InPlaLabs Mini Course Descriptions

WP3. Implementation of InPlaLabs
Knowledge co-creation and sharing procedures

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TRANSLATIONAL NETWORK OF INTEGRATED PLANNING LABS CO-CREATING
KNOWLEDGE ON FORWARD LOOKING TRANSDISCIPLINARY PLANNING
PERSPECTIVES ADDRESSING CLIMATE CHANGE AND URBAN LIFE IN THE POST
PANDEMIC CITY.

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Mini Course 01

InPlaLabs Theoretical Framework - June 5th

[Led by UCY, Urban Calculator, NTUA, Commonspace]

This mini-course provides the foundational knowledge for the forward-looking transdisciplinary planning perspectives addressing climate change and urban life in the post-pandemic city. It explores the essential theoretical perspectives that underpin contemporary approaches to climate-resilient and integrated urban planning. Grounded in a transdisciplinary ethos, it investigates how planning theory adapts to complex urban challenges, such as climate change, digital transformation, and evolving urban mobility. The course introduces key concepts including mobility planning, evidence-based approaches, and participatory design, as foundational pillars in shaping spatial planning that is inclusive, equitable, and future-ready.

Course content:

- Transdisciplinary planning perspectives & principles for the climate-resilient, inclusive, and people-centric city (built environment, urban green, social characteristics, etc)
- The crucial green and digital skills for climate-resilient integrated planning of the contemporary European city
- Mobility planning for addressing climate change and contemporary urban life
- Participatory planning for addressing climate change and contemporary urban life
- Evidence-based planning for addressing climate change and contemporary urban life

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Mini Course 02

InPlaLabs Methodological Resources - June 5th

[Led by UCY, Urban Calculator, NTUA, Commonspace]

This mini-course introduces participants to a robust suite of research and planning methods crucial to integrated spatial planning. Bridging quantitative, qualitative, and participatory approaches, the course provides a methodological foundation for working with complex urban systems, planning tools, and community engagement strategies. Central to this course is the integration of mixed-methods research to support evidence-informed, inclusive, and adaptive planning practices.

Participants will engage with techniques such as connectivity and proximity analysis, multi-scalar spatial data interpretation, and participatory methods. The course emphasizes methodological pluralism and the value of combining data-driven insights with community knowledge to co-create spatial strategies that are both scientifically grounded and socially responsive. Real-world applications and interactive discussions will equip learners with the skills to apply integrated methods in practice.

Course Content:

- Quantitative methods for integrated spatial planning I (Connectivity and Proximity Planning)
- Quantitative methods for integrated spatial planning II (Centrality and Accessibility Planning)
- Qualitative and Participatory methods for integrated spatial planning I
- Qualitative and Participatory methods for integrated spatial planning II
- The crucial mixed-methods approaches for climate-resilient integrated planning of the contemporary European city

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Mini Course 03

InPlaLabs Technical Toolkit - June 5th
[Led by UCY, Urban Calculator, NTUA, Commonspace]

This mini-course introduces participants to a curated set of tools and techniques that support climate, people-centric integrated spatial planning. Rather than offering deep technical training, the course provides a clear and structured overview of how different technologies can be employed to support spatial analysis, data-informed decision-making, and participatory processes in planning. It is designed to familiarize students and professionals with the capabilities and potentials of key tools—particularly GIS-based systems, open data platforms, and participatory planning technologies—without requiring prior technical expertise.

The session situates these tools within real-world planning workflows, illustrating how they can support tasks such as identifying spatial patterns, visualizing urban transformations, and enabling collaborative engagement. Through presentations, guided examples, and critical discussion, the course will equip participants with a functional understanding of the digital infrastructure behind integrated planning practices, while raising awareness of data-related challenges and opportunities.
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Course Content:

- GIS-based tools and data sources towards climate-resilient integrated planning
- Digital tools for analysing urban environment I: Place Syntax Tool, and Urban Calculator
- Digital tools for analysing urban environment II: Space Syntax Toolkit, and STAMP
- Tools (digital and physical) for participatory planning

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Mini Course 04

Analytical planning-support approaches for integrated urbanism-mobility planning - June 6ᵗʰ

[Led by NTUA - Yannis Paraskevopoulos, Stefanos Tsigdinos, Ioannis Chatziioannou]

This interactive course on integrated planning tools provides a comprehensive introduction to planning tools that are essential for analyzing, understanding, and changing cities from both urban and transport perspectives. In particular, the course focuses on leveraging open datasets, spatial analysis and scenario planning to formulate the foundation for effective spatial planning. Participants will be introduced to a variety of tools that facilitate a comprehensive approach, ensuring that transport and land use are seamlessly integrated. Moreover, the course will shed light on how to formulate integrated planning strategies through diverse scenarios that define different priorities, planning and design solutions.

