

**SYLLABUS**

# **Climate, landscape and build-up areas 7.5 credits F7006B**

**Klimat, landskap och bebyggelse**

**Course syllabus admitted: Autumn 2021 Sp 2 - Spring 2022 Sp 3**

**DECISION DATE  
2021-08-19**

# Climate, landscape and build-up areas 7.5 credits F7006B

## Klimat, landskap och bebyggelse

### Second cycle, F7006B

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Arkitektur	Architecture

### Main field of study

Architecture

## Entry requirements

C7002B Sustainable Urban Development or corresponding course. Good knowledge in English, equivalent to English B/6.

## Selection

The selection is based on 30-285 credits

## Examiner

Glenn Berggård

## Course Aim

After completing the course participants should be able to:

Knowledge and understanding

- Describe the impact of landscape, built environment and buildings on the local climate.
- Explain the impact of human activities on the local climatic conditions.
- Explain local climatic aspects such as topography, solar radiation, cold air steams, local winds, shading, reflection, drainage, infiltration, etc.

Competence and skills

- Assess opportunities and challenges of local adaptation of built environment and buildings.
- Evaluate and interpret basic knowledge of the impact of the landscape, built environment and buildings on the local climate

Judgement and approach

- Apply local climate knowledge in the design of landscape, urban design, built environment and buildings, as well as the location of built environment and buildings.

## Contents

This course focuses on understanding the local climate conditions, such as topography, solar radiation, precipitation, cold air steams, local winds, shade, reflection, drainage, infiltration, etc. The course explores the possibilities to improve local climate conditions in the landscape, the built environment and buildings. This includes a focus on the possibilities of adaption and resilience based on changes of aspects in local climate and climate change.

## Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

This course includes lectures, seminars, and project work. The lectures and seminars illustrate the different methods that are available in the planning process. A focus is placed on understanding the terminology used around tools, the role of different tools and the appropriate contexts for their use in the planning system. Lectures also explore the various scale of planning policy. Through the group work the student will practice knowledge in managing and accessing development proposals and scenarios in the planning process. This includes the practice of academic report writing and visual/ oral explanation of work.

## Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. The learning outcomes are examined by the take-home exam, seminars and an assignment. A pass grade for the course requires active participation in the seminar, and pass grades for the Home Exam and the Assignment. The grading scale in G/U for the seminar. The grading scale for the Take Home Exam and Assignment is G/U 3 4 5.

## Literature. Valid from Autumn 2017 Sp 1

Habitat, U. N. (2011). Cities and Climate Change—Global Report on Human Settlements. London: Earthscan.

## Course offered by

Department of Civil, Environmental and Natural Resources Engineering

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Take-home exam	G U 3 4 5	3.5	Mandatory	A12	
0002	Seminar	U G#	1	Mandatory	A12	
0003	Assignment	G U 3 4 5	3	Mandatory	A12	

## Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

## Last revised

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2021-08-19

## Syllabus established

by Lars Bernspång 2012-03-14