URBANISM AND LANDSCAPE

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In this study area, a broad range of courses explore the aesthetic, economic, social, and political influences on the spatial form of urban places and the urban, suburban, and rural landscapes that form our designed environment.

For the M.Arch. I program, required courses in this study area include an introduction to urban design (ARCH 4011) and the satisfactory completion of one of the elective seminar courses from this study area.

REQUIRED COURSE

ARCH 4011a, Introduction to Urban Design  Staff
(Required of first-year M.Arch. I students.) This course is an introduction to the history, analysis, and design of the urban landscape presented with weekly lectures and discussion sections. Emphasis is placed on understanding the principles, processes, and contemporary theories of urban design, and the relations between individual buildings, groups of buildings, and the larger physical and cultural contexts in which they are created and with which they interact. Case studies are drawn from cities around the world and throughout history and focus on the role of public space and public art in shaping the form, use, and identity of cities and regions.

ELECTIVE COURSES

[ ARCH 4209, Territorial Cities of Pre-Colonial America ]

The pre-Columbian history of the Americas has undergone profound revisions in the last three decades. Several authors have been attempting to compile and synthesize discrete, yet radical, contributions stemming from the fields of archaeology, anthropology, ethnography, ethnoarchaeology, biogeography, (environmental/ecological) history, virology, epidemiology, soil science, agrarian studies, political ecology, critical regional studies, and other fields. Emerging visions of the pre-Colonial Western Hemisphere that diverge from hegemonic narratives offer important lessons on urban ecology that can contribute to reimagine the city of the future, as designers seek for principles that may guide contemporary urban (design) culture towards reestablishing a cyclical and renewable relationship with the environment. In this course, we closely examine a series of pre-Columbian agro-ecological urban constellations at the regional, nodal, and architectural scales in North, Central, and South America. We discuss notions such as rurbanism, urbanism beyond the human, and bioeconomics as a productive structure based on polycultures (away from the introduced model of monoculture plantations). Reconsidering urbanism from these perspectives requires a survey of diverse ontologies of the urban and cityness. Furthermore, we approach this research seminar as an editorial laboratory. Students read and comment on unpublished chapters of a book on the contemporary significance of Native American systems of planning as well as their architectural, territorial, regional, and environmental design contributions. Furthermore, initially in pairs, and later individually, students focus on an in-depth study of two pre-Columbian cities and the regions they are part of. This is a reading- and drawing-intensive course. The best visualizations of the pre-Columbian urbanisms that we examine shall be included
in the book for publication. Finally, there is an important field research component to this endeavor. If feasible, we travel to the central coasts of Peru, where we will be able to experience Lima’s huaca system, Norte Chico (the oldest urban system in the Americas), and Chan Chan firsthand. An alternative field trip within the U.S. focuses on mound building in North America, specifically, as it manifests in Cahokia.

3 Course cr

[ ARCH 4213, The City and Carbon Modernity ]

Humanity has moved through three energy paradigms, each of which has produced different built environments and social organizations. At each transition—from nomadic to agricultural and from agricultural to industrial—the productive capacity of human society was transformed, restructuring the existing social order and engendering a corresponding spatial and architectural paradigm. This course studies our current energy paradigm—carbon-intensive fossil fuels—as a driver of urban and architectural form. Rather than studying the technical aspects of energy, however, the course focuses on the social and spatial organizations that arise and are dependent on dense and abundant energy, identifying these as carbon form. Despite increasing awareness of environmental issues, architects continue to replicate carbon form, preventing a transition out of our current energy paradigm. Just as the modern movement proposed a new organization for the city based on the realities of industry, this moment demands new organizations that can respond to an urban system that the climate crisis has shown to be obsolete. Unlike in modernism, however, the energy transition to which we must respond has not yet occurred. And yet, architecture must still declare the death of carbon modernity and seek the means to overcome its material and cultural legacy. In this light, the course interrogates the foundations of contemporary human organization in order to lay new foundations for the oncoming transitions in energy and social form. Students study the theoretical roots of carbon form in the works of Le Corbusier, Hilberseimer, Koolhaas, and others, and speculate on new human settlement patterns by examining the relationship between the energy grid and the urban grid, i.e., between energy and urban form. Assignments include readings, reading responses, as well as drawings at the midterm and final. Limited enrollment. 3 Course cr

