Project Medicinal Chemistry

Programme course

3 credits

Projekt läkemedelskemi

NKED21

Valid from: 2017 Spring semester

Determined by
Board of Studies for Chemistry, Biology and Biotechnology

Date determined
2017-01-25

Main field of study
Chemistry

Course level
Second cycle

Advancement level
A1X

Course offered for
- Organic Synthesis and Medicinal Chemistry, Master'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, Inorganic chemistry, Physical chemistry, an advanced level course in Organic chemistry, Biochemistry, Organic analytical chemistry.

Intended learning outcomes
The course is designed to give students further experience to a 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 a project in organic chemistry/medicinal 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
- take initiative and find creative solutions to problem
- make oral and written presentations of project work in English.
- apply aspects of sustainable development in chemical processes, including economical aspects and risk analysis.

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

Teaching and working methods
The project work is performed in groups of 1-2 students. The course consists of project planning, design of an experimental setup, literature research and is finalized in a project report. 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 in English. Both the presentation and the report must be passed.

Examination

PRA1	Project, oral and written presentation	3 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

Examiner
Peter Konradsson

Education components
Preliminary scheduled hours: 50 h
Recommended self-study hours: 30 h

Course literature
Scientific publications (i.e. peer-reviewed articles). / Vetenskapliga artiklar, (dvs de ska vara peer-reviewed).

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.