Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Syllabus

BI1070.1 Cell biology, 7.5 credits

Cellbiologi

The course is given as course independent of study programme

Syllabus discontinued 18 February 2013

Version 1 in Slukurs. Corresponds to version 1 and 2 in Ladok

Syllabus approved

27 November 2008

The version applies to students admitted from autumn 2009

The version is not a module version

Subjects

Biology/Soil science

Education cycle

First cycle

Modules

Title	Code	Credits
Single module	0101	7.5

Advanced study in the main field

First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

Grading scale

5:Pass with Distinction, 4:Pass with Credit, 3:Pass, U:Fail
The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

Swedish

Prior knowledge

30 credits in Biology and 7,5 credits in Biochemistry.

Objectives

By theory and extensive laborative experiments gradually achieve knowledge of the complicated machinery of the cell and how the cells are created and interact to constitute a complete organism.

Content

- Cell structure and function - differences between procaryote and eucaryote cells.
- Structure and functions of cell walls, cell membarnes and cell organelles.
- Cell reproduction.
- Mitosis, cell cycle, meiosis, basic genetic concepts.
- Basic molecular biology.
- Communication between cells and cell differentiation.
- Cell signals, hormones, receptors, signal transduction.

Laborations will contain:
- growth studies of Escherichia coli.
- water physiology, were parameters as water potential, osmotisk potential and turgor are defined.
-the effects of plant hormones auxin and cytokinin on growth and development.
- studies of different phases of cell division.

Implementation

Scheduled activities

Lectures

approx. 40 Hours

Laboratory work

approx. 70 Hours

group discussions

approx. 10 Hours

Individual studies, not scheduled

Literature studies

approx. 80 Hours

Total

approx. 200 Hours

Formats and requirements for examination

Approved written examination and laboratory experiments

- If the student fails a test, the examiner may give the student a supplementary assignment, provided this is possible and there is reason to do so.
- If the student has been granted special educational support because of a disability, the examiner has the right to offer the student an adapted test, or provide an alternative assessment.
- If changes are made to this course syllabus, or if the course is closed, SLU shall decide on transitional rules for examination of students admitted under this syllabus but who have not yet passed the course.
- For the examination of a degree project (independent project), the examiner may also allow the student to add supplemental information after the deadline. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

Additional information

Compulsory participation in laboratory experiments

- The right to take part in teaching and/or supervision only applies to the course date to which the student has been admitted and registered on.
- If there are special reasons, the student may take part in course components that require compulsory attendance at a later date. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

Responsible department

Department of Forest Genetics and Plant Physiology

Supplementary Information

Finalized by: Arbetsutskott jägmästare/masterprogram
Biology Area: Cell Biology
Replacement course: BI4272, BI4285, BI0689