



FALL 2022

THEORY OF URBAN FORM

Connecting the City: Urban Watercourses

ARCH 5614

CRN: 81155

Monday

7:15pm – 10:00pm

David Lever

To shape the contemporary city, we need to understand it; but how do we grasp an entity that covers hundreds of square miles, involves millions of people, and joins multiple systems and activities in a structure of overwhelming complexity? One way we can simplify the task is by focusing on key systems that connect broad geographic areas, multiple populations, and intersecting disciplines and issues. The watercourses that every city contains (whether visible or not) constitute one such system. Watercourses form the most immediate material connection between the city and the natural world, invoking concerns ranging from the imperatives of stormwater management and natural habitats to society's collective vision of the ideal landscape.

We will approach our problem through three frameworks:

- **Urban Theory:** The intellectual paradigms and built precedents that have guided modern city-building from the mid-19th century to the present, including the Parks Movement, City Beautiful, Garden City, and Modernism; New Urbanism and Landscape Urbanism; and what has been called (among other names) "Postmetropolis"

- **Urban Elements:** The primary elements that structure the urban scene – movement corridors, places of assembly, building types, open spaces, and urban districts – as well as the secondary elements that provide much of what is memorable in the urban experience

THEORY OF URBAN FORM (CONT.)

- **Application:** The process of translating the complexity of the city into viable improvements

Urban theory and the **urban elements** will gain specific meaning as we focus on a very real situation in Alexandria: the conditions of Cameron Run and Four Mile Run. We will investigate how these under-utilized watercourses can achieve a higher level of social meaning within a metropolitan-wide system. Two contemporary projects, the Los Angeles River Plan and the Rapid 5 initiative in Ohio, will provide precedents for action in our own area. They will demonstrate how stream improvement involves not only issues of flooding and landscape, but also the physical, social, and economic condition of the communities surrounding them.



Existing: Los Angeles River at Canoga Park, 2006



Proposed: Riverfront Park/Environs, Canoga Park

Our **texts and sources** will include original short works by Olmsted, Howard, Wright, Geddes, Stein, Garnier, and Le Corbusier; *The Urban Design Reader* by Larice and Macdonald; works on the contemporary city by Fishman, Hayden, Jackson, Corner, Sorkin, Soja, Waldheim, and others; the *Los Angeles River Revitalization Master Plan*; and the *Rapid 5 Report*. Course **requirements** will consist of class discussion; watercourse research and concepts; and a semester paper.



FALL 2022

ARCHITECTURE AND URBANISM SEMINAR

Who Why How

ARCH 5705

CRN: 81158

Tuesday

1:30pm-4:00pm

Susan Piedmont-Palladino

Architecture and the city embody an endless transformation of natural resources into cultural resources via human imagination and energy. In the words of historian of technology Carl Mitcham, we “make to use and use to make,” constantly gathering, assessing, testing, altering, and adapting the resources at hand to construct our world. The built environment surrounding us represents a series of choices – this, not that; here, not there; this with that – concerning the joining or separating of materials, environments, and populations. To read the world and be able to make it better, we have to ask these questions: *Who made this place, this building? Why – for whom and for what purpose? How – under what circumstances or policies, using what technologies?*

Focusing on contemporary issues – and there are many complex ones from which to choose – this class will combine excursions, lectures, and discussions, with each student playing a significant part in the selection of topics. We will use the places we currently inhabit as a vehicle for examining decisions made, avoided, and pending about architecture and its urban setting. Lectures will explore the historical context, present manifestations, and future possibilities of the persistent issues joining architecture, the city, and society. Discussions will focus on how these issues manifest themselves in current practice, society, and the cultural landscape as a whole. Some questions will include: How is architecture political? How does architecture communicate? How do *we* communicate *about* architecture? What is sustainability? What is architecture’s role in public health?



FALL 2022

ARCH AND URBANISM SEMINAR (CONT.)

How is architecture meaningful? How do JEDI – justice, equity, diversity, inclusivity – issues manifest in architecture and urban design? From what does architecture derive its value? What is the relationship between architecture and technology? Is there progress in architecture? Drawing on the constant stream of words and images poured into our disciplines by media old and new, popular and professional, we will dive into these issues and more.

