

Architecture Elective Schedule

Updated 8/27/2021

Fall 2021

ARC	SEC	TITLE	CH	DAY	TIME	ROOM	PROFESSOR	NOTES	PE HIST
331	1	Art and Architecture of India	3	TTH	3:30-4:50	207 HL	Kapoor	Crosslisted with HOA 396	HIST
334/634	1	The Architecture of Revolutions	3	MW	2:15-3:35pm	214 SLOC	Bedard	Crosslisted with HOA 454	HIST
435/735	1	Islamic Architecture	3	MW	3:45-5:05pm	104 Sloc	Henderson	Crosslisted with HOA 389	HIST
436/736	1	Modern Architecture	3	MW	12:45-2:05	104 Sloc	Henderson	Crosslisted with HOA 475	HIST
500	2	Doing Imaging Things	3	MW	3:45-5:05pm	402 Sloc	Linder		PE
500	3	Architecture as Commons	3	Th	9:30-12:20p	Sloc 401	Sho		PE
500	4	Excavating the University Campus	3	MW	12:45-2:05pm	Sloc 404	L. Katrib		PE
500	5	OPTIMIZATION: FORM, ALGORITHM, ANALYSIS AND DESIGN	3	MW	2:15-3:45pm	Sloc 101	Chun		PE/Tech
500	600	Chinoiserie	3	MW	5:15-6:35pm	ARR	Bedard		PE/HG
500	601	Making the Public Sphere	3	MW	8:15-9:35pm	Hybrid (sloc 307)	Borrman		PE/HG
555	1	Intro to BIM	3	T	6:30-9:20pm	014 Sloc	Wing		PE/Tech
558	1	Advanced BIM	3	W	5:15-8:05pm	014 Sloc	Wing		PE/Tech
566	1	Introduction to Preservation	3	MW	8:00-9:20	101 Sloc	Bartlett	Crosslisted with HOA 577	PE
575	1	Urban Housing: Building Block Street	3	W	12:45-3:35pm	307 Sloc	Kamell		PE
500	701	Design Justice	3	T	5:30-8:30pm	FisherCenter	Ebo		PE
500	702	Cities At Risk	3	W	10am-1pm	FisherCenter	Chester & Sordi		PE
553	701	NYC Planning	3	T	3:00-6:00pm	FisherCenter	Schumaker		PE
568	701	Real Estate Design and Development	3	T	10a-1:00p	FisherCenter	Amsler		PE
582	701	NYC Internship Experience	3	WTh Th	8a-6p 6:30-9:00pm	Onsite FisherCenter	Co Co	Students Must Apply	PE

OPTIMIZATION: FORM, ALGORITHM, ANALYSIS AND DESIGN

ARC 500 | Professional Elective

Instructor: Junho Chun, PhD

Contact: jchun04@syr.edu | 306A Slocum

Credit hours: 3

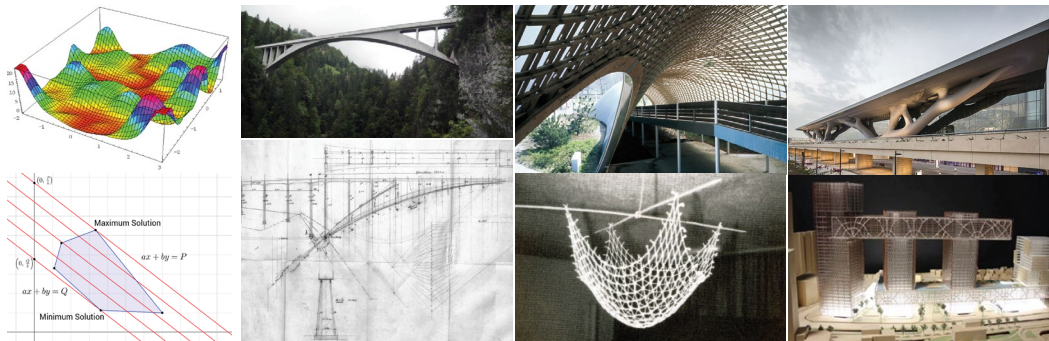
Meeting time: M/W 2:15 PM – 3:35 PM

Prerequisites: ARC311 or ARC612

This is an introductory course to explore optimization algorithms and form-finding methods for structural and architectural design. The course integrates a series of design problems with practical conditions. An emphasis on the relationship between shape and forces is reflected through design that connects architecture and engineering. This course will delve into the balance between architecture and engineering: aesthetics and functions, redundancy and efficiency, shape, and stability through mathematical, technical, and computational approaches. The course material will be delivered through discussion and presentation of optimized forms identified through the algorithmic process by hands or computational platform.

