

PENS-214

Our common soil

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Cursus	Sem.	Type
Projeter ensemble ENAC	BA4	Opt.

Language of teaching	English
Credits	4
Withdrawal	Unauthorized
Session	Summer
Semester	Spring
Exam	During the semester
Workload	120h
Weeks	
Hours	48 weekly
Courses	4 weekly
Exercises	22 weekly
Project	22 weekly

Number of positions

It is not allowed to withdraw from this subject after the registration deadline.

Summary

The course will explore the hypothesis of the "City-Territory" as renewable resource, able to work with and not against ecological systems. Even if still poorly taken into consideration, urbanized soils can in fact play a significant role in the management of urban ecosystems.

Content

Faced with the constant growth of human settlements and increasingly threatening environmental challenges, the Swiss government has recently highlighted, through research initiatives such as the National Research Program 68, the urgency to consider soils as a resource providing a "wide range of ecosystem services" to both human and non-human habitats. In this perspective, the relation between the soil and the city needs to be rethought. Today extended urban formations characterized by a strong co-penetration of urban and rural realms characterize increasingly vast swathes of land all around the world and find in Switzerland a specific configuration. In such a new urban context, the City-Territory, the renewed ratio established between built and open space opens up a wide range of questions where the role of soil is increasingly crucial and strategic.

In this frame, the course aims at: 1 - raising the issue of a necessary re-conceptualization of the existing relation between the city and its soils and 2 - question the paradigm according to which the city merely represents a threat for the natural environment.

The instructors will explore, together with the students, the hypothesis of the "City-Territory as renewable resource", able to work with and not against ecological systems. Even if still poorly taken into consideration, urbanized soils, that in some cases have proven to have higher eco-systemic values than even those of intensive agricultural areas, can in fact play a significant role in the management of urban ecosystems.

Keywords

Soil, City-Territory, Renewable Resource, Ecosystem Services

Learning Outcomes

By the end of the course, the student must be able to:

- Draw an urban soil transect
- Analyze an urban soil transect
- Interpret an urban soil transect

- Integrate different disciplines and know-hows
- Elaborate a set of eco-urban strategies

Transversal skills

- Use a work methodology appropriate to the task.
- Communicate effectively with professionals from other disciplines.
- Demonstrate a capacity for creativity.
- Demonstrate the capacity for critical thinking
- Access and evaluate appropriate sources of information.
- Collect data.

Teaching methods

The course will consist in an "Interdisciplinary Fieldwork and Mapping Campaign" in the Ovest Lausannois in which the students, supported by the teachers, will "experience" and map (draw and critically analyze) a portion of "urban soil transect" (1x8 km) previously selected by the teachers. A set of interdisciplinary, original maps, representing the diversity and potentials of the transect's "urban soils" (both in surface and in depth), will be produced and commented by the students. A final presentation in which the students will propose a set of eco-urban design strategies, directly related to the identified urban soil types/functions, will conclude the course and guide the evaluation.

The course has the ambition to connect two different "gazes" (disciplines) around the question of urban soils: the "gaze" related to the new forms of the contemporary city, that has recently led the way in urbanism, planning and landscape urbanism and the "gaze" related to urban soils, mainly produced by environmental scientists (pedologists, ecologists).