Molecular Design - Project Course

Programme course

6 credits

Molekylär design - projektkurs

NKEC23

Valid from: 2017 Spring semester

Determined by
Board of Studies for Chemistry, Biology and Biotechnology

Date determined
2017-01-25

Offered for the last time
Autumn semester 2023

Replaced by
NKEC78

Main field of study
Chemistry

Course level
First cycle

Advancement level
G2X

Course offered for
- Chemistry

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
Compulsory courses from the first and second year of the programme.

Intended learning outcomes
The course is designed to give students further experience to an chemist's approach to analyze a task, solving problems, organizing the required activities to complete the task and working in groups. This is a practical course in which students work in groups. The course will end with written and oral presentations of the groups accomplishments. By the end of the course, students will be able to:

- plan and experimentally execute a project in chemistry
- understand and evaluate experimentally determined data through critical thinking of scientific literature and available experimental data
- analyze and structuring problems
- plan a project after receiving a problem statement and to generate project and time plans
- take initiative and find creative solutions to problem
- make oral and written presentations of project work in english.

Course content
The project course involves a projekt based on the fundamental working metods in chemistry; syntesis, separation and analysis. The project can be taken from different areas in chemistry

Teaching and working methods

The project work is performed in groups of 3-4 students and is organized in two parts. First, a plan is worked out and designed for the project with literature research. The second part involves laboartory work, documentation and evaluation. During the project the students shall work independently with a supervisor as a discussion partner to support the project. Project work should be documented during the work, and at the end presented in the form of a presentation and a written report written in english. Both the presentation and the report must be passed.

Examination

PRA1	Project	6 credits	U, G

Grades are given as ’Fail’ or ’Pass’.

Grades

Two-grade scale, U, G

Department

Institutionen för fysik, kemi och biologi

Director of Studies or equivalent

Magdalena Svensson

Education components

Preliminary scheduled hours: 50 h
Recommended self-study hours: 110 h

Course literature

Vetenskapliga artiklar eller utdelat material från institutionen (IFM).

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.