This class is required for incoming M.Arch 2 students, but open to others as an elective, space permitting.



FALL 2022

IDEAS, CONCEPTS, AND REPRESENTATIONS OF ARCHITECTURE

ARCH 4114 CRN: 81014 **(Undergraduate Students Only!)**

Tuesday 1:30pm – 4:00pm
Teminioluwa “Temi” Thomas

The path to realizing the materialization of buildings begins with conceptualization, and the ideas that are connected to make concepts are traced from architectural theories found in the discourse of architecture. Theory affords a repertoire of knowledge from which the architect is inspired and collects insights for making buildings. Architectural handbooks, which provide practical building instructions enjoy only momentary relevance until rendered obsolete by advances in taste and technology. Unlike the prescriptive technical details of handbooks, the conceptual aspect of architectural theory remains relevant even to posterity. Furthermore, tools of representation facilitate the transition from design conception to physical construction. Hence, architects, since antiquity, have devised methods of representation as efficient ways to project architectural forms descriptively. They have adopted drawings, models, photographs, and computer graphics to this end.

In this course, we will survey and discuss a series of foundational architectural texts and treatises identifying ideas, concepts, and theories that have shaped architecture over time. We will study how they have influenced buildings by analyzing drawings, photographs, and models. The semester’s coursework will climax with a week of student presentations of visual, architectural representations embodying select ideas and concepts treated in class. These presentations will be accompanied by an essay showing an in-depth understanding and critical synthesis of written materials studied in class, and citing several supplementary sources for the chosen topic(s).



FALL 2022

TOPICS IN DESIGN METHODS

Human-Centric Design Theories and Methods

ARCH 4304 CRN: 81030 (Undergraduate Students)

ARCH 4304 CRN: 81031 (Graduate Students)

Tuesday 4:15pm – 7:00pm
Tuwanda Green

In this course, we will learn human-centric design theories, along with basic biology, scientific methods, and novel design processes to help justify their need in all built environments. The course will be divided into three parts: 1) Our History, Architects and Wellness; 2) Internalizing the Built Environment (biology and scientific methods); and 3) Theory and Science Methods in Practice. Student journal/sketch entries will make up an integral part of this course and will challenge, develop, or analyze students' original positions regarding human-centric design. Each week, we will introduce an assignment for active reflective journaling and/or introductory design research exercises. Weekly lectures will establish context by identifying architects, scientists, and other cross-disciplinary specialists to introduce the relevant concepts, theories, and discerning cultural histories as well as their practical use in the design office. We will discuss the development of architectural wellness design theories and ideas over time while developing a new comprehension of its required science and thoughtful application. Weekly journals and related reading assignments will encourage understanding and synthesis of a given topic while a final extended journal will allow the student to reflect upon, broaden, focus, and develop their specific ideas.

By the end of this course, you should be able to explain human-centric design to others and recommend its appropriate application in design.



FALL 2022

COMPUTER APPLICATIONS IN DESIGN

Revit

ARCH 4164 CRN: 81018 (Undergraduate Students)

ARCH 5064 CRN: 81130 (Graduate Students)

Tuesday 4:15pm – 7:00pm
Samer Bitar

Computer Applications in Design will focus on concepts of BIM (Building Information Modeling) and develop beginner- to intermediate-level skills required to utilize this software as a designer. We will integrate BIM into the design process by teaching methods of design, analysis, and production that compliment methods used in the academic studio and professional practice.

The course will be structured as a series of workshop-style lectures and instructional videos with related tutorial assignments and a final project presentation showcasing each student's design project as developed in Autodesk Revit software.



FALL 2022

TOPICS IN DESIGN METHODS

Creativity

ARCH 4304 CRN: 92065 (Undergraduate Students)

ARCH 4304 CRN: 92041 (Graduate Students)

Tuesday 7:15pm – 10:00pm
Marcelo Stamm

“Creativity is the unique and defining trait of our species; and its ultimate goal, self-understanding: What we are, how we came to be, and what destiny, if any, will determine our future historical trajectory. – What, then, is creativity?”