The course focuses on the theory, implementation, and utilization of optimization in conjunction with analysis tools. This class aims to acquaint the student with state-of-the-art optimization techniques, numerical approaches, form-finding methods, and their application in architecture and engineering. Topics to explore include the introduction of traditional optimization theories, mathematical modeling, topology optimization method, graphic statics, genetic algorithm, and its application to material and structural systems. Students in this class should have an interest in optimization, but do not need to have expert skills in any software or programming language. We will learn fundamental mathematics and physics needed to understand the concept of optimization, but it will not be the main focus of the course.

The class will meet twice a week and will consist of lectures, student presentations (project mid-review), and in-class activities. Lectures will focus on extensive topics of optimization methods, algorithms, design applications exploring practical conditions of architecture and structure. Earlier in the semester, optimization problems at various scales across diverse fields such as architecture, structural and mechanical engineering, and medicines are discussed in lectures to learn problem-solving knowledge, techniques, and tools. There will be a particular focus on topology optimization and graphic statics, genetic algorithm, and students will explore architectural and structural form and investigate their integration in design through term projects.



Making the Public Sphere ARC.500.M601 Fall 2021



Thomas Hirschhorn, *Bataille Monument*, Documenta 11, Kassel, Germany, 2002.

Mon/Wed 8:15pm-9:35pm, Hybrid Course (students may participate in-person or online)
Assistant Teaching Professor of Architecture History and Theory Kristina Borrman, email:
kmborrma@syr.edu. Office hours online and in-person by appointment.

COURSE DESCRIPTION:

What is the public sphere? Is it a physical place, an abstract concept, or an unattainable ideal? Architects have historically had trouble distinguishing the “public sphere” from “public place,” using the terms interchangeably to argue for a more democratic distribution of urban space. In this seminar, we will treat the “public sphere” and “public space” as separate but overlapping terms, paying careful attention to the ways that democratic ideas are mobilized in physical space.

The German philosopher Jürgen Habermas first popularized the term “public sphere” in his classic text, *The Structural Transformation of the Public Sphere* (1962), in which he described the historical conditions that gave rise to the formation of public opinion in early modern Europe. In this class, we will investigate the *Structural Transformation* as the catalyst for political debates, artworks, and architecture that critique Habermas’s classic description of the public sphere, paying special attention to the role of diversity, social equity, and globalization in public-sphere formation. Through the power of discourse and making, students will define the public sphere for themselves.

Excavating the University Campus: Tracing Material and Immaterial Debris

Course
Instructor
Time
Location

ARC 500, SEC M004, Fall 2021
Leen Katrib | Lkkatrib@syr.edu
Mon / Wed 12:45 – 2:05 PM
Room 404, Slocum Hall



The 1952 demolition of the Mecca Flats (left) to make way for the expansion of IIT's Main Campus (right).

“Silences enter the process of historical production at four crucial moments: the moment of fact creation (the making of sources); the moment of fact assembly (the making of archives); the moment of fact retrieval (the making of narratives); and the moment of retrospective significance (the making of history in the final instance).”

