LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Perspektiv på hållbar utveckling
Perspectives on Sustainable Development

FAFF50, 7,5 credits, G2 (First Cycle)

Valid for: 2023/24
Faculty: Faculty of Engineering, LTH
Decided by: PLED N
Date of Decision: 2023-04-17

General Information

Main field: Technology.
Compulsory for: N3
Elective for: F4
Language of instruction: The course will be given in Swedish

Aim

The course is aiming at giving the student the ability to work for a sustainable development by problematizing around and by adopting a critical attitude towards his/her role within, and influence on, society.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

- have a fundamental knowledge of sustainable development.

- be able to describe different aspects on sustainable development and their respective connection to certain problems, especially

- environmental aspects
- ethical aspects
- political aspects
- global aspects
- economical aspects
- legal aspects
- cultural aspects.

- have fundamental knowledge of communication and of different kinds of meeting modes.

- have an understanding of how group-processes are used for and work to reach agreement in decisions.

Competences and skills
For a passing grade the student must

be able to

- account for and critically relate to the concept sustainable developement
- find and value information of immediate importance concerning sustainable development.
- perform a stakeholder-analysis.
- identify and, from different aspects/interests, describe problems which can lead to a non-sustainable development.
- formulate and present arguments in smaller group-discussions as well as in a big public meeting.

Judgement and approach
For a passing grade the student must

be able to

- independently as well as in a group situation create a sustainable and from relevant aspects well illustrated analysis of a problem.

- critically analyze and assess the sustainability in arguments presented to her.

Contents

The student is trained in critical thinking and awareness on the basis of his/her future role as an engineer. This is done by dividing the students into groups representing "stakeholders", i.e. groups with different interests within the international community. Examples of groups can be researchers (within nanotechnology), government representatives from industrial nations and/or developing countries, lobbyists from multinational companies, health organizations, NGO:s with interests in environmental questions and/or human rights or (inter)national regulation agencies. A question at issue is given to all groups of interest. The groups are then supposed to take a position on the issue on basis of the interests of the respective group. The goal is that all groups at the end agree on a roadmap concerning the question at issue. Negotiations are done in group meetings and at the concluding conference. The students are supposed to present and defend the roadmap at a press-meeting in immediate connection to the concluding conference. Students, teachers, journalists and special guests are invited to attend this press-meeting.

Lectures are given to inspire the students and to give them an insight to the parts of society mainly affected from problems within the area of sustainable development. The lectures can, in addition to the concept of Sustainable development, discuss e.g. communication, meeting modes, ethics, practical environmental work, economics, jurisprudence, politics and global environmental justice. At workshops, the students work

in groups to analyze and discuss the concept of sustainability and ethical problems.

Since great importance is attached to every student's individual development concerning attitudes towards the issue of sustainability, the course ends with a follow-up-discussion. Questions about the quality and the planning of the course are raised and discussed. Every student should reflect over standpoints taken and the background for taking these standpoints.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)
Assessment: Mandatory presence and active participation in lectures, workshops, group discussions, final conference and follow-up of conference. Mandatory written reports and hand-in assignments.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Parts
Code: 0120. **Name:** Perspectives on Sustainable Development - theory.
Credits: 3. **Grading scale:** UG. **Assessment:** Mandatory to be present and take active part in at least 80 % of lectures and 100 % of workshops and complete assignments.
Code: 0220. **Name:** Perspectives on Sustainable Development - case.
Credits: 4,5. **Grading scale:** UG. **Assessment:** Mandatory to be present and take an active part in the entire case work - i.e. in all group meetings, intergroup meetings, conference and evalutation.

Admission

Assumed prior knowledge: 120 credits within the Engineering Nanoscience or Engineering Physics programmes - or corresponding.
The number of participants is limited to: 42
Selection: Completed university credits within the programme. Priority is given to students within the Engineering Nanoscience programme.
The course overlaps following course/s: FAFF15

Reading list

- Föreläsningsanteckningar. Written material from lectures and groupwork are distributed via the course Canvas.
- Fredrik Hedenus, Martin Persson, Frances Sprei: Hållbar utveckling - nyanser och tolkningar. Studentlitteratur, 2018, ISBN: 9789144121871.

Contact and other information

Course coordinator: Charlotta Nilsson, charlotta.nilsson@nuclear.lu.se
Course coordinator: Knut Deppert, knut.deppert@ftf.lth.se
Course homepage: http://canvas.education.lu.se
Further information: Some elements may be taught and assessed in English. This includes a maximum of 1.5 hp, in the form of laboratory sessions or written assignments.