[ ARCH 4216, Globalization Space ]

This lecture course researches global infrastructure space as a medium of polity. More than networks of pipes and wires under the ground, this infrastructure space is a visible, enveloping urban medium filled with repeatable spatial formulas and spatial products. Lectures visit the networks of trade, communication, tourism, labor, air, rail, highway, oil, hydrology, finance, standard making, and activism. Case studies travel around the world to, for instance, free trade zones in Dubai, IT campuses in South Asia, high-speed rail in Saudi Arabia, cable/satellite networks in Africa, highways in India, a resort in the DPRK, golf courses in China, ISO standards, and automated ports. More than a survey of physical networks and shared protocols, the course also repositions spatial variables in global governance. Infrastructure space may constitute a de facto parliament of decision-making—an intensely spatial extrastatecraft that often spins around irrational desires. Each week, readings, with both evidence and discursive commentary, accompany two lectures and a discussion section. A short midterm paper establishes each student’s research question for the term. A final paper completes the requirements of the course. 3 Course cr
ARCH 4219a, Urban Research and Representation  Elihu Rubin
Every day, architects and urban designers make proposals that shape the public and private realms of the city. This seminar sets out to contextualize the social and political ramifications of these interventions; to intensify the designer’s tool kit of deep, sociohistorical research of site and place; and to cultivate a reflexive practice that considers seriously the social responsibilities of both the architect and the urban researcher. In the classroom, and in the field, this seminar introduces a diverse set of methods for studying the urban environment, from the archival and visual to the observational and ethnographic. Limited enrollment. 3 Course cr

ARCH 4220, Port Cities
Historically, port cities around the world have played a crucial role as the nodes of connection and exchange for both local and vast global networks of production, trade, culture, and power. Since the industrial revolution, rapid development of new technologies of transport and communication has challenged the planners and developers of these cities to both adapt and innovate, creating new and hybrid spatial typologies and transforming vast areas of urbanized waterfront and rural hinterland. And now, climate change and its impact on coastal and riparian geographies add an additional layer of complexity and challenge. This seminar considers the changing and persistent patterns, functions, and images of port cities, particularly in the context of their regional and global networks, researching, analyzing, and mapping the architectural and spatial manifestations of those systems. Limited enrollment. 3 Course cr

ARCH 4221, Introduction to Commercial Real Estate
This seminar introduces commercial real estate. It does not require any prior knowledge of finance, accounting, or taxation policies. Commercial real estate is income-producing property that is built, financed, and sold for investment. This course examines five basic types of commercial real estate (office, industrial, retail, multifamily, and hotel) from the standpoints of the developer, lender, and investor. Principles of location, financing, timing of market cycles, leasing, ownership structure, and external factors are explored. Students are expected to evaluate assets, partnership interests, and other positions such as debtor interests through valuation measurement, which requires the use of some simple mathematics. An HP-12C calculator or laptop computer with Excel for use in class is required. Students also examine commercial deeds, leases, partnership agreements, and other legal documents. Each student selects a building or development site within New Haven County for a due diligence analysis of zoning, real estate taxes, deeds, liens, market supply and demand, projected income and expenses, and availability of debt. In addition to out-of-class assignments, a brief exercise is included during each class. Limited enrollment. 3 Course cr