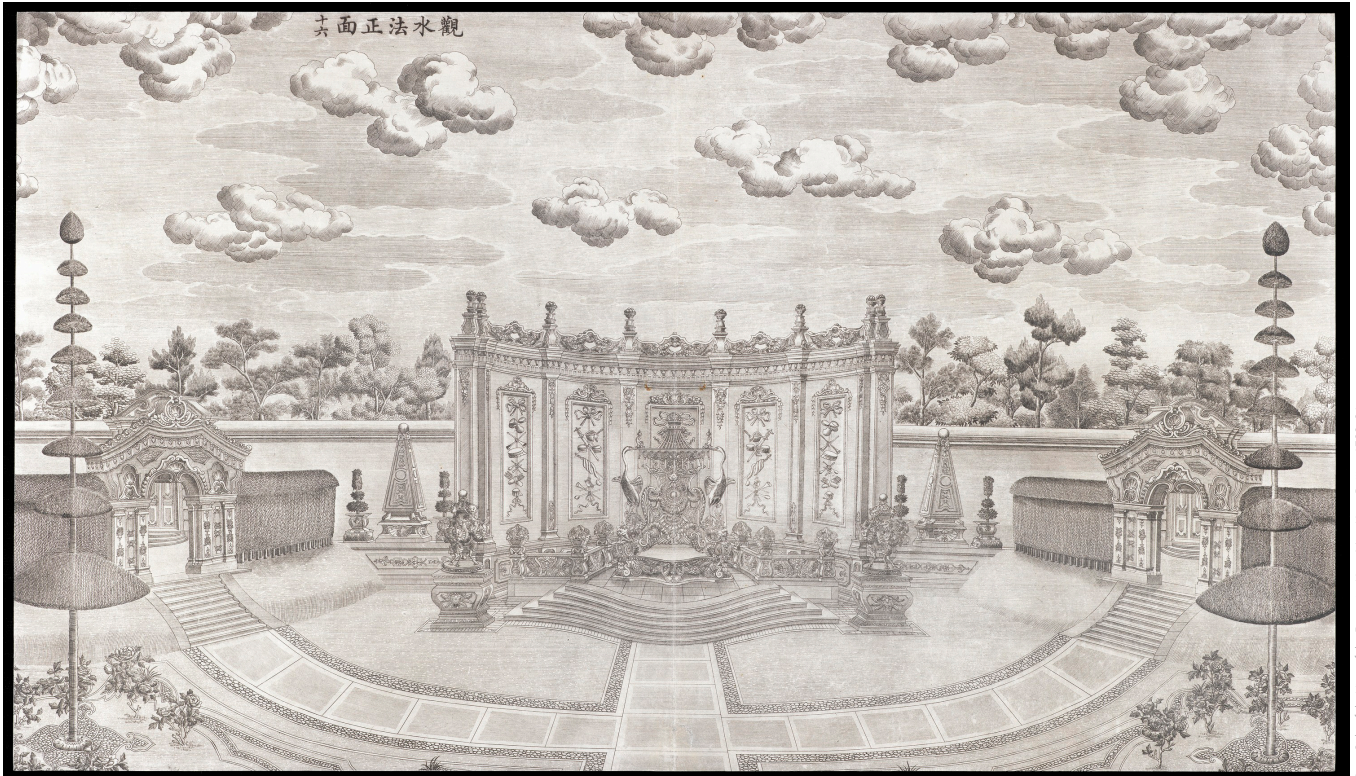
Michel-Rolph Trouillot, *Silencing the Past: Power and the Production of History* (1995)

Much of architectural scholarship and practice has focused on architecture-as-construct—we analyze its history; its form; its transformation of context; its theoretical parameters; its dissemination; its exhibition. And yet, little has been theorized about the destruction of architecture and its material and immaterial afterlife as debris. Debris is intertwined with the forces that produce it. Countless case studies in the history of archaeological excavations reveal a pattern wherein a values-based system is exercised to determine a hierarchy of what is worth investigating, restoring, preserving, and publishing at the expense of alternative histories—and in doing so, evicting subaltern populations that coexisted with the context, reducing the materiality of alternative histories to debris, eradicating traces of that debris, and subsequently creating strategic gaps in imperial archives.

But beyond the material detritus that is discarded, debris exists—and lingers—in more subtle ways. As anthropologist Ann Stoler argues, terms such as “urban decay,” “environmental degradation,” or “racialized unemployment” are forms of lingering debris that humanity is left to endure long after the forces that produced it have dissipated. As such, debris is both material and immaterial, and the terminologies seek to sever the relationship between debris and the imperial forces that produced it.

In the United States, the implications of architecture’s destruction and the mis/management of its afterlife are all but invisible in the typology of the university campus. Countless campus expansions (from 1950 – present) were justified under the guise of “slum clearance,” and came at the expense of demolishing and evicting vulnerable populations, leaving little to no material trace of their histories or a comprehensive record of this pattern of destruction. As such, debris and destruction serve as productive entry points into what histories were silenced and inequalities deepened.

Through precedents of university campus expansions, students will spend the first half of the semester conducting weekly representation exercises to excavate and trace both material and immaterial debris. Students are encouraged to engage a variety of media (drawing, 3D modeling, physical modeling, filming, etc), collect visual/auditory/textual accounts, consult relevant preservation societies for archival research, and interview former inhabitants or their descendants to record oral histories (where applicable). Though primarily a production-oriented seminar, the weekly exercises during the first half of the semester will be supplemented with readings by anthropologists, historical archaeologists, and historians who have written on the social and material implications of debris and destruction. During the second half of the semester, students will consolidate their traces to storyboard immersive and interactive audiovisual narratives that will be part of the Harry der Boghosian Fellowship exhibition in Spring 2022.



