

## **MEST05, Climate Change Impacts, Adaptation and Vulnerability, 7.5 credits**

*Klimatförändringarnas påverkan, anpassning och sårbarhet, 7,5 högskolepoäng*  
**Second Cycle / Avancerad nivå**

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### **Details of approval**

The syllabus was approved by The Board of the Lund University Centre for Sustainability Studies on 2024-05-31 (STYR2024/1440). The syllabus comes into effect 2024-10-14 and is valid from the spring semester 2026.

### **General information**

The course is a second term compulsory course within Lund University Master's Programme in Climate Change and Society (LUCAS), 120 credits.

*Language of instruction:* English

#### *Main field of study*

Environmental Studies and  
Sustainability Science

#### *Specialisation*

A1F, Second cycle, has second-cycle course/s as  
entry requirements

### **Learning outcomes**

Upon the completion of the course, the student shall be able to:

#### **Knowledge and understanding**

- Demonstrate comprehensive, interdisciplinary knowledge and understanding of the challenges and solutions of adaptation, as well as the socio-economic and political dimensions of inequality and vulnerability.
- Critically reflect on and explain the central societal debates around adaptation, and how they reflect different social contexts, interests, and trade-offs.
- Understand and be able to evaluate different adaptation measure from a justice perspective.

## Competence and skills

- Demonstrate the ability to systematically and qualitatively apply social science concepts to climate adaptation cases from a range of different geographical and social contexts.
- Demonstrate the ability to independently and collaboratively, both in writing and orally, formulate, present, and discuss various societal perspectives on adaptation; as well as to reflect on and synthesize interdisciplinary perspectives on climate change.

## Judgement and approach

- Demonstrate an advanced ability to apply critical and scientifically grounded approaches to ongoing debates on climate change adaptation.
- Identify different ways of thinking about and understanding adaptation, along with the tensions, conflicts, and disagreements among them.
- Develop the ability to understand the significance of justice aspects in adaptation measures.

## Course content

The aim of the course is to provide students with an in-depth understanding of climate change adaptation, centered around the concepts of risks, vulnerability and justice. The course presents and discusses various solutions for climate adaptation and gives students an overview of current initiatives in relation to questions of risk and opportunity, and the relative vulnerability of different groups to the impacts of climate change.

Students will become familiar with theoretical frameworks aimed at understanding vulnerability and risk, building on concepts introduced in previous courses. The course also addresses the historical limitations of adaptation policies and initiatives, political and economic drivers, and issues of knowledge politics and climate justice.

Illustrative cases from various socio-economic contexts, geographies, and sectors are used throughout the course. Concepts and theories are connected to current societal debates and placed in the context of broader social impacts. Students will also have opportunity to engage with reports from the Intergovernmental Panel on Climate Change (IPCC), particularly from Working Group II, which focuses climate change impacts and adaptation.

The course is organized around four modules, that build on each other. These are:

1. Foundations of climate change adaptation, where historical and political dimensions of adaptation are introduced, along with key concepts of inequality, vulnerability and risk.
2. Root causes and differential experiences of vulnerability, loss and damage, who is affected, where, and how, why and at what scale.
3. Adaptation governance, situating adaptation within broader debates on inequality, finance, climate justice, and sustainable development.
4. The central role of justice exploring the importance of justice in both current and future adaptation approaches and solutions.

## Course design

The course consists of lectures, seminars, and practical exercises. Group assignments and exercises are combined with individual work to develop the students' understanding of climate change adaptation, as well as practical skills related to the underlying constructions and shortcomings of the knowledge politics of human responses to adaptation, vulnerability, and risk.

## Assessment

Course assessment is based on three examinations:

- Written group take-home exam (2,5 credits)
- Oral group exam (presentation of the written group take-home exam) (0 credits)
- Written individual take-home exam (5 credits)

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.

A student who has passed the exam may not retake the exam or submit a new paper to obtain 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 oral group exam is excluded from the grading scale above. The grade scale for this component is Fail - Pass.

At the start of the course, students are informed about the intended learning outcomes and the grading scale, including how it is applied.

### Overall course grade:

The grade for the entire course consists of the average grade of the two exams that are assessed according to the Fail-5-4-3 grading scale. The written group take-home exam is worth 30% of the final grade. The written individual take-home exam is worth 70% of the final grade. For a grade of 3 on the entire course the student must have been awarded at least 3 on all graded exams and a Pass on the oral group exam (presentation of the written group take-home exam).

Exam	Credits	Grading scale	Part of final grade for the course
Written group take-home exam	2,5	Fail-3-4-5	30%
Oral exam in group (presentation of written group take-home exam)	0	Fail - Pass	

Exam	Credits	Grading scale	Part of final grade for the course
Written individual take-home exam	5	Fail-3-4-5	70%
	7,5		100%

Example: The student receives a grade 3 on the written group take-home exam, a grade of 5 on the written individual take-home exam and a pass on the oral group exam (presentation of the written group take-home exam). The final grade is calculated as  $((3 \cdot 30) + (5 \cdot 70)) + (\text{Pass} \cdot 0) / 100 = 4,4$ .  $< 4.5$  is rounded down and  $4.5 >$  is rounded up.

## Entry requirements

To be admitted to the course, the student must have fulfilled course requirements of at least 22,5 higher education credits in LUCAS.

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.