Faculty of Social Sciences

MESS18, Sustainability Science, 7.5 credits

Hållbarhetsvetenskap, 7,5 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Board of the Lund University Centre for Sustainability Studies on 2021-09-02 (STYR 2021/1733) and was last revised on 2024-02-02 (STYR 2024/333). The revised syllabus comes into effect 2024-02-02 and is valid from the autumn semester 2024.

General information

The course is a first term compulsory course within Lund Univeristy Master's Programme in Environmental Studies and Sustainability Science (LUMES).

Language of instruction: English

Main field of study	*Specialisation*
Environmental Studies and Sustainability Science	A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

Upon the completion of the course, the student shall

Knowledge and understanding

- discuss what the field of sustainability science entails, including its focus, significance and origins, and explain and account for its emergence and continued evolution.
- identify appropriate approaches and methods to structure a specific sustainability challenge for a given case.
- envision a specific socio-ecological development at a defined future point in time and reframe this vision based on other perspectives.

Competence and skills

- identify, analyse, and synthesise knowledge of a complex sustainability challenge case in relation to a specific sustainability challenge or sustainability issue.
- formulate and convey this knowledge in writing in a structured manner that abides by academic standards.
- engage in group settings to constructively process and complete defined tasks.
- discern and convey strategic information and knowledge to a broader audience about a sustainability topic within a given amount of time.

Judgement and approach

- demonstrate the ability to consider and differentiate the strengths and weaknesses of different concepts and approaches used in sustainability science.
- identify synergies between and limitations to the goals of fair distribution and ecological preservation.

Course content

The course builds on student learning outcomes from the first three courses, and creates opportunities for students to broaden, deepen and nuance their knowledge and competencies in relation to socio-ecological processes, states and drivers. The course also provides a foundation for understanding and addressing the sustainability challenges that are covered in subsequent programme courses.

Initially the course describes and accounts for the evolution of sustainability science and the subject field's key concepts and perspectives, including their limitations. Examples include socio-ecological theory, political ecology, resilience, systems theory and transition theory and management.

The course emphasises the following approaches, methods and techniques to analyse current sustainability challenges, decrease uncertainty, and assess their potential long-term effects: DPSIR, causal loop diagrams, multi-level frameworks, scenario analysis, strategic visioning and narratives.

The course places particular emphasis on critical reflection, presentation skills and collaborative ability when solving problems and co-authoring reports and texts.

Course design

The course is designed around a diverse set of interactive learning activities with emphasis on competencies development, skills training and working in groups.

The learning activities consist of group work (including peer teaching), individual and/or group reporting to other course participants, interactive topic overview lectures, student-driven seminar, report writing, and group or individual reflection sessions.

Fulfilment of the course's learning outcomes is assessed through the student's active participation in a seminar and an evaluation of the student's performance in group work and on an individual paper.

Compulsory components

Unless there are valid reasons to the contrary, compulsory participation is required in one seminar. Students who have been unable to participate due to circumstances such as accidents or sudden illness will be offered the opportunity to compensate for or re-take compulsory components. This also applies to students who have been absent because of duties as an elected student representative.

Assessment

Course assessment is based on tree exams:

- Written group take-home exam (4 credits)
- Oral (in house) group exam (1 credit)
- Written individual take-home exam (2,5 credits)

To recive a passing grade on the course the student must also have particiapted in the compulsory component, a seminar.

The course includes opportunities for assessment at a first examination, a re-sit close to the first examination and a second re-sit for courses that have ended during that school year. Two further re-examinations on the same course content are offered within a year of the end of the course. After this, further re-examination opportunities are offered but in accordance with the current course syllabus. 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 a passing grade cannot re-take an exam or re-submit a paper to get a higher grade.

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.

Grades

Grading scale includes the grades: Fail, Three, Four, Five
The compulsory compenent is exempted from the grading scale above. The grade awarded for this component is Participated. For the grade of Participated, the student must show acceptable results.

The highest grade for the course is Five and the lowest grade for passing is Three. Grades for a non-passing result is Fail. The student's results are assessed with reference to learning outcomes of the course. For grade Five, the student must show an excellent result in all learning outcomes. For the grade Four, the student must show a very good result in all learning outcomes. For the grade Three, the student must show a sufficiently good result in all learning outcomes. The grade Fail means that the student has not reached the learning outcomes of the course. At the start of the course, students are informed about the learning outcomes stated in the syllabus and the grading scale and how it is applied on the course.

Overall course grade
The grade for the entire course consists of the average grade of the three exams that are assessed according to the Fail-5-4-3 grading scale. The written group take-home exam is worth 50% of the final grade, the oral (in house) group exam is worth 15% of the final grade, and the written individual take-home exam is worth 35% of the final grade. For a grade of 3 on the entire course the student must have been awarded at least grade 3 on all exams. The student must also have participated in the compulsory component to pass the course.

Exam	Credits	Grading scale	Part of final grade for the course
Written group take-home exam	4	Fail-3-4-5	50%
Oral (in house) group exam	1	Fail-3-4-5	15%
Written individual take-home exam	2,5	Fail-3-4-5	35%
Seminar (compulsory component)	0	Participated	0
	7,5		100%

Example: The student got the grade of grade 3 on the written group take-home exam, the grade of 4 on the oral (in house) group exam, and the grade of 5 on the written individual take-home exam (and the grade of Participated on the compulsory component). The final grade is 4 ((3 * 50) + (4*15) + (5*35)) / 100 = 3,85).

Entry requirements

To be admitted to the course, the student must hold a Bachelor's degree, including at least 180 ECTS.

A good command of spoken and written English, equivalent to English 6/B (advanced) proficiency in the Swedish secondary system, is required. Equivalent assessments will be made according to national guidelines.

Further information

The course cannot be included in a degree together with MESS33 Sustainability Science, 10 credits.