

Faculty of Science

# MVEN27, Environmental Science: Planning with Climate in Focus, 15 credits Miljövetenskap: Samhällsplanering med klimatperspektiv, 15 högskolepoäng Second Cycle / Avancerad nivå

# Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2020-07-03 to be valid from 2020-07-03, spring semester 2021.

# **General Information**

The course is a compulsory second-cycle course for a degree of Master of Science in Environmental Science with a specialisation in Applied Climate Strategy.

Language of instruction: Swedish

Main field of studiesDepth of study relative to the degree<br/>requirementsEnvironmental ScienceA1F, Second cycle, has second-cycle<br/>course/s as entry requirementsEnvironmental Science with<br/>specialization in Applied ClimateA1F, Second cycle, has second-cycle<br/>course/s as entry requirements

# Learning outcomes

The general aim of the course is that the student should acquire knowledge and skills to understand, study, and analyse the relationship between the climatic effects on our society and community planning, with focus on measures for decreased emission of greenhouse gases and adaptations to climate change.

### Knowledge and understanding

On completion of the course the students shall be able to:

• describe the conditions for, and the links between, municipal, regional and national community planning, with respect to the division of responsibility in relation to the environmental goals and the climate policy work

- account for the opportunities and limitations of physical planning when contributing to reach the climate policy goals
- explain how different societal actors can work with the fulfilment of national environmental and sustainability goals
- assess and compare different methods to examine social and environmental effects of community planning

#### Competence and skills

On completion of the course the students shall be able to:

- get a systematic understanding of the opportunities and limitations community planning has to achieve climate policy goals and other environmental and sustainability goals
- based on practical cases, independently formulate, plan, and carry out relevant research with appropriate methods and within given time frames
- present, in writing and orally, specific research assignments
- evaluate the own work in relation to selected method and previous knowledge

#### Judgement and approach

On completion of the course the students shall be able to:

- identify and reflect on goal conflicts, including ethical aspects, between different actors in community planning
- evaluate the importance of community planning for the development of climatically and sustainable societal progress in relation to other policy instruments
- critically discuss the opportunities and limitations of science regarding development and design of sustainable community planning.

### Course content

The course consists of three modules:

Module 1: Circular bio-based society in theory and practice 6 credits This module gives a general overview about a circular r bio-based society in practice and theory. The module is divided into a take-home examination 3 credits, and written assignments 3 credits.

#### Module 2: Circular activities and sectors 4 credits

This module deepens the understanding about a circular biobased society and how its effects can be examined based on experiences from different activities and sectors e.g. accommodation, energy, industry and agriculture. The module consists of a literature survey 4 credits.

#### Module 3: Project work 5 credits

The module consists of advanced studies through a project work in groups with a specific problem area where acquired knowledge is applied. The course consists of both theoretical and practical parts. These parts are tightly linked to ongoing research and placement in industry and societal actors. The module is divided into project work 4 credits, and take-home examination 1 credit.

The teaching consists of lectures, field trips, assignments, presentations and project work. Participation in field trips, assignments, presentations, project work and other integrated teaching is compulsory.

#### Assessment

Examination takes place via written assignments, written and oral presentations, two written take-home examinations, and an individually completed literature survey.

For students who have not passed the regular examination, an additional examination in close connection to this is offered.

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.

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

# Grades

Marking scale: Fail, Pass, Pass with distinction.

Grades awarded on module 1 are Failed, Passed and Passed with distinction for takehome examination I (3 credits), and Failed and Passed for the written assignments (3 credits)

Grades awarded on module 2 are Failed, Passed and Passed with distinction for the literature survey (4 credits)

Grades awarded on module 3 are Failed, Passed and Passed with distinction for takehome examination II (1 credit), and Failed and Passed for the project work (4 credits)

To pass the entire course, it is required to succesfully complete: take-home examinations, written assignments, a literature survey and project work.

The final grade is determined by the combined assessment of the take-home examinations, literature survey, written assignments and project work.

# Entry requirements

To be admitted to the course, a first-cycle degree of at least 180 credits or an equivalent international degree are required. In addition, the student must have passed the courses MVEN15 Environmental Science: Climate Change, Science and Society 15 credits, and MVEN16 Environmental Science: Climate Policy, Governance, and Communication 15 credits, or equivalent.

To be admitted to the course, the students must also have Swedish B and English B or equivalent.

# Further information

The course may not be included in a degree together with MVEN17 Environmental Science: Planning with Climate in Focus 15 credits, or MVES13 Environmental Science: A Circular and bio-based Society 15 credits.

# Subcourses in MVEN27, Environmental Science: Planning with Climate in Focus

Applies from V21

- 2101 Home exam I, 3,0 hp Grading scale: Fail, Pass, Pass with distinction
  2102 Assignment, 3,0 hp Grading scale: Fail, Pass
  2103 Litterature survey, 4,0 hp Grading scale: Fail, Pass, Pass with distinction
  2104 Home exam II, 1,0 hp
- Grading scale: Fail, Pass, Pass with distinction
- 2105 Project, 4,0 hp Grading scale: Fail, Pass