Front Side of the View of the Fountain. Yuan Ming Yuan, Beijing, 1783-86

Chinoiserie

Exoticism and the
Imagining of the Self and
the Other in Architectural
Culture

Professor Bedard
ARC 500 M600 Monday
& Wednesday
5:15pm-6:35pm
Slocum 302

Although the term “chinoiserie” has historically referred to the particular mixture of “oriental” and western styles particularly popular in European courts during the seventeenth and eighteenth centuries, recent scholarship has pointed to the ways that, although this phenomenon exoticized, via European material culture, Asian—and also African and Muslim subjects, objects, and landscapes: it was also a form of self-representation at a critical turning point in world history. Furthermore, the taste for the “exotic” was not limited to the European aristocracy of the Baroque and the Enlightenment. Asian monarchs like the Chinese Qianlong emperor (r. 1735–96) and the Siamese king Chulalongkorn (r. 1868–1910) built palaces and gardens that imitated western models, a practice that has been named “occidenterie.”

This seminar critically re-examine the history of chinoiserie, understood in the broadest terms as a trans-regional appropriation of form, by attending to its associations with materiality and the global redivision of labor in the building trades, its embeddedness within burgeoning colonial networks of trade and their attendant spatialization of the concept of race, its translation of regional idioms into a universal formal grammar, and its merging of distinct categories of design (architecture, interior decoration, landscape design, and the fine arts) into *gesamtkunstwerke*.

This course will be reading, research, and writing intensive. In addition to a term paper, students will be presenting, throughout the semester, readings and the state of their research. A methodological component is designed to help students hone their research and perfect argumentative skills.

Professional Elective for
Undergraduate Students

DOING IMAGING THINGS : THEORIES AND PRACTICES

Professor Mark Linder

M/W 3:45-5:05

“not primarily manifestations of the properties of a certain technical medium, but operations ...” that engender a “transformation of the forms of sensible experience, of ways of perceiving and being affected?”

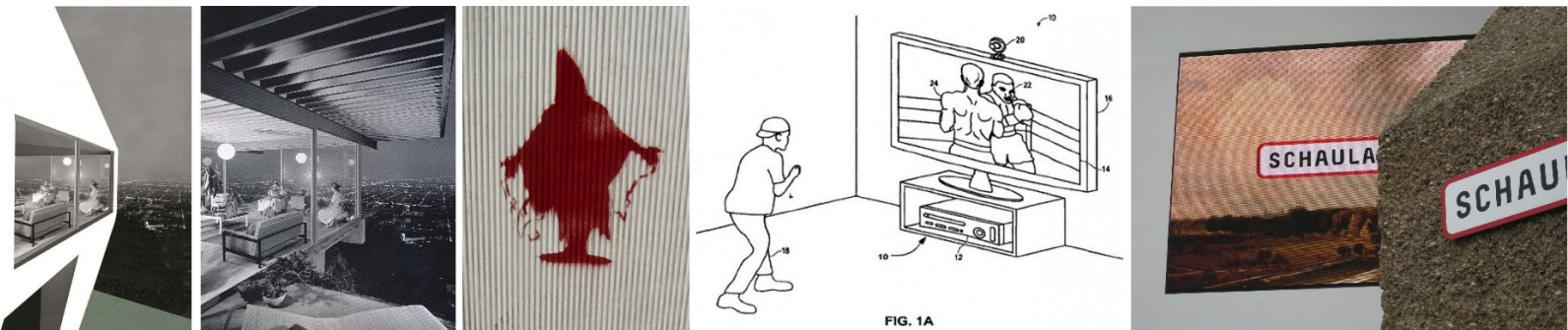
Jacques Rancière, *“The Future of the Image”* (2007) and *Aisthesis: scenes from the aesthetic regimes of art* (2013).

This course focuses on **design theory and design research**. A series of studies will explore how, increasingly, **design is a matter of doing imaging things**. These studies will build on a diverse set of readings and projects (architecture, film, video, etc.) from the recent and not quite recent past that are exemplary scenes in the historical emergence of imaging practices. For the final project, students will design imaging installations for one of several campus buildings. The aim of this work is to understand how our brains are now being called upon, in both new and old ways, to operate with imaging in a changed world and to change the ways an imaged world operates.

