Remarque
Inscription faite par la section

Summary
This course explores the potential of information and spatial analysis to develop a set of speculative proposals about future urban challenges.

Content
It is urgent to approach the planning of cities under a radical vision of the future, that faces the short and long-term transformations needed to preserve the habitability of our planet. The concentration of population and the consumption of energy, goods and food in urban areas means that cities are the places where the challenge of collective survival can be addressed - while configuring the resulting social order governing our lives.

However, contemporary socio-economic disruptions arising from the digital transformation have dissolved the hierarchies imposed by space, challenging us to understand how they invalidate previous urban regulations and their implicit social pacts. The effects of these profound transformations can only be understood by redrawing cities under novel perspectives (health, well-being, urban quality, prosperity, climate change and governance).

In this context, a new information ecosystem is available (open data from public bodies and big data generated by the use of information technologies) to generate complex diagnoses and inform the urban planning process.

The visiting studio will explore several scenarios of urban transformation based on a vocabulary of futures to rethink cities along with the disciplines and tools that ultimately shape them.

Keywords
Cartography, urban planning, urban data, spatial analysis, digital disruption.

Learning Prerequisites
Recommended courses
Cartography (Maçães)

Important concepts to start the course
Basic knowledge of geographic information systems and urban planning is recommended but not mandatory.

Learning Outcomes
By the end of the course, the student must be able to:
• Identify a future challenge for a selected city/topic.
• Define available data sources to describe the identified challenge.
• Create a data model.
• Analyze and extract meaningful information from large amounts of urban data
• Interpret the information by means of cartographic expressions.
• Develop a multiple scale/format proposal.

Transversal skills
• Demonstrate the capacity for critical thinking
• Access and evaluate appropriate sources of information.
• Demonstrate a capacity for creativity.

Teaching methods
The unit will have both a theoretical and practical approach. A series of lectures providing both theoretical references, case studies and technical skills will be complemented with a practical assignment (research and proposal) assisted by desk critiques, weekly pin-ups and intermediate reviews.

Expected student activities
The unit will focus in a Swiss city (in close proximity to Lausanne) as a case study. A field trip will be organised at the beginning of the semester and fieldwork will be required during the course.

Assessment methods
Continuous assessment.
Desk reviews and pin-ups: 30% of grade.
Intermediate review: 30% of grade.
Review of final work: 40% of grade.

Supervision
Office hours No
Assistants Yes
Forum Yes

Resources
Bibliography
The bibliography will be distributed at the beginning of the course.

Websites