



*Course syllabus*

# Internationellt hållbart byggande International Sustainable Development in Built Environment

**ABAF01, 7,5 credits, G2 (First Cycle)**

**Valid for:** 2023/24

**Faculty:** Faculty of Engineering, LTH

**Decided by:** PLED A

**Date of Decision:** 2023-03-28

## General Information

**Elective for:** IBYA3

**Language of instruction:** The course will be given in Swedish

## Aim

The aim of the course is to give an orientation on sustainable development with a focus on the built environment in an international perspective.

## Learning outcomes

### *Knowledge and understanding*

For a passing grade the student must

in writing and with references to the course literature, be able to:

describe the main features of urbanization in an international perspective

describe challenges for a sustainable, urban development

### *Competences and skills*

For a passing grade the student must

in writing and with references to the course literature, be able to carry out a broad analysis of a housing area on themes related to sustainable development of the built environment

in writing and with references to the course literature be able to make a general analysis of a housing area on themes related to sustainable development of the built environment

in drawings and with references to the course literature be able to design a building and part of a housing area on themes related to sustainable development of the built environment

#### *Judgement and approach*

For a passing grade the student must

show an interest to discuss the built environment from the perspective of sustainable development

be willing to try out new methods in their continued studies

## Contents

The course gives an insight on sustainable development of the built environment from an international perspective with a focus on low-income groups. The course contains both literature studies and a design proposal of a building and part of a housing area.

The course provides an introduction to the global goals and strategies for a sustainable development of the built environment, based on UN documents. Concepts of Urbanization, urban growth, and the distribution of the urban population in different regions of the world will be introduced. The course focuses on themes of sustainable development of the built environment related to social, environmental and economic aspects.

The course aims to analyze and interpret the design of housing and public space related to themes of sustainable development of the built environment. The following themes are included: use of public space, physical planning, energy consumption and passive climatization of buildings and urban space, slum upgrading, finance for low-income housing and organized self-help housing.

Examples include projects, case-studies and research from Algeria, Costa Rica, Honduras, Morocco, Nicaragua, the Philippines Sri Lanka, Sweden, South Africa, Tanzania, and Tunisia.

## Examination details

**Grading scale:** UG - (U,G) - (Fail, Pass)

**Assessment:** Approved exercises, essay and project work, active participation in excursions, seminars and group critiques and at least 80% attendance at lectures.

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.

## Admission

**The number of participants is limited to:** No

**The course might be cancelled:** If the number of applicants is less than 16.

## Reading list

- Acioly Jr C, Davidson F: Density in Urban Development. Lund Centre for Habitat Studies, Lund University, 1996.
- Adamson B & Åberg O: Design for Climatization, Houses in Warm-Humid Areas. Lund Centre for Habitat Studies, Lund University, 1993.

- Rodríguez M, Åstrand J: Organized Small-scale Self-help Housing. Lund Centre for Habitat Studies, Lund University, 1996.
- Rosenlund, H: Climatic Design of Buildings Using Passive Techniques. Housing Development and Management, Lund University, 2000.
- Tannerfeldt, G, Ljung, P: More Urban Less Poor, An introduction to urban development and management. Earthscan, 2006, ISBN: 978-1-84407-381-8.
- Örn, H: Urban Traffic and Transport. Housing Development and Management, Lund University, 2002.
- Åstrand, J (Red.): Att bygga i u-land. Svenska Missionsrådet, 1994, ISBN: 91-85424-10-2.

## Contact and other information

**Course coordinator:** Erik Johansson, [erik.johansson@hdm.lth.se](mailto:erik.johansson@hdm.lth.se)

**Course homepage:** [http://www.hdm.lth.se/education/undergraduate\\_courses](http://www.hdm.lth.se/education/undergraduate_courses)