AR-401(k)

Studio MA1 (Huang)

Huang Jeffrey

Cursus	Sem.	Type
Architecture	MA1, MA3	Obl.
Mob. AR	H	Opt.

Language of teaching	English
Credits	12
Withdrawal	Unauthorized
Session	Winter
Semester	Fall
Exam	During the semester
Workload	360h
Weeks	14
Hours	**6 weekly**
Lecture	2 weekly
Project	4 weekly
Number of positions	

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

Remark

Inscription faite par la section

Summary

The Urban Wilds studio questions how architecture can participate in strengthening urban ecological networks through a critical revision of historically anthropocentric mapping and design methodologies.

Content

Overcoming the anthropocentric bias ingrained in the way we sense and view the city is an essential precondition for designing urban futures that care for all life forms. Given that cities are increasingly being represented and designed through data, how can designers employ open-source visualization tools to radically remap the built environment from a multispecies perspective? What does it mean to intelligently mediate human-non-human habitation through design? Urban Wilds, Envisioning the Multispecies City, explores these questions within the context of Greater Lausanne. The studio adopts a critical approach to multispecies design, beginning with the analysis of Lausanne's ecological network proposed to restore habitat for fauna under threat of extinction. Students will decode the ecological entanglements between these animals and the built environment (tensions and opportunities) along habitat corridors and will formulate clear design problems and sites accordingly. The semester will be devoted to developing a network of interventions that integrate wildlife and human habitat at the architectural scale.
The course will consist of a combination of lectures, discussions, site visits, and design exercises. Students will engage in independent research, group work, and design projects to deepen their understanding of urban ecology. Guest lectures by experts in the field will provide students with unique insights into real-world challenges and opportunities related to wildlife coexistence in urban settings.
The design process will emphasize research, analysis, and conceptual development through the use ofmapping and representational tools devised for the studio to enhance the presentation and communication of design proposals. This will incorporate innovative visual representation using animation, geodata, and on-site investigations combined through multi-layered drawings.
The results from this studio are planned to be shared with the city of Lausanne to provide insight into innovative ways to design for multispecies, as well as be part of a future exhibition on multispecies architecture & urban design.

Keywords

Data-driven design, circular cities, growth typology, artificial intelligence, flow analysis, morphogenesis.

Learning Prerequisites

Important concepts to start the course

We assert that it is precisely the new wave of digital tools (machine learning, scripting, parametric modeling, and associative geometry) that enable the type of approach which is forwarded by the studio's agenda. The ability to organize and leverage information permits the architect to approach projects of new scales and complexity. The logical management of variation empowers the architect to avoid repetitive solutions and to maintain an equally high level of conceptual rigor across the entire project, to engage with that complexity rather than reducing it. An additional aspect is the ability to quickly and accurately produce quantitative information during the design process which can be used to strengthen the argument or inform the decision-making process.

Learning Outcomes

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

- Critique a specific project brief and a specific context and respond with a meaningful data-driven design concept.
- Translate a data-driven design concept into meaningful architectural and/or urban propositions at appropriate scales and levels of granularity.
- Produce coherent architectural representations and models at sufficient levels of detail.
- Formulate the morphogenetic narrative and create convincing arguments for the design propositions.
- Develop convincing final diagrams, drawings, renderings, simulations, physical and digital models.

Transversal skills

- Collect data.
- Design and present a poster.
- Make an oral presentation.
- Demonstrate the capacity for critical thinking

Teaching methods

Presentations, Mapping exercises, Hands-on design activities, Design reviews, Group projects.

Expected student activities

Group discussion, Case studies, Mapping, Sketching, Designing, Design Reviews, Pin-Up, Desk Crits.

Assessment methods

Grading will be based upon the quality of the projects in the preliminary stages, intermediary reviews, and in the final review. Projects will be assessed based on: (1) their conceptual strength and innovation, (2) the coherence and resolution of their architectural translation, (3) their representative clarity and expressive power, and (4) the persuasiveness of their communication, both orally, and through the physical and digital artifacts.

Supervision

Office hours	Yes
Assistants	Yes

Resources

Websites

- http://ldm.epfl.ch