Course syllabus
Third-cycle courses and study programmes

This is a translation of a Swedish document. In the event of a discrepancy, the Swedish-language version shall prevail.

Research communication in chemicals, health and environment

Forskningskommunikation inom kemikalier, hälsa och miljö

<table>
<thead>
<tr>
<th>Course Code/Codes</th>
<th>50KE003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Area</td>
<td>Chemistry</td>
</tr>
<tr>
<td>School/equivalent</td>
<td>NT</td>
</tr>
<tr>
<td>Valid from</td>
<td>2019-09-16</td>
</tr>
<tr>
<td>Approved</td>
<td>2019-12-12</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
</tr>
<tr>
<td>Approved by</td>
<td>Prefekt Peter Johansson</td>
</tr>
<tr>
<td>Translation to English, date and signature</td>
<td></td>
</tr>
</tbody>
</table>

1 Course content

The aim of the course is for doctoral students to develop an understanding of the significance of being able to communicate academic research in the field of chemicals, health and the environment and knowledge of how this can be beneficial for society, industry and academia. The student will further work on their 21st century skills. The aim is also that students broaden their knowledge of the perspective and praxis in other disciplines related to chemicals, health and environment through exchanging experience of their respective research fields. The course is included in the Junior academy workshop, organized by Swedish academic consortium on chemical safety, 2019, with a theme of Career development within chemicals, health and environment. Invited speakers are representing trade union, consulting in sustainability, retail and academia. Preparation before the workshop is an assignment to prepare a one-slide presentation following the Need, Approach, Benefit and Competition model (presented during the workshop. Presentations and group work activities on creating a research presentation, mapping of stakeholders and research network building are included in the course. Following the course a written assignment of self-evaluation should be performed. The final examination takes place after the workshop at the PhD D student’s home university with a research pitch presented.

2 Outcomes

2.1 The course in relation to the doctoral programme
The course shall primarily refer to the following intended learning outcomes for third-cycle courses and study programmes as described in the Higher Education Ordinance, i.e. the doctoral student shall demonstrate:

**Knowledge and understanding**
- broad knowledge and systematic understanding of the research field (part of outcome 1)
- advanced and up-to-date specialised knowledge in a limited area of this field (part of outcome 1)
- familiarity with research methodology in general (part of outcome 2)
- familiarity with the methods of the specific field of research in particular (part of outcome 2)

**Competence and skills**
- the capacity for scholarly analysis and synthesis (part of outcome 3)
- the capacity to review and assess new and complex phenomena, issues and situations autonomously and critically (part of outcome 4)
- the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively (part of outcome 4)
- the ability to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames (part of outcome 4)
- the ability to review and evaluate research and other qualified tasks (part of outcome 4)
- through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research (outcome 5)
- the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general (outcome 6)
- the ability to identify the need for further knowledge (outcome 7)
- the capacity to contribute to social development both through research and education and in some other qualified professional capacity (part of outcome 8)
- the capacity to support the learning of others (part of outcome 8)

**Judgement and approach**
- intellectual autonomy and disciplinary rectitude (part of outcome 9)
- the ability to make assessments of research ethics (part of outcome 9)
- specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used (outcome 10)

The intended learning outcomes are listed in the same order as in the general syllabus for the programme.

### 2.2 Intended course learning outcomes

After completing the course, the student should be able to:
- demonstrate knowledge and skills in developing and presenting ideas related to their research area,
- demonstrate understanding of how research can be communicated to stakeholders in chemicals, health and environment as well as to other research areas.

To obtain a passing grade, the doctoral student shall demonstrate:

### 3 Reading list and other teaching material

The following course readings and teaching material will be used on the course:

Course material provided during the course
4 Teaching formats

Teaching on the course takes the following format:
Lectures, group work, oral and written presentations

5 Examination

1. Oral presentation of research pitch and written self-reflection.
2. 

For examinations consisting of several examination components, the following applies: If during the course it is concluded that a doctoral student is unable to complete a certain examination component, the examiner may set a substitute assignment provided that circumstances do not reasonably allow for the course component to be completed at a later date during the run of the course.

