

Introduction to Biological Chemistry (D002900)

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

Credits 6.0 Study time 180 h Contact hrs 60.0 h

Course offerings and teaching methods in academic year 2018-2019

A (year)	Dutch	lecture	45.0 h
		seminar: coached	15.0 h
		exercises	

Lecturers in academic year 2018-2019

Delcoigne, Michaël	WE07	staff member
Strubbe, Katrien	WE06	lecturer-in-charge
Hoogenboom, Richard	WE07	co-lecturer

Offered in the following programmes in 2018-2019

	crdts	offering
Bachelor of Science in Physical Education and Movement Sciences	6	A

Teaching languages

Dutch

Keywords

general chemistry, organic chemistry, cell biology

Position of the course

The course provides basic physics and general principles in organic and inorganic chemistry necessary to understand the mechanisms of molecular cell biology that governs cellular functions.

This subject contributes to the fields of competences of the course Bachelor of Physical Education and Movement Sciences: B1.2

Contents

- 1. General Chemistry: physiochemical principles required to understand chemical reactivity and structure
- 2. Application of these principles in organic and biologic components: the organic molecular building of stones of life

Initial competences

The learning outcomes of the secondary school (scientific major) with respect to chemistry and biology

Final competences

- 1. Apply general chemical principles.
- 2. Understand that general chemical principles control the processes in living organisms.
- 3. Situate chemical processes of relevance in biomedical context
- 4. Understand the molecular basis of chemical transformations
- 5. Solve simple problems in biological chemistry that are relevant in a biomedical context.

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: coached exercises

Learning materials and price

Estimated Cost € 25.

Course.

Additional didactic material (illustrations, slides,...) can be consulted in the Electronic Learning Environment (minerva.ugent.be)

References

- Chemical Principles. Steven S. Zumdahl, Houghton Mifflin, Boston. - ISBN-10:0-618-94690-X- Latest edition.
- Bio-organische chemie voor levenswetenschappen, J.F.J. Engbersen en A.E. de Groot Wageningen Academic Publishers, ISBN 9074134963

Course content-related study coaching

Through oral and electronic (minerva.ugent.be) communications with the lecturer and the teaching assistants and through online-exercises (curios)

Evaluation methods

end-of-term evaluation

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

Written examination

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

Written examination

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

not applicable

Calculation of the examination mark

Addendum

This course is not open for incoming mobility students (Erasmus)