ARCH 4222a, History of Western European Landscape Architecture  Warren Fuermann
This course presents an introductory survey of the history of gardens and the interrelationship of architecture and landscape architecture in Western Europe from antiquity to 1700, focusing primarily on Italy. The course examines chronologically the evolution of several key elements in landscape design: architectural and garden typologies; the boundaries between inside and outside; issues of topography and geography; various uses of water; organization of plant materials; and matters of garden decoration, including sculptural tropes. Specific gardens or representations of
landscape in each of the four periods under discussion—Ancient Roman, medieval, early and late Renaissance, and Baroque—are examined and situated within their own cultural context. Throughout the seminar, comparisons of historical material with contemporary landscape design are emphasized. Limited enrollment. 3 Course cr

[ ARCH 4223, Introduction to British Landscape and Architectural History: 1500 to 1900 ]
This seminar examines chronologically the history of landscape architecture and country-house architecture in Britain from 1500 to 1900. Topics of discussion include the history of the castle in British architecture and landscape architecture; Italian and French influences on the seventeenth-century British garden; military landscaping; the Palladian country house and British agricultural landscape; Capability Brown's landscape parks; theories of the picturesque and of the landscape sublime; Romanticism and the psychology of nature; the creation of the public park system; arts and crafts landscape design; and the beginnings of landscape modernism. Comparisons of historical material with contemporary landscape design, where appropriate, are made throughout the term. The collection of the Yale Center for British Art is used for primary visual material, and a trip to England over spring break, partially funded by the School, allows students to visit firsthand the landscape parks studied in this seminar. Limited enrollment. 3 Course cr

[ ARCH 4224, Out of Date: Expired Patents and Unrealized Histories ]
What if the U.S. Army Corps of Engineers had developed "soft infrastructures" and "living systems" for dealing with the changing flows of the Mississippi in and around New Orleans? What if Henry Ford had used soy protein for automotive parts and synthetic meats in the 1940s? Or what if South Asian nation states had adopted the Ganges Water Machine model in the 1970s to address critical water shortages in urban areas? What do these three seemingly disparate examples all have in common? Each is based on a patent or series of patents that were never adopted for one reason or another. These are just a few of the questions that animate this course. Historians ask the why and the how, but they are rarely trained to visualize what a city, a meal, or a landscape might have looked like had a particular technology or living system been adopted. Rather than shy away from such counterfactuals, we explore and seek to visualize these historical what-ifs by taking a comparative, global perspective on the history of patents as visual and textual artifacts. No prior knowledge of the history of science and technology or architecture is required. Limited enrollment. 3 Course cr

[ ARCH 4233, Ghost Town ]
This is an advanced, interdisciplinary seminar in architectural history, urban planning, vernacular building, the politics of preservation, collective memory, tourism, and, ultimately, urban sustainability. Looking at a broad spectrum of failed or almost-failed cities in the United States and across the globe, this seminar uses the ghost town and its rhythms of development and disinvestment to establish a conceptual framework for contemporary urban patterns and processes. Students develop skills in urban and architectural research methods, visual and formal analysis, effective writing, and critical reasoning. Limited enrollment. 3 Course cr

[ ARCH 4245, The City before and after the Tubewell ]
What do such disparate cities as New Delhi, Jakarta, Mexico City, and Phoenix all have in common? In short, each relies on a fantastic technology that few people
know anything about but that has transformed the shape and life of cities and their hinterlands: the tubewell. Water pump technologies for drawing up groundwater, tubewells are used in places where municipal water supply is nonexistent, unreliable, or often polluted. A minor technology with a global reach, the tubewell is to the city what the elevator was to the skyscraper in the booming American metropolis of the early twentieth century. In this course we look at how tubewells and other decentralized infrastructures have radically transformed urban and agricultural spaces across the globe from the nineteenth century to the present. We watch how people exult before these infrastructures; we witness how governments and philanthropies as well as farmers and townspeople appropriate them for radically different ends. And we consider why. The course proceeds chronologically. While it is global in scope, we focus most of our attention on South and Southeast Asia. In particular, we focus on the evolution of pump technologies and how they have changed life in cities and their hinterlands. If as historian Swati Chattopadhyay argues, “Urban forms have a direct correlation with infrastructural norms,” then what can the shift to decentralized water infrastructure tell us about the form and life of cities? Along with weekly readings, students watch a number of films where decentralized and centralized systems play an important, if occasionally clandestine, role in shaping spaces and experiences in cities and farms. 3 Course cr

