Department of Environmental Science

Stockholm University

Syllabus

for course at first level

Climate Change Solutions
Att motverka klimatförändringen

7.5 Higher Education Credits
7.5 ECTS credits

Course code:	MI3001
Valid from:	Spring 2019
Date of approval:	2019-01-14
Department	Department of Environmental Science
Main field:	Climate Science
Specialisation:	G1F - First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Decision

Prerequisites and special admittance requirements

Admission to the course requires knowledge equivalent to 30 credits. Proficiency in English is also required corresponding to passing English in the Swedish upper secondary school course English B / English 6.

Course structure

Examination code	Name	Higher Education Credits
HELA	Climate Change solutions	7.5

Course content

The course covers activities and solutions aimed to reach climate neutrality. The course highlights:
• The basic principles of operation of the climate system and of climate change
• The natural science, socio-economic and political causes of the ongoing climate change
• The effects of climate change on the earth system and on society from the perspectives of natural science, socio-economy and politics
• Local and global activities and possible solutions to reach a climate neutral and sustainable society and assessment of both positive and negative co-effects of proposed activities
• Arguments on the responsibilities of the individual and of society for justice and equality in relation to environmental issues
• The value and limitations of various political activities to mitigate greenhouse gas emissions and of political steering of the technological development toward a sustainable energy supply

Learning outcomes

Upon completion of the course, students are expectedto be able to:
• Explain the basic principles of the climate system and of climate change
• Explain the natural science, socio-economic and political causes of the ongoing climate change
• Explain the effects of climate change on the earth system and on society from the perspectives of natural science, socio-economy and politics
• Identify local and global activities and possible solutions to reach a climate neutral and sustainable society and analyse both positive and negative co-effects of proposed activities
• Evaluate arguments on the responsibilities of the individual and of society for justice and equality in relation to environmental issues

• Understand the value and limitations of various political activities to mitigate greenhouse gas emissions and of political steering of the technological development toward a sustainable energy supply

Education

Instruction consists of web-based lectures and exercises as well as campus-based seminars. Participation in seminars and any associated integrated instruction is compulsory. In the event of special circumstances, the examiner may, after consultation with the teacher concerned, grant a student exemption from the obligation to participate in certain compulsory instruction.

Forms of examination

a.The course is examined as follows: Knowledge assessment takes the form of oral and written examination. Examination takes place in English.

b. The course has no compulsory instruction.

c. Grading is carried out according to a 7-point scale related to learning objectives:
A = Excellent
B = Very Good
C = Good
D = Satisfactory
E = Sufficient
Fx = Fail
F = Fail

c. The grading criteria will be distributed at the beginning of the course.

d. In order to pass the course, students must receive a passing grade and participate in all mandatory instruction.

e. Students who receive a failing grade on a regular examination are allowed to retake the examination as long as the course is still provided. The number of examination opportunities is not limited. Other mandatory course elements are equated with examinations. A student who has received a passing grade on an examination may not retake the examination to attain a higher grade. A student who has failed the same examination twice is entitled to have another examiner appointed, unless there are special reasons to the contrary. Such requests should be made to the department board. The course includes at least two examination opportunities for each course unit per year when the course is given. At least one examination opportunity will be offered during a year when the course is not given.

f. Students awarded the grade Fx are given the opportunity to improve their grade to E. The examiner decides the supplementary assignments to be performed and the pass mark criteria. The supplementary assignments will take place before the next examination session.

Interim

Students may request that the examination is carried out in accordance with this syllabus even after it has ceased to apply. This right is limited, however, to a maximum of three occasions during a two-year-period after the end of giving the course. A request for such examination must be sent to the departmental board. The provision also applies in the case of revisions to the course plan.

Misc

The course is offered as a separate course but may be included in a degrree. The course is offered in collaboration with: University of California, Department of Geological Sciences, Department of Natural Geography, Department of Meteorology, Department of Biology Education, Department of Political Science, Institute for International Economic Studies, Department of English, Department of Archaeology and Classical Studies, Department of Aconomic History and International Relations, Department of Law, and Department of Philosophy.

Required reading

The course literature is decided by the department board and published on the Department of Environmental Science' website at least two months before the start of the course.