



MESS33, Sustainability Science, 10 credits

Hållbarhetsvetenskap, 10 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Board of the Lund University Centre for Sustainability Studies on 2013-10-22 to be valid from 2013-08-28, autumn semester 2013.

General Information

The main field of study is *Environmental Studies and Sustainability Science*. The course constitutes the 3rd module at LUMES, Lund University International Master's Programme in Environmental Studies and Sustainability Science.

The course is compulsory for all LUMES students.

Language of instruction: English

Main field of studies

Environmental Studies and Sustainability Science

Depth of study relative to the degree requirements

A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

On completion of the course, the student shall demonstrate

- a profound understanding of what the emerging field of sustainability science entails including its history, founders, focus, approach, and rationale;
- the ability to identify, analyse, and discuss complex sustainability challenges (e.g., climate change, water scarcity, land degradation, loss of biodiversity, food insecurity, depletion of marine fish stocks) through a system perspective and other wider views, and
- the ability to critically reflect on how the existing university structure creates both opportunities and barriers for addressing, discussing and solving complex sustainability challenges.

Course content

The course presents, discusses and critiques the main literature in the sustainability field. Students are exposed to interdisciplinary and transdisciplinary theoretical perspectives, approaches and tools commonly used or under development within the field, and how these are used to analyse and interpret complex sustainability challenges and societal transition processes.

In addition, the course covers and scrutinizes a variety of theories, frameworks, and approaches used in sustainability science, e.g., resilience theory, transition theory/management, ecological economics, political ecology, system analysis, DPSIR, CLDs. The course also offers methods training in system analysis with a focus on dynamic interactions and their quantitative modeling using computer software. Finally, the course exposes students to real-world settings with societal actors (e.g., municipalities, organizations, companies, communities) where students actively partake in the design of a project related to persistent sustainability challenges. The training is significantly group-oriented with an emphasis on participatory training activities.

Course design

The course is comprised of lecture, seminars, group discussions, and may include student presentations, and individual assignments/papers.

Consistent, regular class attendance and fully engaged participation is expected from all students in LUMES. Attendance at the sessions where graded activities take place is compulsory to pass the course.

Assessment

For a passing grade, the student must (a) have an overall passing mark on the individual assignments; (b) have an overall pass on combined group work and individual assignments; (c) have participated in the mandatory sessions;

Students who fail a test have the right to re-examination. An opportunity for re-examination will be offered after the end of the course. If necessary, a second re-examination will be arranged at a later date. A student who has taken two examinations in a course or a part of a course without obtaining a pass grade is entitled to the nomination of another examiner, unless there are special reasons to the contrary. Students getting pass mark cannot re-take an exam or re-submit a paper to get a higher grade.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Three, Four, Five.

The grades awarded in examinations are 5-4-3-Fail. The highest grade is 5 and the lowest passing grade is 3. The grade for a non-passing result is Fail. The student's performance is assessed with reference to the learning outcomes of the course. The grade "5" denotes outstanding performance in *all* learning outcomes. The grade "4" signifies very good performance in *all* learning outcomes. To receive the grade of

"3", the student must obtain minimum criteria in fulfilling *all* learning outcomes. The grade of Fail signifies that the student has not fulfilled the learning outcomes of the course, or that additional work is required before the credit can be awarded.

Entry requirements

Admittance to the LUMES programme is required for admittance to the course.

Further information

This course cannot be included in a degree together with MESS04.

The syllabus was adopted by the Board of the Faculty of Social Sciences, Lund University, on December 13, 2012.

Subcourses in MESS33, Sustainability Science

Applies from H13

1201 Sustainability Science, 10,0 hp
Grading scale: Fail, Three, Four, Five