6 Grades

Examinations on third-cycle courses and study programmes are to be assessed according to a two-grade scale with either of the grades ‘fail’ or ‘pass’ (local regulations).

The grade shall be determined by a teacher specifically nominated by the higher education institution (the examiner) (Higher Education Ordinance).

To obtain a passing grade on examinations included in the course, the doctoral student is required to demonstrate that he/she attains the intended course learning outcomes as described in section 2.2. Alternatively, if the course consists of multiple examinations generating credit, the doctoral student is required to demonstrate that he/she attains the outcomes that the examination in question refers to in accordance with section 5.

A student who has failed an examination is entitled to a retake.

If an examination consists of several examination components, and a student fails an examination component, the examiner may, as an alternative to a retake, set a make-up assignment with regard to the examination component in question.

A doctoral student who has failed an examination twice for a specific course or course element is entitled, upon his/her request, to have another examiner appointed to determine the grade.

7 Admission to the course

7.1 Admission requirements
To gain access to the course and complete the examinations included in the course, the applicant must be admitted to a doctoral programme at Örebro University.

7.2 Selection

Help text (Delete by clicking the tab and pressing the delete key three times).
This section sets out the selection criteria for the course with regard to the applicants that meet the admission requirements outlined in the previous section.

Articulate and list, in order of preference, the assessment criteria that will be used in the selection of applicants to the course.

There are different kinds of selection criteria:

A. Affiliation to a certain subject/graduate school etc., primarily if a similar limitation of access has not already been specified in section 7.1. Example:
1. Applicants from the subject of …
2. Applicants from the following subject/-s: ...
3. Applicants from the school where the subject is based: ...
4. Applicants from the following school/-s: ...
5. Applicants from the university’s graduate school: ...
6. Applicants from subjects within the faculty of ...

B. Previous knowledge requirements, e.g. that priority for a specialist course is given to applicants with a higher level of previous knowledge, either generally or within the specific field.

C. A need to be given priority to the course, e.g. (1) applicants with a higher number of course credits shall be given priority over those with a lower number of course credits; (2) applicants with a lower number of course credits left before the award of their degree shall be given priority over those with a higher number of remaining course credits (if applicants are enrolled on different programmes and the number of course credits required differ between these programmes); (3) applicants for whom the course is compulsory; or (4) doctoral students who are deemed as having a greater immediate need for the course in terms of his/her thesis project.

D. Drawing lots.

If no other selection criteria are specified in this section, priority shall be given to applicants with a lower number of course credits left before the award of their degree over applicants with a higher number of remaining course credits. Should two or more students have equal number of credits, selection will be done through the drawing of lots. This also applies within any selection groups listed unless otherwise stated.

Selection between applicants who have been admitted to doctoral programmes at Örebro University and who otherwise meet the admission requirements as listed above is made according to the following order of precedence:

If no other selection criteria are specified in this section, priority shall be given to applicants with a lower number of course credits left before the award of their degree over applicants with a higher number of remaining course credits. Should two or more students have equal number of credits, selection will be done through the drawing of lots. This also applies within any selection groups listed unless otherwise stated.
7.3 Other applicants than doctoral students admitted at Örebro University

Other applicants than doctoral students admitted at Örebro University may be given access to the course on the grounds of provisions for and/or agreements regarding contracted courses, joint degrees, national graduate schools or cooperation in other respects with other universities.

Any decisions on what such other applicants may be given access to the course are made separately and on the basis of the provisions and/or agreements that occasion the student to apply for the course.

For participation in the course in other respects, the same provisions shall apply as for doctoral students admitted to Örebro University.

8 Transfer of credits for courses, study programmes and other experience

Provisions on the transfer of credits can be found in the Higher Education Ordinance and on the university’s webpage.

9 Other information

Course language is English

Transitional provisions