

# KD2905 Project in Chemistry 7.5 credits

#### Projekt i kemi

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

#### **Establishment**

Course syllabus for KD2905 valid from Autumn 2013

## **Grading scale**

P, F

## **Education cycle**

Second cycle

## Main field of study

Chemical Science and Engineering

### Specific prerequisites

Appropriate courses for the chosen problem, at least 150 credits in chemistry and chemical engineering, 20 university credits (hp) in mathematics and 6 university credits (hp) in computer science or corresponding.

The examiner will determine if prerequisites are sufficient and that the student has sufficient depth studies for the selected task and also make likely that the proposed project work is expected to lead to that the student can develop the skills specified in the learning outcomes.

Director of undergraduate and master's studies, GA will assess and approve the proposed project by the examiner. Examiner presents a brief description of the project on the application form.

#### Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

### Intended learning outcomes

After completing the course, students should be able to:

- apply knowledge and skills in chemistry and chemical engineering sought in earlier studies
- analyze a specific research task or problem
- obtain the necessary information for the formulation of the problem and plan how the task can be solved
- perform experimental and theoretical treatment of the task, if needed
- search for information from the scientific literature
- correctly use and reference source material
- use graphical representation to effectively convey results
- summarize the results in a written report

#### Course contents

Course is designed as an individual project work equivalent 5 weeks of full-time job. A current problem or research project in chemistry and chemical engineering are formulated and analyzed in conjunction with interested teachers. The task can be theoretical and /or experimental nature.

In general, the project begins with studies of the project's background and with a smaller literature review. Then the task is planned and, where appropriate formulated a project plan for the experimental work. When the task is completed, the background of the project and its goal are described, the method and the results are analyzed, discussed and documented in a written report of good quality.

#### Course literature

Väljs i anslutning till projektuppgiften.

Relevant scientific articles and textbooks in the field

#### **Examination**

• PRO1 - Project, 7.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

The written report should preferably be written in English.

### Other requirements for final grade

Relevant literature survey, approved planning report / project plan and approved final report (PRO1; 7,5 hp).

The student should first write a planning report for description of the problem/project assignment and it should also include a plan for the project. The planning report is submitted to the examiner for approval.

The written report should be checked with tools for plagiarism by the examiner.

# Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.