Paradoxical, ambiguous, intractable, irrelevant, elusive. Images seem to have an image problem. They are indefinable and indefatigable. They are vague, ephemeral, and shape-shifting. They operate with both stupidity and intelligence. They threaten stability and circulate surreptitiously. They are a source of consternation and controversy. They invite and activate forms of discourse that test the limits of presumed authority and expert knowledge. Images, in comparison to their equally ubiquitous and useful companions such as language, data, formulas, graphs, or forms, are perplexing as a subject of inquiry and undervalued as an object of exchange, even as they increasingly pervade our mediated and virtual realities as actual informational, reproducible materialities.

Even more important than images’ new status as regular stuff are the myriad imaging practices and imaging technologies that produce, distribute, manipulate, record, and activate this stuff. The astounding imaging capacities of digital technologies and the imaging practices they have generated – from printing and fabricating to screening and scanning to modeling and animating, and from the ubiquitous and banal to the rarified and esoteric – are extreme alterations in human culture and experience that engage and immerse us, as casual and expert users, in imaging products and environments.

*Students in this class should have a deep and intense interest in digital media, but do not need to have expert skills in any particular software. We are all imagists now and each of us knows more than enough to have **some serious fun doing imaging things**.*



Fall 2021 / ARC500 / Architecture as Commons

Professional Elective

3 credits

Thursdays 9:30am-12:25pm EST

Instructor:

Yutaka Sho

SU School of Architecture

ysho@syr.edu / Slocum 306E

According to Elinor Ostrom, a Nobel laureate in economics, commons are units of common-pool resource (CPR) management. CPRs mean resources owned and managed by a group of people instead of individuals, and they could be land, energy, knowledge, live stocks, and so forth. For example, properties on which neighborhood shepherds grazed their sheep until the 18th c. Britain, lobster in Maine, and petroleum in Alaska can be defined as CPRs. Commons are managed by those who share the burden of caring for and sustaining, and enjoy the benefits of the resources. Ostrom who analyzed over 5,000 commons worldwide concluded that, in many instances, commons have proven to be successful alternative institutions to the state or private corporations. The commons are a timely community structure for us to investigate, because COVID and #BLM have shown us that the state and private corporations have not shared common resources with all people equally. As designers who contribute to constructing the built environment, we are equipped to question discriminatory spaces and propose new ones. In this seminar, we will research commons as a system parallel to or nestled within the larger political structures to imagine an alternative and more equitable space of care.

Ostrom identified eight design principles among enduring commons. The third principle in particular, “collective-choice arrangements” that govern the commons, is of our interest. This principle means that the members of the commons collectively decide and implement the structure and rules of the commons operation. When we apply this principle to design disciplines, we notice that sustainable architecture requires a commons in every step of its existence. First, all sustainable architecture is initiated because everyone involved in the process, including the clients, architect, landscape architect, plumbers, and so on, agreed the environment, our largest commons, is the utmost importance. Second, designers and builders need support from the community to research, design, and construct this architecture, and one person cannot make it alone. Third, once created, the project must be maintained and it would require knowledge, labor and funding from a community. It may need to be reconstructed every so often, or it may be demolished after a while, which takes labor and money. If the state or private corporations would not help with the project the community needs, they would have to build it and maintain it on their own. To do that, they would need to make a commons. This course will investigate the tools, methods and structures of architectural commons.

Fall 2021

Course number: ARC 566
Course title: **Introduction to Historic Preservation**
Instructor: Professor Ted Bartlett

Course Description:

The built environment provides a context within which future designers will work, both for new designs and designs working with existing buildings and neighborhoods. By promoting their reuse, continued use, rehabilitation and continued viability through appropriate planning and design Historic Preservation plays a pivotal role in protecting historic resources. To this end the field of historic preservation has developed a philosophical approach to preserving historic resources through repurposing them and integration within new designs.

While historic preservation often gets a 'bad rap' and is presented as in direct conflict with progress and new designs, nothing could be further from the truth. The tenets providing the foundation for preservation philosophy, designs and repurposing are based in practicality, economics, appreciation for works of the past, holistic design concepts, and promotion of high quality, distinctive and appropriate design; all towards improvement of quality of life.

Since preservation planning always starts with identifying existing conditions (historic or not) and then the assessment of historic conditions, these initial steps assist in providing a comprehensive understanding of site, buildings and environment *before* planning or design starts. In this course we will look at how preservation philosophy, issues and appropriate design apply to 21st century planning and design.