[ ARCH 4246, Introduction to Urban Studies ]
An introduction to key topics, research methods, and practices in urban studies, an interdisciplinary field of inquiry and action rooted in the experience of cities. As physical artifacts, the advent of large cities has reflected rapid industrialization and advanced capitalism. They are inseparable from the organization of economic life, the flourishing of cultures, and the formation of identities. They are also places where power is concentrated and inequalities are (re)produced. Debates around equity are filtered through urban environments, where struggles over jobs, housing, education, mobility, public health, and public safety are front and center. The course is organized as a colloquium with numerous guests. Accessible entirely online, there will also be live, in-person events, with social distancing and face masks/shields, available to students in New Haven. Limited enrollment. 3 Course cr

ARCH 4247a, Difference and the City Justin Moore
Four hundred and odd years after colonialism and racial capitalism brought twenty and odd people from Africa to the dispossessed indigenous land that would become the United States, the structures and systems that generate inequality and white supremacy persist. Our cities and their socioeconomic and built environments continue to exemplify difference. From housing and health to mobility and monuments, cities small and large, north and south, continue to demonstrate intractable disparities. The disparate impacts made apparent by the COVID-19 pandemic and the reinvigorated and global Black Lives Matter movement demanding change are remarkable. Change, of course, is another essential indicator of difference in urban environments, exemplified by the phenomena of disinvestment or gentrification. This course explores how issues like climate change and growing income inequality intersect with politics, culture, gender equality, immigration and migration, technology, and other considerations and forms of disruption. 3 Course cr
[ ARCH 4248, Curating Cities: The Power of Zoning ]
Zoning tells us what can be built where, and therefore, what we can do where. Since zoning emerged a century ago, it has become the most significant regulatory power of local government. But it is also the most underappreciated: even architects don’t always understand how zoning—hidden in plain sight—governs our places, and, by extension, our health, wealth, and happiness. Indeed, very few architects are actually engaged in shaping and influencing the way these codes operate. Instead, planners, lawyers, and volunteer community members take the lead drafting role, which sometimes results in zoning codes that have unfortunate, perhaps unintended consequences on the way people experience place. This seminar explores several key questions. How do the origins of zoning—rooted in a segregating impulse—shape land use patterns today? How and why is it that our laws lock in outdated, homogeneous, and uninspired places and hinder modern thinking about design? How has zoning simultaneously managed to undermine social justice, cultural heritage, and our ability to respond to climate change? Whose agency is constrained or enabled by the political processes of zoning itself? And what must we as architects do to change the status quo? The goal of this interdisciplinary course is to explore the tension between law and design, by exploring law’s influence on the creative enterprise. 3 Course cr

[ ARCH 4249, Urban Landscape and Geographies of Justice ]
What explains the socioeconomic and ecological patterns in a city? This course introduces students to ideas in the history and theory of urban planning; the production of urban environments; and concepts in environmental justice to understand the challenges that face contemporary cities. Using New Haven as a case study, the course explores the ways in which structural inequalities are inscribed and reproduced in urban landscapes. The course builds up a sequence of historical-geographic layers and conceptual frameworks with the goal of unpacking the legacies of planning and urban development decision-making on contemporary social and environmental conditions. We are in a moment of crisis, and there is a need for engaged public scholarship. We require theory-informed practices to address the real challenges we face in our cities. Therefore, an integral part of this course is student projects that serve the twin purposes of creating academic scholarship and making this knowledge available for the public and communities. Limited enrollment. 3 Course cr

