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ECOLOGICAL INFRASTRUCTURE

Columbia University in the City of New York

Graduate School of Architecture Planning and Preservation / GSAPP A6832

FALL 2017 Tuesdays 11am-1pm UD Seminar II

Avery Hall, Rm 115

Note: Some books are on our seminar shelf #409 or on reserve at Avery Library

Instructors:

Kate Orff RLA ko2111@columbia.edu

With Jason Loiselle PE, Sherwood Engineers, and Morana Stipisic, UN Hill Policy Expert

Office Hours Avery 411: Tuesdays 10-11am by appt.

COURSE DESCRIPTION

This course explores urban design practice through the lens of ecology, infrastructure and design. Readings, site visits and lectures that conceptualize the contemporary city as a living system are interspersed with analyses of case studies of catalytic urban ecological design projects and emergent forms of design practice that synthesize infrastructure with public space. Our aim is to gain new perspectives on how to better transform knowledge into world-changing urban design practice that is informed by the best ecosystem thinking that defines interventions at multiple scales with social and environmental purpose. The course is divided into roughly two parts, RESEARCH and DESIGN. During the RESEARCH phase the instructors and invited speakers will outline critical issues and methods in urban ecological and green infrastructure design and management. During the second part students will present Case Studies of Ecological Infrastructural projects and, working with the instructors, apply them in a DESIGN SKETCH study in designated sites within the Hudson Valley. We will use the New York bioregion as a primary reference point and lab for learning.

Objectives

This seminar intends to marshal thinking in infrastructure, landscape, design and policy towards developing a toolkit of methods and strategies for change. Through faculty guidance and relevant readings, this seminar will facilitate informed discussion and

exchange on dynamic, systems thinking, and imagine cities of the future as a living field of infrastructure and a hybrid of cultural and natural systems. This broader approach will be coupled with case studies and examples of systems driven design interventions. Faced with massive challenges of climate change, social inequity and privatization, we tend towards inaction, bogged down by contrasting perceptions, overwhelmed by the scope and interrelated extents of the most pressing issues of our time. This seminar aims to hone tools for research, analysis, decision making, and participation and reveal avenues of transformative, ecology-driven practice. We will study the problematic of SCALE and study how to work simultaneously at multiple scales as an approach to ecological infrastructure. We speculate on forms of next century infrastructure complex and adaptive, and as jointly physical and social.

Format

The class includes lectures by the instructors, invited speakers, library research, field trips, student-led presentations on case studies and readings, and discussions of timely issues. There will be assigned readings for each week. Students are expected to be prepared to discuss these readings and engage in a lively discussion during course time. Students will choose and sample project where they will be asked to analyze, explore & explain systems and scales of water infrastructure in the urban landscape and speculate on future directions and opportunities.