- E. Wilson, *The Origins of Creativity*

In this search to understand creativity, we will interrogate preconceptions regarding creativity (including Edward Wilson’s quote from *The Origins of Creativity*). This might mean to debunk common creativity myths such as the alleged innate quest for originality and humanity’s seeming love of novelty. Our aim will be to arrive progressively through readings, assignments, and practical exercises to a deeper understanding of the creative process in relation to modern mantras such as the “art of invention,” “creative problem-solving,” “design thinking,” and “transformation.” We will scrutinize ways of “fostering conditions of creativity” (e.g. “creative communities”), examine “paradoxes of constraint,” and critically appraise “creativity talk” and forms of individual “expression.” The course will thus also converse back and forth with a student’s studio work in an attempt to complement and enhance individual student’s project pursuits.



FALL 2022

PROFESSIONAL PRACTICE

ARCH 4044 CRN: 81003 (Undergraduate Students)
ARCH 5044G CRN: 81125 (Graduate Students)

Wednesday 7:15pm – 10:00pm
Randall “Randy” Mars

This course will cover the basic elements of professional architectural practice, from marketing to product delivery. We will discuss the history of the profession, noting how the industry has developed through time. We will also review office organization and operation, as well as how to establish relationships with associated professionals, including engineers, consultants, contractors, and owners.

We will review construction document delivery options, procedures and client services, marketing, and fees. We will also gain an understanding of legal matters and professional ethics. Finally, by seeing our designs through to fruition, we will review the role of the architect during construction and the many relationships involved in that process.

Guests to the class will include general contractors, owners, representatives, engineers, and attorneys, all of whom will share their views of the profession.

Students will be required to complete a series of exercises and encouraged to participate in class lectures and discussions. Midterm and final exams will test students' comprehensive understanding.



FALL 2022

TOPICS IN ARCHITECTURE HISTORY AND THEORY

Constructing Sites

ARCH 4214 CRN: 81024 (Undergraduate Students)
ARCH 5134 CRN: 81150 (Graduate Students)

Thursday 12:00pm – 4:00pm
Paul Kelsch

This course will serve as an introduction to landscape architectural theory and design at the scale of specific sites, with a “concrete theory” approach to understanding issues related to site, terrain, flow, and life. Working through a small design problem, students will develop their site designs and grapple with the application of these concepts through site grading, stormwater management, and plant ecology. The course is aimed at helping architecture and urban design students encounter landscape architectural thinking to inform their own design work and to be good collaborators with landscape architects.



FALL 2022

PHOTOGRAPHY

ARCH 3514 CRN: 80981 (Undergraduate Students)
ARCH 5115 CRN: 81134 (Graduate Students)

Thursday 1:30pm – 4:00pm
Andargé Asfaw

This introductory photography course will explore digital and analog image creation, exposure and lighting challenges, composition and design, photo editing, and printing methods, with a focus on creating imagery as a means of visual and artistic expression. Emphasis will be placed on hands-on problem solving, craftsmanship, aesthetics, and reflection. Class critiques will allow opportunities for growth and improvement in image creation.



FALL 2022

TOPICS IN ARCHITECTURE HISTORY AND THEORY

Word and Image: Ten Treatises

ARCH 4214 CRN: 81028 (Undergraduate Students)
ARCH 5134 CRN: 81149 (Graduate Students)

Thursday 4:15pm – 7:00pm
Paul Emmons

Artifacts – buildings and cities, drawings and models – largely define our shared architectural inheritance. Equally important for our edification, however, are the treatises written by architects. Unlike handbooks, which give rules for design, treatises describe the philosophical framework or cosmology within which design occurs. In this course, we will read the words and images that past architects in different cultures have left for us in their treatises, revealing fundamental continuities and discontinuities about the conception of architectural practices. The knowledge of history will open up our apparently fixed present assumptions to critical examination and therefore allow us to project new futures.

In addition to completing readings and participating in class discussion, each student will write a scholarly 10-page paper with 10 footnotes. The paper will explore an architectural element of your choice. Your study can be a comparison of treatises, or comparison of a single treatise with an historic or contemporary built work. A frontispiece of your design with 10 elements will serve as a hybrid cover for your paper. The final paper, frontispiece, and a brief ekphrasis describing the frontispiece will be due at the end of the term.



