Reg No: KEGB21/20221



Faculty of Health, Science and Technology Chemistry

Syllabus

Chemistry in Society

Course Code: KEGB21

Course Title: Chemistry in Society

Kemi i samhället

Credits: 7.5

Degree Level: Undergraduate level

Progressive First cycle, has less than 60 credits in first-cycle

Specialisation: course/s as entry requirements (G1F)

Major Field of Study:

KEA (Chemistry)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2021-08-31, and is valid from the Spring semester 2022 at Karlstad University.

Prerequisites

Registered for 30 ECTS credits in Chemistry, with at least 15 ECTS credits completed, or equivalent

Learning Outcomes

The aim of the course is for students to acquire basic knowledge of the role of chemistry and science in society. The starting point is to analyse how people in general view chemistry, based on debates in the media, and relate this analysis to the research perspective of chemistry. Special emphasis is placed on the role of chemistry for sustainable development and on gender equality.

Upon completion of the course, students should be able to:

1. analyse, evaluate, and summarise current texts and debate contributions in social media, blogs, podcasts, daily press, television, and radio from the perspectives of source criticism,

chemistry research, and sustainability

- 2. reflect critically upon how texts related to chemistry research can be understood in relation to gender equality and a norm critical approach
- 3. plan, carry out, report, and defend an independent project on the role of chemistry for sustainable development, according to instructions and within given time limits, and
- 4. examine and discuss chemical science texts.

Content

The course treats the role of knowledge of chemistry for reaching the global goals of sustainable development. The marketing of chemical products is related to a gender equality perspective. Does this marketing address a certain target group? Norm critical values are also treated in relation to chemistry research, for instance in relation to views of the chemical industry. Are emissions from this industry more dangerous?

The course comprises two parts, which are assessed separately: the seminar unit and an independent project.

The seminar unit (4 ECTS cr) deals with and examines learning outcomes 1, 2, and 4. Texts from different types of media are analysed, summarised, and assessed from the perspective of chemistry research. The texts also provide a basis for reflecting upon the chemistry-related content from gender equality and norm critical perspectives. Students write individual texts for each seminar. These texts are discussed in groups, and written summaries of the group discussions are then submitted after each seminar. Attendance is mandatory.

The independent project (3.5 ECTS cr) deals with learning outcomes 1-4 and examines learning outcomes 3 and 4. The independent project is reported in an individual essay, presented and discussed in a group seminar. The presentation should make use of ICT. The seminar also includes serving as a peer reviewer of another student's essay. Attendance at the final group seminar is mandatory.

Reading List

See separate document.

Examination

Assessment of the seminar unit is continuous and based on individual texts and group discussions in 4 seminars. A summary of each group discussion is reported in writing.

Assessment of the independent project is in the form of:

- 1. an individual written report
- 2. an oral presentation with support from ICT
- 3. defense of the independent project
- 4. peer review of another student's independent project

Assessment is individual and all examination components are considered in the final assessment.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades Fail (U), Pass (G), or Distinction (VG) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.

Students offer suggestions for texts that provide a basis for assignments completed in the course.