Faculty of Social Sciences

MESS51, Science and Politics of Climate Change, 7.5 credits

Klimatförändring som vetenskap och politik, 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 2015-01-13 to be valid from 2015-08-30, autumn semester 2015.

General Information

The course constitutes a 3rd term elective (non-compulsory) course at LUMES, Lund University Master's Programme in Environmental Studies and Sustainability Science.

Language of instruction: English

Main field of studies	*Depth of study relative to the degree requirements*
Environmental Studies and Sustainability Science	A1F, Second cycle, has second-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding

To pass the course the student shall

- demonstrate a broad understanding of the dynamics of the climate system and its complexity in terms of interaction with other system
- show a good understanding of the most important scientific debates in the climate change scientific community as well as the actors and drivers of the debate
- show a good understanding of the climate change policy regime with a focus on the role of science

Competence and skills

To pass the course the student shall

- demonstrate ability to independently analyse the state of the art in climate science and relate it to political climate change debates
- demonstrate ability to independently contribute to the political debate on climate change based on an evaluation of the state of the art in climate science, taking into account different ethical considerations and choices
- show ability, in writing and orally, to independently formulate, present and discuss own conclusions with regard to climate policy, considering the scientific, theoretical and/or ethical bases for these

Judgement and approach

To pass the course the student shall

- show deepened ability to critically reflect upon scientific, social and ethical questions with regards to mitigation of climate change and adaptation to a changed climate
- show deepened ability to critically reflect upon the climate policy debate, considering global, inter-generational and intersectional perspectives on justice

Course content

The course provides basic scientific understanding of the dynamics and complexity of the climate system, including its connections to the marine and terrestrial ecosystems. The course also provides an understanding of and an ability to analyse and understand political questions and decision making in relation to climate mitigation and climate adaptation. Based on this the course aims to provide a deepened understanding of the most important scientific questions and how these are reflected and dealt with in the international climate policy debate. The course also includes methods components such as how to handle scientific uncertainty and detection and attribution. Special attention is given to ethical perspectives such as global justice.

The course starts with a survey of the dynamics and complexity of the climate system. Then the course provides a special focus on an evaluation of different climate science debates and how these are linked to important climate policy questions. To select these key questions and debates is an important aspect of the course and it is organized through moderated dialogues and processes amongst the students and between students and lecturer. The course consists primarily of reading and evaluation of scientific articles, mixed with lectures, seminars and debates, the structure of which is decided upon amongst the course participants along the way. The course work should result in a scientific evaluation of and a survey of current climate science. Both the process and the resulting reports are inspired by the scientific protocol of the IPCC.

Course design

The course consists of lectures and seminars. Participation in seminars is obligatory unless there specific circumstances.

An alternative form or date for compulsory components is offered to students who are not able to complete a compulsory component owing to circumstances beyond their control, e.g. accident, sudden illness or similar. This also applies to students who have missed classes because of activities as a student representative.

Assessment

The course includes the following components: written individual assignments, peer-review and written and oral presentations in groups.

The group presentations build upon a peer-review process in which the students, both in writing and orally, assess their peers' individual assignments. With the support of these peer-reviews, the students produce and report summaries of the knowledge produced.

Three opportunities for examination are offered in conjunction with the course: a first examination and two re-examinations. Within a year of the end of the course, two further re-examinations on the same course content are offered. 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.

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 highest grade for the course as a whole 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 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 3, the student must obtain minimum criteria in fulfilling all course learning objectives. 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 grade can be awarded.

At the beginning of the course, students are informed about the learning outcomes of the course and about the grading scale.

Entry requirements

To be eligible for the course the student must have fulfilled course requirements of at least forty higher education credits in the LUMES, Lund University International Master's Programme in Environmental Studies and Sustainability Science (120 credits).

Further information

The course was approved by the Board of the Faculty of Social Sciences on February 5, 2015.

Subcourses in MESS51, Science and Politics of Climate Change

Applies from H15

1501 Science and Politics of Climate Change, 7,5 hp
Grading scale: Fail, Three, Four, Five