



BB1160 Eukaryotic Cell Biology

7.5 credits

Eukaryot cellbiologi

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for BB1160 valid from Spring 2019

Grading scale

A, B, C, D, E, FX, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

The upper-secondary school before 1 July 2011 and adult education at upper-secondary level before 1 July 2012

Specific entry requirements: mathematics E, physics B and chemistry A. The grade Passed or 3 inn each of the subjects is required .

The upper-secondary school from 1 July 2011 and adult education at upper-secondary level from 1 July 2012 (Gy2011)

Specific entry requirements: Physics 2, Chemistry 1 and Mathematics 4. Minimum requirement is a pass grade.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

On completion of the course, the student should master and be able to explain:

- The structure of multicellular organisms.
- Organisation and transport inside eukaryotic cells.
- Principles of the communication of cells
- The structure of multicellular organisms.
- Cancer progression from a molecular perspective
- Basic immunology

Course contents

The course will through lectures, exercises and laboratory sessions describe organisation and transport within eukaryotic cells and how individual cells build multicellular organisms. Furthermore, principles of the communication of cells will be described. The cell cycle, cell division and cell death including errors that lead to cancer will be treated from a molecular perspective. Central principles of the function of the immune defence are also included in the course.

Course literature

Alberts: Molecular biology of the cell, 6:th edition. Garland science. ISBN:9780815344643

Examination

- **TEN2** - Written exam, 7.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.