



## DEPARTMENT OF CHEMISTRY AND MOLECULAR BIOLOGY

### **KEM960 Degree Project in Chemistry 4, 60 credits**

Kemi, självständigt arbete 4, 60 högskolepoäng

*Second Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Department of Chemistry and Molecular Biology on 2017-09-20 and was last revised on 2019-03-28 to be valid from 2019-03-28, spring semester of 2019.

*Field of education:* Science 100%

*Department:* Department of Chemistry and Molecular Biology

#### **Position in the educational system**

The course is classified at the level 90- 120 credits at second cycle level for Degree of Master (120 credits). The course can be read as a free-standing course.

The course can be part of the following programmes: 1) Atmosphere, Climate and Ecosystems, Master's Programme (N2ACE), 2) Chemistry and learning, Master's Programme (N2KOL), 3) Master's Programme in Organic and Medicinal Chemistry (N2KEL) and 4) Master's Programme in Chemistry (N2KEM)

#### *Main field of studies*

Chemistry

Chemistry with Specialization in Organic and Medicinal Chemistry

#### *Specialization*

A1N, Second cycle, has only first-cycle course/s as entry requirements

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#### **Entry requirements**

For admission to course, passed courses in chemistry totally worth 90 credits as well as a bachelor degree or an equivalent degree are required.

### Learning outcomes

The student should, with support from their supervisor, carry out an independent project and thereby train their ability to apply the accumulated knowledge they acquired during their education. The student should acquire skills at a level that prepares them for continued post-graduate studies in the research field. On completion of the course "Independent project 4" the student is expected to be able to:

#### *Knowledge and understanding*

- **explain** the basics of the field of the chemistry that has been chosen for the project related to this project,
- **formulate** a theoretical problem and on this basis **design** adequate experiments.

#### *Competence and skills*

- independently **perform** a research-oriented project of theoretical and/or experimental character,
- **use** the scientific primary literature both as basis for their own project as in the discussion of the relevance of their own results,
- in an efficient way **present** scientific results in writing and orally both in Swedish and English.

#### *Judgement and approach*

- **search**, **evaluate** and critically **interpret** information relevant for the project,
- in an independent way **reflect** on and **adapt** the presentation to a selected target group.

### Course content

The course consists of an independent literature study or an experimental or theoretical work for which the student themselves should search supervision from one of the teachers of the department or, after approval from department, an external supervisor. The supervisor should give an introduction to and overview over the field of chemistry that concerns the independent work. The literature that constitute a background of project should be studied. The student should by means of appropriate experiments and/or calculations solve the problem posed in the project. The project should require two semesters' full-time studies including report writing and presentation. The result of the project should be presented in the form of a monograph as well as an oral presentation.

**Form of teaching**

See above.

*Language of instruction:* English and Swedish

**Assessment**

Examination takes place through the oral and written presentations. To pass whole course, passed results on the written and oral presentations of the independent work are required. A student who has failed twice in the same part of examination has the right to change their examiner if this is practically possible. The application shall be sent to the board of the department and has to be in writing.

**Grades**

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U). Regarding application of the ECTS scale for grade please see Vice-Chancellor decision 28/05/2007, diary nr G 8 1976/07.

**Course evaluation**

A student who participates in or has completed course should be given the opportunity to anonymously perform experiences of and views in the course in a course evaluation.