SA2003 Sustainable Development in Engineering Physics 1.5 credits

Hållbar utveckling inom teknisk fysik

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

Establishment

The course syllabus is valid from Fall 2024 according to the school principal's decision: S-2023-1678 Decision date: 2023-10-16

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Engineering Physics

Specific prerequisites

Completed degree project on Bachelor level with major in technology.

Language of instruction

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

Intended learning outcomes

After completing the course, the student should be able to:

- Demonstrate insight into the role of science and technology in society and the responsibility of individuals in using it for sustainable development, focusing on how a physicist's skills can contribute to a sustainable society.
- Demonstrate the ability to clearly present and discuss their conclusions, knowledge, and the arguments behind sustainability assessments in both oral and written forms, in dialogue with different groups.

Course contents

The course is delivered through various modules, primarily in the form of seminars, focusing on subject-related and professional role-related issues connected to sustainable development.

Key topics include:

- The connection between physics and sustainable development.
- Strategies for complex problem solving.
- Sustainability aspects in the workplace.

Examination

- SEM1 - Seminars, 1.0 credits, grading scale: P, F
- REF1 - Reflection, 0.5 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.

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.