ML180U Sustainability in practice 2.0 credits

Hållbarhet i praktiken

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

Establishment

The official course syllabus is valid from the fall semester 2023 in accordance with the decision by the Head of the ABE School: M-2023-1810. Date of decision: 2023-09-18

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Language of instruction

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

Intended learning outcomes

On completion of the course, the participant should be able to:

1. carry out an analysis of present situation and preconditions for increased sustainability in an industry operations.

2. suggest improvements in a company's business strategy or business model to take additional steps towards a transition to a circular economy.

3. plan and carry out improvements according to the company's ambition to contribute to a more sustainable development.

Course contents

Each module in the course consists of an online seminar. Most of the seminars also contains a preparatory assignment before the seminar and an assignment after the seminar.

In this course, you get a solid understanding of what sustainability is, how it can be handled in an industrial context and how a sustainability approach can contribute to create value for a company, its customers and the society in general. The course consists of online seminars, assignments and a miniproject. It is based on the concept ”flipped classroom”, which it implies that the participants prepare for teaching activities on their own by means of online lectures, course literature and preparatory assignments. During lectures, the teaching will to a large extent be based on an active learning.

On completion of the course, the participant should be able to show a solid understanding of:

• basic concepts, challenges and possibilities that relate to the concept of sustainable development with special emphasis on how a sustainability approach can contribute to create value for a company, its customers and the society in general.

• frameworks for sustainable industry and transports, e.g. the global sustainable development goals in Agenda 2030.

• how sustainability relates to lean as well as agile methods and how one can use such understanding in strategic thinking and improvement work.

• how different perspectives among people and stakeholders lead to different conclusions about which measures should be taken.

Examination

- SEM1 - Seminars, 1.0 credits, grading scale: P, F
- ÖVN1 - Assignments, 0.5 credits, grading scale: P, F
- PRO1 - Project, 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.

Other requirements for final grade

Grading criteria for SEM1 - attendance requirement 80%.

The course consists of seven (7) online seminars that will be a mixture of lectures and exercises (in 6 modules) and one occasion for questions/inspiration. Between each seminar, an assignment is given, in total four (4) assignments of various nature, both practical assignments and written reflections connected to own occupation and work. The course contains a small project (miniproject), that will be presented by the participants at the final seminar. All these activities are compulsory to pass the course.

A Pass grade for the entire course requires attendance at at least 5 of the 6 modules, and submitted and presented project task.

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.