science in Teaching in Science and Technology (main subject Biology)	3	A
Master of Science in Biology	3	A
Exchange Programme in Biology (master's level)	3	A

Teaching languages

English

Keywords

biology, history, philosophy, Aristotle, Descartes, Lamarck, Darwin, zoology, fysiology, taxonomy, morphology, evolutionary theory, genetics.

Position of the course

To survey the most important topics within the fields of the history and philosophy of biology.

Contents

It is the main aim of this course to survey the most important developments in the history of biology, by making use of the work of 'the great authors' (Aristotle, Descartes, Ray, Linnaeus, Cuvier, Lamarck, Darwin, Haldane, and so on). Special attention will be given to the origin and growth of several biological subdisciplines (zoology, taxonomy, morphology, physiology, evolutionary theory, genetics), within the broader cultural and scientific historical contexts. The philosophical problems related to these specific subdisciplines will be systematically dealt with (discussions on natural kinds, universals versus particulars, criteria of classification, levels of selection, interaction genes and development, ...). In particular, the meaning of the Darwinian revolution will be clarified in relation to the historical and contemporary development of biology and to the philosophy of the life sciences.

Initial competences

None

Final competences

General knowledge of the history of biology and of the specific problems discussed in the philosophy of biology.

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in 'Starting Competences'

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture, seminar, independent work

Learning materials and price

Articles on the history and philosophy of biology (written by contemporary authors and the teacher) Cost: 15 EUR

References

E. Mayr: *Towards a new Philosophy of biology*, E. Mayr: *This is Biology*, D. Hull & M. Ruse, eds.: *The philosophy of biology*.

Course content-related study coaching

By the teacher.

Evaluation methods

end-of-term assessment

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

Written assessment with open-ended questions

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

Written assessment with open-ended questions

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

not applicable

Calculation of the examination mark

Facilities for Working Students

1. Student attendance during educational activities is required
 2. Possible oral examination on a different time in the same academic year
 3. Feedback can be given by email or during an appointment during office hours
- Extra information: For more information concerning flexible learning: contact the monitoring service of the faculty of Arts and philosophy