The goals of this course are: (1) to provide the student with an exposure to the background, development, and philosophies inherent within historic preservation, (2) to explore how guidelines and applications of historic preservation issues work in our 21st century built environment including regulating agencies/standards and existing condition assessments, (3) to make the student aware of historic preservation resources and tools available to the design field, and (4) provide the student with a broad appreciation and understanding for when historic preservation issues may or may not come into play in project planning.

Preservation projects offer demanding challenges for quality design. Drawing upon actual case studies and several site visits as examples, guest lecturers, selected readings, and class lectures, the class will provide an overview and insights of historic preservation as practiced today.

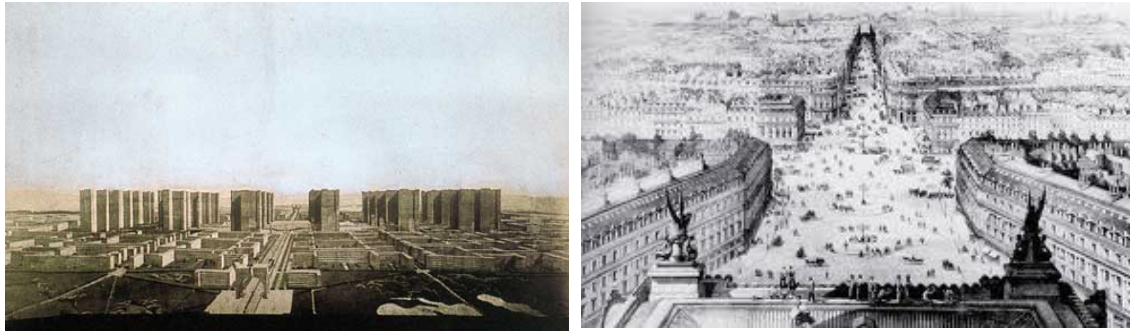
Mode of Evaluation: Class Participation & Discussion, Site Visit Critiques,
Exams, and Term Paper/Project
Course Format: Lecture / Discussion / Site Visits
Meeting Times: Monday & Wednesday 8:00am – 9:20am
Location: Room 101 Slocum
Questions: tbartlett@crawfordstearns.com

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BUILDING BLOCK STREET: SEMINAR IN URBAN HOUSING

Syracuse University School of Architecture

ARC 575 | fall 2021 | 3 credit hours | Professor Elizabeth Kamell | Class Hours: W 12:45-3:35pm | Rm 307, Slocum Hall



Everyone relies on the city and all the public services that it contains. If we have concluded rightly, from what the philosophers say, that cities owe their origin and their existence to their enabling their inhabitants to enjoy a peaceful life, as free from any inconvenience or harm as possible, then surely the most thorough consideration should be given to the city's layout, site, and outline. Yet, opinions vary on these matters."

- Leon Battista Alberti, De Re Edificatoria, Book 4, chp. 2, c.1450

INTRODUCTION

Cities represent the aspirations of our common interests and the realities of political compromise. They are the product of the power invested in regime, of political will, of contention and compromise, of cultural ambition and economic exigency. Cities are made, they are crafted with intention, but they are also circumstantial and the product of climate and geography. Cities are negotiated territories and they are the place of dwelling.

Although there are many factors that bear on the quality of urban life, often omitted from a very long list is the relationship of the individual living unit to the larger structure of streets, blocks, and open space. But, formal and social aspects of the private city in the context of the public realm, both buildings and open space, are among the significant factors that render urban centers amenable to human life. The ways in which we dwell determine and are determined by larger urban systems.

Too often, the study of architecture and the city is limited to a review of monuments, buildings of cultural and institutional importance and smaller projects by known architects. Iconographic monuments and open spaces are the ones by which cities are readily identified - and they usually are the buildings and places in which public life resides. But cities are primarily composed of residential fabric, the place of daily, domestic activity. Given the predominance of housing fabric over other types of building, it may be argued that the kind and character of housing, of residential streets and blocks, is what gives form to the city as a spatial and sociopolitical entity.

Cities are distinguished not only by the quality of the public realm, the streets and open spaces, but also by the private, habitable spaces, the place of quotidian existence. This course examines urban housing within the context of cultural, social, political, economic and formal ambitions from the 17th century to the present as the product of political and social ambition, aesthetic culture, a twentieth century, modernist urban agenda, technology, economic markets, and sustainability. The relationship of the formal and socio-political, the private dwelling and urban, collective ambition focuses discussion in the seminar.