GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2025-2026

Philosophical Issues in the Life Sciences (A005268)

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

Credits 5.0 **Study time 150 h**

Course offerings in academic year 2027-2028

A (semester 2)	English	Gent

Lecturers in academic year 2027-2028

Van de Vijver, Gertrudis	LW01	lecturer-in-charge
Josten, Dries	LW01	staff member

Offered in the following programmes in 2027-2028	**crdts**	**offering**
Master of Science in Teaching in Arts and Humanities (main subject Philosophy)	5	A
Master of Arts in Philosophy	5	A
Exchange Programme Philosophy and Moral Sciences	5	A

Teaching languages

English

Keywords

History and philosophy of science; Philosophy of the Life Sciences; teleology; reductionism; (scientific) objectivity.

Position of the course

In this course, students are acquainted with central issues from the history and philosophy of the life sciences by means of both historical and contemporary philosophical texts.

Contents

The issues involved are specifically problems pertaining to epistemology, metaphysics, and philosophy of science with which both the philosopher and the practicing life scientists are confronted, such as questions concerning the specificity of life as the object of biology over and against the objects of other sciences, the specificity of the methods, theories, and concepts of biology as a scientific practice, and the interpretation of the results of biology as well as their implications for our conceptions of nature and of science in general. These problems are made concrete by means of:

- Lectures on key topics in the history and philosophy of the life sciences (within the tradition of the *History and Philosophy of Science*). The lectures offered may differ from year to year.
- Group discussions of philosophical texts from different periods and traditions that are to be prepared in advance. Here too, the selection of texts and topics can vary, depending on the development of the field and the expertise of the lecturers involved in the course. Topics covered in the past that are likely to return in some form or other are: teleology and the concept of function, reduction in biology, vitalism vs. mechanism, development and plasticity, epigenesis and preformationism, the structure and development of the modern concept of the gene and of evolutionary theory.

Initial competences

This course is intended for advanced students, and therefore requires a solid background in philosophy and/or the life sciences.

Final competences

1 Knowledge of central issues, debates, and positions within the philosophy of

biology.
2 Insight into the specifically philosophical problems concerning the life sciences.
3 The skill to identify, analyze, reconstruct, and evaluate arguments and positions from primary literature from the history and philosophy of science.
4 The skill to formulate, defend, refine and revise their own position through a discussion with others.
5 The skill to independently apply philosophical methods to a specific scientific field.
6 6 Competences: 1.3, 2.4, 2.8, 3.3, 3.4, 3.5, 5.1.

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

Access to this course unit via an exam contract is unrestricted

Teaching methods

Seminar, Lecture, Independent work

Extra information on the teaching methods

This course involves a mixture of lectures, group discussions, and independent work. The lectures are usually meant as a preparation for a group discussion on a text that is made available beforehand. Students are expected to read the texts in advance and to participate actively in the group discussion. All students will be required to take point in the discussion in at least one of the sessions, be it alone or in a small group.
This course further involves an additional activity. Depending on the options, this will be either an interdisciplinary cooperative project, or the reading and discussion of additional texts in several smaller groups ("cartels"). The results of these group discussions are then presented and discussed in a plenary session at the end of the course.
No lecture recordings will be provided.

Study material

Type: Reader

Name: Philosophical issues in the life sciences
Indicative price: Free or paid by faculty
Optional: no
Language : English
Available on Ufora : Yes
Additional information: All required reading will be uploaded on the Ufora page

References

The course material changes every year. Classically we deal with texts from or about Descartes, Kant, the history of vitalism, gene-reductionism, epigenesis and preformationism, the concept of function.

Course content-related study coaching

By the lecturer, co-lecturer and researchers (office hours, and by appointment).

Assessment moments

end-of-term and continuous assessment

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

Oral assessment

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

Oral assessment

Examination methods in case of permanent assessment

Participation

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Extra information on the examination methods

Examination form: oral exam (60%). The exam mainly asks insight questions

regarding the strictly philosophical part and the literature read and discussed during the course. The questions will be communicated in advance.

The non-periodic part includes 20% cooperation (preparation of texts and participation in discussions) and 20% participation in a cartel and presentation of this in the cartel discussion moment.

Calculation of the examination mark

60% oral examination and 40% participation.
If one does not participate in the evaluation of one or more of the subparts of the course, one can no longer pass the course as a whole. If in this case the final grade is higher than 7/20, it will be reduced to the highest non-deliberable grade.

Facilities for Working Students

1. Possible exemption from educational activities requiring student attendance
2. Possible rescheduling of the examination to a different time in the same academic year
3. Alternative time for feedback is possible

For more information concerning flexible learning: contact the monitoring service of the faculty of Arts and philosophy