

# Biological Chemistry

**Lecturer**

Kristin BARTIK (Coordinator)

**Course mnemonic**

CHIM-H312

**ECTS credits**

5 credits

**Language(s) of instruction**

English

**Course period**

First term

**Campus**

Solbosch

## Course content

Structure of organic molecules (stereochemistry, chirality, conformation).

Structure and function of biomolecules (carbohydrates, proteins, nucleic acids, lipids).

Introduction to metabolism.

## Objectives (and/or specific learning outcomes)

This course aims to give the fundamentals of organic chemistry in order to explain biological processes at the molecular level.

The objective is for students to acquire the basic knowledge of the chemistry of living organisms.

## Pre-requisites and co-requisites

### Course having this one as co-requisite

BIME-H302 | Biologie générale et anatomo-physiologie humaine | 10 crédits

## Teaching method and learning activities

Interactive face-to-face lectures based on a powerpoint presentation.

Face-to-face supervised exercises carried out for the purpose of consolidation, reminder, control or discovery of theoretical knowledge.

Work in pairs with report and presentation

## Contribution to the teaching profile

This teaching unit contributes to the following competences

- > Understand the chemical processes within and related to living organisms

## References, bibliography and recommended reading

Organic chemistry: structure and function, K.P.C. Vollhardt and N.E. Schore (2007 - 5th Edition), Freeman.

Organic Chemistry: a biological approach, J. McMurry (2007), Thomson.

Fundamentals of biochemistry: life at the molecular level, D. Voet, J.G. Voet and C.W. Pratt (2006 - 2nd edition), Wiley.

Biochemistry, J.M. Berg, J.L. Tymoczko and L. Stryer (2007 - 6th Edition), Freeman.

Foundations of Chemical Biology, C.M. Dobson, J.A. Gerrard and A.J. Pratt (2001), Oxford Chemistry Primers, OUP.

## Course notes

Université virtuelle

## Other information

### Place(s) of teaching

Solbosch

### Contact(s)

Prof. Kristin Bartik : kristin.bartik@ulb.be

Teaching assistant : Dr Karolis Norvaisa : karolis.norvaisa@ulb.be

## Evaluation method(s)

Group work and written examination

### written examination

Open question with short answer and Open question with developed answer

### Determination of the mark (including the weighting of partial marks)

Written exam : 75%

Written report and presentation of the group project : 25%

Final grade = weighted geometrical average =  $(\text{exam})^{0.75} * (\text{group work})^{0.25}$

## Main language(s) of evaluation

English

## Programmes

Programmes proposing this course at the  
Brussels School of Engineering

BA-IRCI | Bachelor in Engineering Sciences | option Bruxelles/unit 3

