Drug Discovery and Pharmaceutical Development

Programme course

6 credits

Läkemedelsutveckling

NKED20

Valid from: 2017 Spring semester

Determined by
Board of Studies for Chemistry, Biology and Biotechnology

Date determined
2017-01-25

Main field of study
Engineering Biology, Chemical Biology

Course level
Second cycle

Advancement level
A1X

Course offered for
- Chemical Biology
- Engineering Biology, M Sc in Engineering
- Organic Synthesis and Medicinal Chemistry, Master's programme
- Protein Science, 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
Medicinal Chemistry, Organic Synthesis, Protein Chemistry, Advanced Organic Synthesis.

Intended learning outcomes
After completing the course, the student should be able to:
- synthesis of aromatic heterocycles
- explain drug discovery, design and development
- account for antibacterial agents
- account for antiviral agents
- account for anticancer agents
- account for drugs acting on the nervous system

Course content
The course will give advanced knowledge of the drug discovery, design and development in different research areas like infectious diseases, anticancer agents and drugs acting on the nervous system. The course also includes synthesis and process development of drugs.

Teaching and working methods

The education includes lectures, seminars and laboratory work.

Examination

UPG1	Group assignments including written and oral presentations	1.5 credits	U, G
LAB1	Laboratory work	0.5 credits	U, G
TEN1	Written examination	4 credits	U, 3, 4, 5

To pass the laboration course practical performance and approved reports is required

Grades

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

Department

Institutionen för fysik, kemi och biologi

Director of Studies or equivalent

Magdalena Svensson

Examiner

Peter Nilsson

Education components

Preliminary scheduled hours: 48 h
Recommended self-study hours: 112 h

Course literature

Graham L. Patrick: An Introduction to Medicinal Chemistry, A. Claesson, B. Danielsson och U. Svensson: Läkemedelskemi. Publikationer från läkemedelskemiska tidskrifter.

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.