FKD3400 Corrosion Challenges - in Current and Future Technologies 4.5 credits

Korrosionsutmaningar - i nuvarande och framtida teknologier

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

Establishment

Course syllabus for FKD3400 valid from Spring 2022

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

PhD student in chemistry, chemical engineering and materials science.

Language of instruction

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

Intended learning outcomes

After completion of the course the doctoral student should have the knowledge and ability to

- analyse an application for metallic materials from a corrosion perspective
- break down a corrosion issue into questions related to damage mechanisms, materials selection criteria, and the effect of environmental parameters

Course contents

- Cost of corrosion
- Consequences of corrosion in different applications
- Possibilities to avoid corrosion via materials selection or mitigation measures
- Focus on selected applications which each course participant describes in a literature study

Examination

- LIT1 - Literature assignment, 3.5 credits, grading scale: P, F
- SEM1 - Seminars, 1.0 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.

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

Other requirements for final grade

Approved report and presentation plus active participation in at least 80% of seminars within the course.

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.