Course syllabus

Nature-based Solutions for urban transformation Naturbaserade lösningar för urbana omställningar

??003, 7.5 credits, --

Valid for: 2026/27
Faculty: Faculty of Engineering LTH
Decided by: PLED W
Date of Decision: ---

General Information

Main field: Environmental Management and Policy **Depth of study relative to the degree requirements:** First cycle, has only upper-secondary level entry requirements
Elective for: TILLF1
Language of instruction: The course will be given in English

Aim

This course is a Special Area Studies (SAS) course provided for both exchange students and regular students at Lund University. The aim of this course is for students to learn what Nature-based Solutions (NBS) are, and how their emergence/implementation can be facilitated as a result of visions, governance strategies, the engagement of various stakeholders, financing mechanisms and business models.

The course delivers knowledge of the concept of NBS and its multiple benefits in an urban context, and how NBS can be assessed, governed, financed and supported by a variety of stakeholders. It also delivers knowledge on the role of policy, tools and (planning) approaches to support effective urban governance leading to a sustainable society. These include collaborative dialogues, urban living labs, financing models, local regulations and innovation procurement for urban transition processes.

(The mainstreaming/scaling up of) NBS requires governmental interventions on multiple levels along with the support of various stakeholders. The course provides numerous NBS cases for urban planning, skill building exercises and tools for analyzing NBS in cities. Coursework also promotes the development of students' ideas on how to facilitate the transition to more sustainable urban futures working with nature.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

- demonstrate the ability to describe basic challenges involved in designing, implementing and integrating nature-based solutions in urban environments;
- be able to apply critical thinking perspectives on the relationship between climate change, urban nature and governance innovation;
- be able to describe and contrast basic concepts, strategies and assessment methods that can enable NBS;
- be able to describe nature-based solutions and the role of governance and innovation, business models, and assessment methods;
- demonstrate the ability to analyze, evaluate and make critical judgements on strategies and approaches for integrating/working with nature-based solutions in cities, not the least in the area of urban planning;
- demonstrate the ability to discuss the needs for multifunctional nature-based solutions in cities in the context of societal challenges/in the context of the Sustainable Development Goals;
- be able to discuss/outline governance and innovation pathways for nature-based solutions.

Competences and skills
For a passing grade the student must

- demonstrate the ability to plan and execute course assignments within given time limits, applying relevant and suitable methods for completing the assignment.
- demonstrate the ability to present, in written or oral form, a coherent and sustained argument related to given questions, or problems, of relevance to the course content.

Judgement and approach
For a passing grade the student must

- demonstrate the ability to reflect upon how cities, urban planning, policies and governance can promote or impede a transition to nature-based urban futures

Contents

The course consists of an introduction and five modules:

Module 1: **NBS in Urban Transformation**. This module explores the concept of nature-based solutions (NBS) and builds a rationale for why society needs nature in cities. It also engages with visions for climate action and the plans or strategies on how to achieve ambitious goals.

Module 2: **Assessment methods for nature-based solutions**. This module explores the multiple functions and benefits of NBS. It also engages with the assessment methods in the context of different perspectives on cities, nature and innovation.

Module 3: **Governance strategies for nature-based solutions**. This module presents the concept of governance, the role of governments, policies and networks and discusses examples and the role of collaboration and engaging citizens and communities.

Module 4: **Business models for nature-based solutions**. This module explores the role of business models and how to create economic and social value. It also investigates financing through examples and experiences with nature-based solutions.

Module 5: **Innovation pathways for nature-based solutions**. This module discusses different ways of working with nature, cities and innovation. It examines new values, norms, forms of engagement, institutions and visions needed for creating new urban futures with examples of nature-based solutions.

Examination details

Grading scale: TH - (U, 3, 4, 5) - (Fail, Three, Four, Five)
Assessment:

Active participation in study visits, seminars and case discussions is mandatory. In order to pass the course, the student must also complete all course assignments. The final grade is based on the mark received on the written exam and the mark received for the course project. Absence from compulsory activities will be compensated by an assignment according to the instruction of the teacher in charge.

Please note that not all material covered in class will be covered by the content of assigned readings. The examination may assess all content presented throughout the course, including material covered exclusively during lectures or seminars.

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.

Modules
Code: ??01. **Name:** Nature-based Solutions for urban transformation.
Credits: 4.5. **Grading scale:** TH - (U, 3, 4, 5). **Assessment:** Approved written exam
Code: ??03. **Name:** Project.
Credits: 3.0. **Grading scale:** TH - (U, 3, 4, 5). **Assessment:** Approved individual project **The module includes:** Individual project

Admission

Admission requirements:

- These courses belong to the First Cycle of the European Bologna system. This is equivalent to undergraduate/bachelor’s level in other systems. Apart from basic qualifications to study at undergraduate level no other prerequisites are required

The number of participants is limited to: No
Kursen överlappar följande kurser: SASI06

Reading list

- According to a literature list that will be available at the latest eight weeks before the start of the course on the course web page.

Contact

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