# EMERGENT URBAN NATURES: Systems Studio

FALL 2020 - LA 539 - Studio Syllabus



Wei Tianxi, Biophilic Urbanism Studio, 2020

"There are no separate systems.

The world is a continuum.

## Where to draw a boundary around a system depends on the purpose of the discussion."

- Donella H. Meadows, Thinking in Systems: A Primer

## SCHEDULE:

Monday, Wednesday, Friday from 1:00 pm- 4:50 pm, Remote (Zoom link to be provided on CANVAS)

## **INSTRUCTOR:**

Ignacio Lopez Buson - ilopezbu@uoregon.edu

## **STUDIO DESCRIPTION:**

This studio will focus on the study of symbiotic relationships between environmental and social phenomena in order to determine optimal locations for the potential design and development of green infrastructure within an urban setting.

Referring to cities, Nicholas de Monchaux stated in his book Local Code that "it is impossible to imagine physical resilience without social, cultural and economic resilience as well." This also holds for the presence of nature in the urban realm. Unless landscape architects understand how social, cultural, and economic systems affect and relate to environmental systems, their role in shaping contemporary cities will risk becoming merely cosmetic.

Designing with systems is, by definition, both a multi-disciplinary and a multi-scalar challenge, and it is important to know where to draw a boundary if specific goals are to be achieved. As far as our physical environment's development is concerned, landscape architecture critically relates to territorial, urban, spatial, and material scales. For this studio's purpose, we will focus on urban and spatial systems in the city of Eugene as a way of answering why and where new bodies of nature could exist. To help with the analysis of urban systems, students will be introduced to GIS theory and technology. The value of urban green infrastructure is beyond question today, and it will continue to grow exponentially in a rapidly urbanizing world. However, green infrastructure can take many shapes. Its impact varies greatly depending on its scale, implementation, and purpose: water management, heat-island effect, mental health, local ecosystems, urban comfort, food production, air pollution...

Cities in the Pacific North West are privileged regarding the presence of green spaces, both within their boundaries and outside. However, such a green appearance can sometimes be misleading, especially in small cities. Are all urban green spaces equally accessible? Are their ecosystems healthy? Do all of them perform at the same level in terms of stormwater management? Despite all Eugene's active environmental policies, it is essential to critically evaluate their spatial outcome separately and holistically and understand their relevance to the city's future growth.

To center the focus of this course, we will be analyzing natural and urban phenomena along Amazon Creek. Amazon Creek's watershed, with a total area of 10.000 acres, provides enough diversity of urban land (urban, suburban, rural, industrial) for the students to face the challenge of analyzing, understanding, and designing for complex systems.

It will be the students' task to evaluate social and environmental variables at the city scale (along the creek); find optimal spaces for green infrastructure, plan for their systemic implementation; determine their program and purpose based on their location; and finally develop design rules that would guarantee the ecological integration and sustainable growth of these new emergent urban natures.

#### PREREQUISITE:

This studio is for Landscape Architecture MLA students only.

#### **CURRICULAR CONTEXT:**

This class is required for first-year MLA students.

#### **GRADING:**

Consistent with all Department of Landscape Architecture studios, this studio is graded Pass/No Pass with formative and summative feedback.