



Faculty of Science

KEMH00, Chemistry: Project Work, 15 credits

Kemi: Projektarbete, 15 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2019-01-17 to be valid from 2019-01-17, spring semester 2019.

General Information

The course is an elective first-cycle component of a degree of Bachelor of Science in Chemistry.

Language of instruction: Swedish and English

The language of instruction is English, but it can be altered to Swedish due to the nature of the project and if the student is Swedish-speaking.

Main field of studies

Chemistry

Depth of study relative to the degree requirements

G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Learning outcomes

The aim of the project is to enable students to acquire specialised and additional knowledge in a subject-specific subarea and to practise using advanced chemical research methods and their ability to complete minor research projects.

Knowledge and understanding

On completion of the course, the students shall be able to

- demonstrate subject knowledge and account in detail for the current state of knowledge in the subject area
- account for the applicable methods within the subject area and for their possibilities and limitations

Competence and skills

On completion of the course, the students shall be able to

- use literature or other information searches to independently collect, compile and assimilate the information required to process an issue scientifically
- execute a minor laboratory and/or theoretical research project independently and within a predetermined time frame
- demonstrate sound methodological, experimental and theoretical skills in relation to the issue
- document, analyse and compile the results obtained, and discuss them from a broader perspective
- present a scientific project orally and in writing, including issue, methods and results

Judgement and approach

On completion of the course, the students shall be able to

- interpret and assess the results obtained in order to perform both troubleshooting and appropriate control experiments during the process
- relate the issue and results to applicable scientific, societal and ethical aspects
- critically analyse published articles in the research area of the project
- assess their need for knowledge and take responsibility for their ongoing learning within the subject area

Course content

The focus and design of the project are to be determined in consultation with the supervisor. The focus can be within one of the specialisations of chemistry. The project is to include literature studies mapping the background of the chosen topic and laboratory work and/or theoretical tasks. The student is to execute the project independently but with some supervision, including data collection and continuous documentation as well as compilation, analysis and evaluation of the results obtained.

Course design

The course is implemented as a project planned in consultation with a supervisor having experience in the chosen subject area. The project can be conducted at one of the divisions of the Department of Chemistry or, subject to an agreement with the examiner, at another academic department or outside the University. It is the responsibility of the student to contact a research team or equivalent in order to find a suitable project and supervisor. The project is to be conducted under supervision, but with independence. The practical work is to be documented in detail and in accordance with the procedures of the workplace.

The project is to be presented in writing in a scientific report and orally at a public seminar. Execution of the project, the scientific report and the oral presentation are compulsory components.

Assessment

The assessment is based on the scientific report and the oral presentation of the degree project.

The reports are to include an introduction to the project with relevant references to the supporting literature, a material and methods section enabling repetition of the experiments, and a brief presentation and discussion of the results obtained. If the examiner finds that the report submitted cannot be awarded a Pass, the student is to have the opportunity to revise the project for a renewed assessment.

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.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.

For a grade of Pass on the whole course, the student must have passed the written project report and the oral presentation.

The examiner/examining committee determine the grade to be awarded for the project in consultation with the supervisor. The final grade is determined by a weighted aggregate of the assessment of the execution of the project and the written and oral presentation.

Entry requirements

To be admitted to the course, students must meet the general entry requirements for higher education and have passed courses in chemistry comprising 60 credits.

Subcourses in KEMH00, Chemistry: Project Work

Applies from V19

1901 Project Work, 15,0 hp
Grading scale: Fail, Pass, Pass with distinction