

Project Course, Chemical Biology

Programme course

6 credits

Projektkurs i kemisk biologi

TFKE60

Valid from: 2019 Spring semester

Determined by

Board of Studies for Chemistry, Biology
and Biotechnology

Date determined

2018-08-31

Main field of study

Biotechnology, Chemical Biology

Course level

First cycle

Advancement level

G2X

Course offered for

- Chemical Biology, M Sc in Engineering
- Chemical Biology, Bachelor's Programme
- Master's Programme in Protein Science

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

Biochemistry 2

Intended learning outcomes

After the course the student know how to:

- plan and experimentally execute a project in gene technology
- plan and experimentally execute a project in protein characterization
- plan and execute a larger laboratory intensive group project with different individual roles
- understand and evaluate experimentally determined data through critical thinking of scientific literature and available experimental data

The student has also achieved comprehensive practical experience of methods in molecular biology as well as in biological measurements.

Course content

The experimental part is based on earlier knowledge from courses in Biochemistry. The main part of this course is experimental and will give insights in modern experimental techniques in molecular biology and biological measurements.

Teaching and working methods

The course runs the entire semester, and should be taken in parallel with TFKE38 and TFKE37 during HT1. The course is divided into two separate project exercises, one in protein characterization (UPG1) and one individually assigned project in gene technology (UPG2). Both projects are laboratory intensive and are presented as written reports for each project. In the laboratory course (LAB1) a larger project in molecular biology is performed in group with individual roles for the group members. The laboratory course is examined both orally and as a written report.

Please note that the courses TFKE37, TFKE38 and TFKE60 are not scheduled to a specific timetable module during Ht1, instead they share timetable modules 1+2+3. As a result, these courses are difficult to combine with other courses.

Examination

UPG2	Individual project assignment in gene technology	1.5 credits	U, G
UPG1	Project assignment in protein characterization	1.5 credits	U, G
LAB1	Project laboratory work in molecular biology	3 credits	U, G

Grades are given as "Pass" or "Fail".

Grades

Two grade scale, older version, U, G

Other information

Supplementary courses

Protein Chemistry, Protein Engineering

Department

Institutionen för fysik, kemi och biologi

Director of Studies or equivalent

Magdalena Svensson

Examiner

Lars-Göran Mårtensson

Education components

Preliminary scheduled hours: 31 h

Recommended self-study hours: 129 h

Course literature

Other

Compendium from the department, reviews on the subject area and scientific articles.