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Course Syllabus

Urban Development and Design 7.5 Credits*, First Cycle

Learning Outcomes

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

- Perform urban analyses using GIS tools
- Explain and critically reflect on the historical and contemporary development of cities, their driving forces, processes of change, and urban discourses
- Describe, analyse and demonstrate an understanding of cities as complex systems from a sustainability perspective using digital tools
- Design cities based on urban-geographical and urban-morphological concepts
- Manage urban development processes through iterative analysis and design process work supported by design based and digital methods and tools

Course Content

The course gives an overview of cities as a phenomenon in a historical development perspective and urban geographical concepts to describe and analyse the structures and processes of urban development. In particular, a complex adaptive system perspective is emphasised in which different subsystems can be identified, analysed and managed in relation to each other on different scale levels in urban planning. This includes both physical-structural, socio-economic and technical infrastructure aspects as well as cultural and institutional aspects in a spatial perspective. The course also provides an introduction to urban morphology as a field of knowledge as well as ways to describe and analyze cities, focusing on an architectural design perspective and a functional modeling perspective. Historic and contemporary urban development discourses will be discussed based on current planning situations. Sustainable development is addressed with a focus on the interaction between different ecological, social, economic and spatial factors and subsystems in a resilience perspective, taking into account the importance of urban governance and institutional factors. The course introduces GIS-based urban analysis tools applied in an urban development project that is based on reflexive process work with iterations between analysis and design synthesis. Evaluation and impact assessment tools such as multicriteria analyses and indicators are applied to evaluate the project work.

Assessment

Written exam, 2.5 credits Project work including oral and design presentations, seminars and GIS-analyses, 5 credits



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Forms of Study

Lectures, compulsory seminars and project work including GIS-analyses.

Grades

The Swedish grades U, 3, 4, 5.

The grading scale is U, 3, 4, 5. For project work the grading scale is U,G,VG. The final grade for the course is determined upon completion of a comprehensive evaluation made by the examiner.

Prerequisites

Introduction to GIS 7.5 credits, Construction-CAD 5 credits, Urban and Regional Planning 7.5 credits, Form and Urban Design 7.5 credits, Transport Planning 7.5 credits and Population and Social Planning 7.5 credits

Subject: Civil Planning and Construction

Group of Subjects: Civil and Environmental Engineering

Disciplinary Domain:

Social Science, 25% Technology, 75%

This course can be included in the following main field(s) of study:

1. Civil Planning and Construction

Progression Indicator within (each) main field of study:

1. G2F

Approved:

Approved 8 November 2018 Valid from 21 January 2019