



**LUNDS UNIVERSITET**  
Lunds Tekniska Högskola

*Course syllabus*

# **Projektkurs i läkemedel, material eller kemi** **Project in Pharmaceuticals, Materials or** **Chemistry**

**KASN40, 15 credits, A (Second Cycle)**

**Valid for:** 2023/24

**Faculty:** Faculty of Engineering, LTH

**Decided by:** PLED B/K

**Date of Decision:** 2023-04-18

## **General Information**

**Main field:** Pharmaceutical Technology.

**Compulsory for:** MLAK1

**Elective for:** B4-l, K4-m, K4-l, N4

**Language of instruction:** The course will be given in English on demand

## **Aim**

The aim of the course is to give thorough practical skills in chemistry.

## **Learning outcomes**

### *Knowledge and understanding*

For a passing grade the student must

- be able to interpret experimental results to explain chemical phenomena.
- understand how a project group works including knowledge on some common tools for project management.
- understand the use of subject specific tools and procedures within the project

### *Competences and skills*

For a passing grade the student must

- be able to plan and execute chemical experiments under supervision
- be able to describe how to apply theoretical reasoning in the laboratory
- be able to document experimental results
- be able to present results in speech and writing

- be able to search, evaluate and use information relevant for the project using university library resources and open electronic sources
- be able to assess the feasibility of the project and determine the factors that contribute to, or impede, the feasibility
- be able to make relevant judgements and validations concerning safety, economy and environmental factors in the project.
- be able to discuss and generate creative solutions for a practical and relevant problem

### *Judgement and approach*

For a passing grade the student must

- understand how the choice of a technique and method affects the quality of the result
- for a given problem be able to choose an optimal method
- be able to reflect on the role that the student will take in a project group

## Contents

The course comprises of a experimental project related to different chemical, biochemical and/or cellular techniques and methods, such as organic synthesis, chemical analysis, polymer and material and analysis, bioanalysis or cell cultivation. The project is reported orally and in writing.

## Examination details

**Grading scale:** UG - (U,G) - (Fail, Pass)

**Assessment:** For passing grade, the student should show ability to write, follow and manage a project plan and work according to the standard set by the specific project. The student should participate in mandatory activities, give an oral seminar and provide a written report.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

### Parts

**Code:** 0120. **Name:** Written Report.

**Credits:** 7,5. **Grading scale:** UG. **Assessment:** Approved report

**Code:** 0220. **Name:** Oral Presentation.

**Credits:** 7,5. **Grading scale:** UG. **Assessment:** Approved presentation

## Admission

### Admission requirements:

- Theoretical advanced course within selected project: - KASN10 Materials Chemistry for projects in Materials Chemistry - KASN25 Polymer Chemistry or KASN20 Polymer Physics for projects in Polymer Technology - KOKN01 Medicinal Chemistry and at least 2.5 hp approved of KOKN05 Organic Chemistry - Theory for projects in Organic Chemistry - Approved part 0220 Laboratory Experiments 1.5 credits in KASN45 Advanced Analytical Chemistry for projects in Analytical Chemistry - At least 3 hp approved of KIMN10 Biopharmaceuticals for projects in Biopharmaceuticals

**The number of participants is limited to:** No

The course overlaps following course/s: KASN01

## Reading list

## Contact and other information

**Examinator:** Margareta Sandahl, [margareta.sandahl@chem.lu.se](mailto:margareta.sandahl@chem.lu.se)

**Examinator:** Patric Jannasch, [patric.jannasch@chem.lu.se](mailto:patric.jannasch@chem.lu.se)

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**Examinator:** Anna Sandström Gerdtsson, [anna.sandstrom\\_gerdtsson@immun.lth.se](mailto:anna.sandstrom_gerdtsson@immun.lth.se)

**Course coordinator:** Johan Reimer, [johan.reimer@chem.lu.se](mailto:johan.reimer@chem.lu.se)

**Further information:** The course comprises an experimentally based project within a subject; organic chemistry, analytical chemistry, polymer technology, materials chemistry or biopharmaceuticals.