FALL 2022

DESIGN BUILD

ARCH 3514 CRN: 80976 (Undergraduate Students)
ARCH 5125 CRN: 81136 (Graduate Students)

Thursday 4:15pm – 7:00pm
Ryan Pieper

NOTICE: Design Build will be offered on additional days and times yet to be determined. Please attend the first WAAC Weekly Forum at 1:30pm ET on August 22nd for more information!

The directness of touch is largely absent from the daily work of a modern architect. Stuck on cellphones or behind computer screens, architects have lost many of the basic sensibilities one can only learn through the sense of touch, via direct confrontation with materials. In WAAC Design Build, the hand will become the singular and proper instrument with which to explore the realm of matter, allowing one to not only physically, but mentally, grasp architectural concepts.

Design Build students will undertake projects involving the skilled application of both hand and mind, engaging in the full spectrum of constructive thinking, from conception to drawing and modeling, on to execution. Design Build projects typically involve renovation of the 1001 Prince Street building itself, allowing students to leave behind a small part of their work here to act as future inspiration for others.

This course is open to students of all skill levels and previous shop experience is not required!

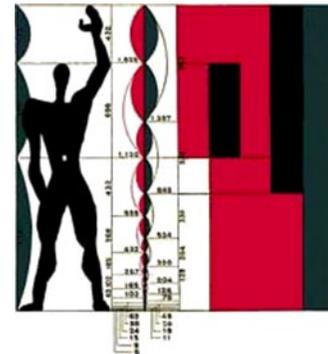
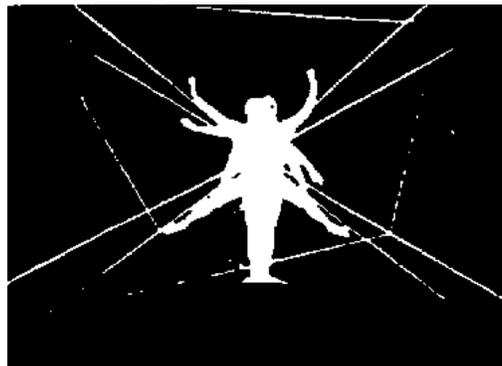
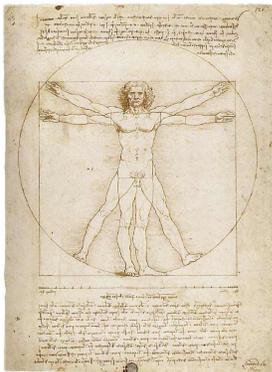
PHD + MASTER'S SEMINAR

(Undergraduates by Permission)

Embodied Design Thinking: Thinking Design through the Body

ARCH 4214	CRN: 81026	(Undergraduate Students)
ARCH 5134	CRN: 81148	(Master's Students)
ARCH 6005	CRN: 81226	(PhD Students)

Friday 10:00am – 12:30pm
 Marcia Feuerstein



Embodied thinking places our bodies at the center of architectural thought and imagination by taking a performative approach to theory within practice in architecture, philosophy, and design research.

This advanced seminar will develop critical reading, writing, thinking, and designing skills while exploring specific design projects (in architecture, landscape architecture, product design, and interiors). We will consider texts drawn from a variety of sources, all involved in embodied thought. Entwined with readings on the body in architecture, each will provide a basis for students to explore the texts and projects for their own thoughtful practice in architecture and scholarship. At the same time, we will examine projects and performances that are transformed through the body within architectural practice.



FALL 2022

PHD + MASTER'S SEMINAR (CONT.)

In this seminar, we will consider various ways of knowing and exploring ideas that will move each student toward developing their own topic, thesis, and/or design. We will discuss texts by both architects and non-architects read by architects/theorists. Participants will select and present specific readings and projects while actively engaging in class discussions. Guests will also present their research to the seminar, with an initial three guests at the start of the semester. Our plans include a visit to at least one project – the Glenstone Museum – to test our ideas within architecture and its landscape.

While required for PhD students, the seminar is also open to and useful for master's and undergraduate students interested in the relationship between theory, design, and practice, who will be developing a thesis. The course content and schedule, developed during our initial meeting, may change as the semester progresses.

Students will lead or co-lead seminars, focusing on the course texts along with relevant images and “inhabitants.” Final grades will be based on class presentations, participation, and the development or expansion of one's topic as a written paper accompanied by a hybrid architectural drawing, video, or other representation constructed from a collection of images/people.