The course's objective is to bridge the gap between integrated planning theoretical principles and practice, through demonstrating to participants key tools for employing cohesive integrated planning solutions and strategies.

Course content:

This interactive course offers a robust introduction of key planning tools and strategies, having been structured properly to transfer knowledge effectively, while inspiring participants. The main points of the course are the following:

- Revisiting key integrated planning principles and implications
- Lecture on the basic concepts and characteristics of planning tools and the importance of open datasets
- Brief lecture on strategic scenario planning to support participants envision creative solutions
- Demonstration of multiple planning tools and strategies with real-life examples
- Hands-on practice, where participants will be requested to formulate their scenarios and deal with a real case through an integrated planning perspective. This will help them to acquire significant practical experience

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Learning outcomes:

- Understand the options for pan-Eurpean open data which are relevant to integrated spatial planning tools
- Formulate strategic scenarios underpinned with integrated perspectives
- Creative thinking to planning solutions and practices
- Understand how theory could be "translated" into practice
- Teamwork and interaction with individuals coming from different disciplines and background
- Administer urban complexity

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Mini Course 05

Participatory Planning and Design Methods: History, theory, and practice - June 6th
[Led by Commonspace - Sofia Tsadari, Dionisia Koutsi]

During this engaging mini-course, theory on participatory planning meets practice through an engaging workshop simulation. In more detail, this session offers a dynamic exploration of the history, principles, and real-world applications of participatory processes. In addition, an exploration of participatory methods and tools is included, concluding with an interactive workshop simulation.

Course content:

This interactive course offers a coherent overview of the subject of participatory planning and design.
The main points of the course are:

- Discover the historical and political evolution of participatory planning.

- Learn the core principles, methodologies, and tools that drive inclusive urban design.

- Explore successful European case studies and best practices.

- Engage in a hands-on workshop simulation, where you will step into the role of an interdisciplinary planning team, collaboratively designing a participatory workshop on a specific topic related to a specific theme.

Learning outcomes:

- Creative thinking – Innovations: Inspired by new ideas or combine existing ones to develop innovative, novel solutions for urban issues

- Develop strategies to solve urban problems: Develop specific goals and plans to prioritize, organize and accomplish work

- Interact with different stakeholders: Engage with others face-to-face in a wide range

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Mini Course 06

Introduction to Space Syntax as an Evidence-based Design tool: Processing using QGIS Space Syntax Toolkit – June 10th

[Led by UCY - Mariam Shulqamy, Rafaela Christodoulou, Frixos Petrou, Nadia Charalambous]

Evidence-based design is an approach that involves using research and data to inform design decisions. It is a process of collecting and analyzing data to gain insights into user behavior, preferences, and needs, and using that information to guide design decisions. The goal of evidence-based design is to create designs that are effective, efficient, and user-friendly. Examples of evidence that can be used in evidence-based design include user feedback, analytics data, and user research.

Course content:

- Theoretical framework and space syntax terms
- Introduction to Space Syntax toolkit and what it measures
- Results: spatial analysis of urban systems using SSx Toolkit in QGIS
- Types of analysis
- Interpreting the results of the spatial analysis:
    1. Understand the impact of spatial layouts on various aspects
    2. Testing scenarios
    3. Correlations between spatial values and other forms of data

Learning outcomes:

- Preparing space syntax maps for analysis.

- Running space syntax analysis in QGIS.

- Visualising the results of the analysis

- Running catchment analysis in QGIS.

- Using the SSL toolkit in QGIS.

Mini Course 07

Integrating centrality and accessibility analysis into urban design at early stages – June 12th

[Led by Urban Calculator - Meta Berghauser Pont]

Designed to streamline planning procedures, Urban Calculator offers an intuitive interface accessible to planners, irrespective of their GIS proficiency. This tool empowers planners to conduct spatial analyses interactively, enabling informed decision-making supported by robust evidence.
In its implementation, Urban Calculator focuses on assessing street centrality, encompassing pedestrian and vehicular street networks. Additionally, it examines accessibility to various destinations, such as social services and bustling urban hubs.
The aim of the half day workshop is to introduce the tool to a wider audience, specifically practitioners.

The workshop objective is to demonstrate to participants how centrality and accessibility analyses can be used as a part of a design loop to quickly measure potential effects of their spatial interventions and to compare different design alternatives.

Course content:

- Presentation on basic concepts of spatial analysis, when it comes to street centrality and accessibility, with the focus on interpretation and understanding analysis results
- Summary of the research background behind selected spatial analyses, in connection to pedestrian movement in cities and socio-economic process
- Demonstration of the tool in connection to evidence-based urban design
- Learning-by-doing design exercise, where participants are asked to test the tool themselves in order to understand the relevance of spatial analysis for early stages of design process

Learning outcomes:

- Being able to interpret space syntax centrality and accessibility analysis in connection to applied urban design
- Integrating spatial analysis into evidence-based urban design