[ ARCH 4250, A Critical History of Domestication: Environments of Subsistence ]
The premise of this joint seminar is to interrogate the human settlement through a critical genealogy of domestication and its corresponding architectures and ecologies. Our main hypothesis is that domestication, the process by which our industrial, capitalist civilization has been produced, works on two registers: the house and the environment. From prehistory to contemporary times, the practice of environmental disturbance has been fundamental to human existence, yet within practices of ecological intensification, the rise of the sedentary family household marks an act of enclosure that fundamentally disturbed the pooling of resources that was characteristic of premodern settlements. In other words, the logic of the house as primary enclosure initiated a transformation of the whole environment, with the domestication of crops and animals becoming an irreversible ecological turning point and an origin point for the patriarchal premises of both capitalism and colonialism. By studying the evolution of the household alongside changing practices of subsistence, this seminar locates the house and the environment as two fundamental sites of transformation. 3 Course cr
[ ARCH 4251, Architectures of the Collective ]
Architects are generally trained to provide design services to the private sector and/or to the public sector through bids and competitions. Some, nevertheless, chose a different route of action and work with communes, communities, cooperatives, and neighborhoods in the co-creation and co-production of collective projects at different scales. Academia plays a crucial role in such approaches as a key partner knitting networks of collaboration that involve a diverse mix of community members, private and public stakeholders, donors, and others. In this research seminar, working in groups, students engage real, feasible, community-based projects (architectural, infrastructural, environmental and/or cultural) located in Ecuadorian Amazonia. The seminar follows a tripartite structure. The first third of the semester, students conceptually develop an existing project proposal with their local counterparts. In the second third, following the procedure used by documentary film makers for crowdsourcing, students develop a pitch for their projects using video, text, and images. In the final third of the semester, students consolidate their pitch, after reviewing it with their partners and external critics. To conclude, the class sets up a digital platform that can be easily shared in social media for crowdfunding purposes. From a methodological standpoint, the seminar pivots around two axes: one focuses on a theoretical and ethical inquiry, based on a series of readings, guest lectures, and discussions; the other one is pragmatic and structured around a series of stakeholder workshops and reviews. Architects who have ample experience working in community projects are invited to share their experiences with us, as well as documentary film makers and other experts from a diverse array of fields (finance, NGOs, etc.).

ARCH 4252a, The Architecture of the Food System  Staff
This course explores the entangled production of food and our built environment as tangible, material manifestations of our societal and cultural values and as powerful and urgent drivers of rapidly accelerating climate change. The seminar surveys the spaces and places of the American food system throughout history and today, including its architecture and infrastructure, its inputs and outputs, its embodied energy, and its economic and political dynamics. Students read and analyze texts drawn from a number of disciplines including ecology, botany, economics, industrial engineering, and history, and synthesize material that is new to the architectural discourse. Course work results in a qualitative and quantitative survey of the architecture of our national food system and concludes with a focus on projective and future-facing concepts for radically repurposing food infrastructure. In doing so, students in the course set parameters for architecture as a means of regional food system transformation.

ARCH 4291, The Urban Atlas  Staff
This program, based in the collaboration between the Yale School of Architecture and the Architecture Department at Chalmers University of Technology in Gothenburg, Sweden, introduces Yale students to the rigorous study of urban form and space and their social uses in relation to the context of historic and contemporary architecture and urbanism in the north of Europe. During an intensive monthlong residency in Gothenburg, Yale students learn and practice methods and techniques of urban analysis, including graphic and modeling approaches to understanding the interface between building form and typology and larger patterns of urban use and movement. Students live, travel, and work together as an integrated research team, contributing
to a new Urban Atlas of North European cities. All program travel plans will be made in accordance with University and national travel policies. Limited enrollment.

3 Course cr

[ ARCH 4299, Independent Course Work ]
Program to be determined with a faculty adviser of the student’s choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student’s eligibility under the rules. (See the School’s Academic Rules and Regulations. Available for credit to fulfill the M.Arch. I Urbanism and Landscape elective requirement with the approval of the study area coordinators.)

3 Course cr

Electives outside of School of Architecture

Courses offered elsewhere in the University may be taken for credit with permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits. Students must have the permission of the Urbanism and Landscape Study Area coordinators in order for a course to count as an urbanism elective.