Cell Biology

Programme course

6 credits

Cellbiologi

NBIA25

Valid from: 2017 Spring semester

Determined by
Board of Studies for Chemistry, Biology and Biotechnology

Date determined
2017-01-25

Main field of study
Biology, Chemical Biology

Course level
First cycle

Advancement level
G1X

Course offered for
- Chemical Biology, M Sc in Engineering
- Engineering Biology, M Sc in Engineering
- Biology, Bachelor´s Programme

Entry requirements
Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites
General Chemistry

Intended learning outcomes
The aim of the course is to give basic knowledge of the structure and function of the cell. Another important aim is to increase the skills in basic, biological methodology.

Course content
Cell biology treats basic structure and function of eukaryotic cells. Cell membranes are studied as well as organelles, cytoskeleton, cell metabolisms, cellular communication and extracellular matrix. The course also gives an introduction into biological laboratory work, where you learn how to handle biological material and apply established methods and instruments, among others the light microscope.

Teaching and working methods

The course includes lectures which give a summary of the subject and to some extent complete and/or explain the course literature. A part of the course is laboratory work which exemplifies the theory and whose results are presented and discussed at seminars. The course includes, furthermore, team work of practical and/or theoretical character, which is to be presented in writing and orally.

Examination

LAB1	Laboratory work	1.5 credits	U, G
TEN1	Written examination	4.5 credits	U, 3, 4, 5

Grades

Four-grade scale, LiU, U, 3, 4, 5

Other information

Supplementary courses: Methods in Cellbiology

Department

Institutionen för fysik, kemi och biologi

Director of Studies or equivalent

Agneta Johansson

Examiner

Thomas Östholm

Course website and other links

Education components

Preliminary scheduled hours: 44 h
Recommended self-study hours: 116 h

Course literature

Hardin et al. 2016. Beckers world of the cell Eighth edition. Pearson Education Inc. Rekommenderad: Perry,M 1998 Photoatlas for biology, eller liknande

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.