UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Biochemistry G1F

7.5 credits

Course code: KE314G
Version number: 8
Valid from: 1 January 2025
Ratified by: Curriculum Committee for Bioscience
Date of ratification: 24 October 2024

1. General information about the course

The course is provided by the University of Skövde and is named Biochemistry G1F (Biokemi G1F). It comprises 7.5 credits and is a first-cycle course. The level of progression is G1F.

The course is a part of the subject of Chemistry. The disciplinary domain of the course is Natural Sciences.

2. Entry requirements

The course has the following entry requirements: a total of at least 22.5 passed credits in one of or both the subjects of biology and medicine (or the equivalent).

An additional requirement is 7.5 credits in the subject of chemistry, including passed KE118G Laboratory basic course G1N (or the equivalent).

3. Course content

The course describes composition and regulation of the most important metabolic and energy-providing processes that occur in prokaryotic and eukaryotic cells. Important aspects are the understanding of the role of proteins in catalysis as well as performing enzyme kinetic experiments and calculations.

4. Objectives

After completed course the student shall be able to:

- describe the metabolism of carbohydrates, proteins and fats, its regulation and integration,
- describe how metabolism is affected by metabolic diseases and physical exercise,
- describe and discuss the metabolic principles behind the most common diets,
- be able to describe the role of proteins as catalysts and perform enzyme kinetic analyses and calculations, and
- plan, perform and evaluate laboration and present the results in writing.

5. Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

A final grade of the course is only issued when all the examination parts have been passed.

The examination Laboratory assignment involves a dugga. The purpose of the dugga is to ensure that the student has the required knowledge regarding safety surrounding the laboratory work. The dugga also secure that the student can perform the laboration in an occupational workmanlike manner.

In the course duggor are also included that are not mandatory, but which can give bonus points for the Supervised written examination.

The examinations of the course consist of the following modes of assessment:

- **Supervised written examination**
  3 credits, grades: A/B/C/D/E/F (determines the final grade)
- **Laboratory assignment**[1]
  1.5 credits, grades: G/U
- **Essay**
  1.5 credits, grades: G/U
- **Written assignment**
  1.5 credits, grades: G/U

[1] The laboration contains a dugga.

Students with a permanent disability who have been approved for directed educational support may be offered adapted modes of assessment.

6. Types of instruction and language of instruction

The teaching comprises computer exercise, lectures and laboratory session.

The teaching is conducted in English.

7. Course literature and other educational materials

Campbell, M., Farrell, S. & McDougal, O. (2017). *Biochemistry* (9th ed.). Boston, MA: Cengage Learning. ISBN 9781305961135 **or**

Campbell, M., Farrell, S. & McDougal, O. (2017). *Biochemistry*.Boston, MA: Cengage Learning. ISBN 9781337514354 [e-book]

8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

The content of the course corresponds completely or partially with the following course(s) and cannot be included in the required credits of a degree qualification:

- MB329G - Biochemistry G1F 7.5 credits
- MBB131 - General Biochemistry B13, Intermediate level 5 p

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.