



SPRING
2020

SCHOLARSHIP IN LANDSCAPE ARCHITECTURE

LAR 5724

CRN: 16207

Monday

9:30am – 12:00pm

Cloud Room

Nate Heavers

This course will introduce students to the rich traditions of scholarship in the fields of landscape architecture and allied design disciplines. Students will acquire a familiarity with a variety of research approaches ranging from the sciences to the humanities. Particular to landscape architecture, there will be an emphasis on the observation and description of sites through both written and graphic means. Over the course of the semester, students will identify a research question focused on a site (or set of sites), engage multiple sources and types of evidence, and build written and graphic arguments to support a claim. Through weekly discussions of readings and the work produced for the course, students will develop the verbal and graphic ability to critically assess their own and others' scholarship. The course will culminate with a term paper, written throughout the semester, showing mastery of the methods discussed and establishing a firm scholarly background for thesis research in landscape architecture, architecture, or urban design. This course will be delivered via Zoom to Blacksburg and in-person at the WAAC.



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TECTONICS OF LANDSCAPE ARCHITECTURE III

Material Construction

LAR 5364

CRN: 20178

Tuesday

10:00am - 12:30pm

Secret Room

Doug Hays

This course will link landscape architecture design, engineering, materials, and construction. We will combine concepts covered in preceding landscape tectonics courses with information on construction materials and assembly techniques to prepare landscape architecture drawings and specifications.

Over the course of the semester, students will go through the process of preparing Schematic Design level documents (SD), Design Development drawings (DD), and final Construction Documents (CD) of their work. These exercises will demonstrate the iterative design process that occurs at each level of design and the decisions that are required to advance design concepts through detailed design and ultimately into documents for construction. We will also cover methods of documentation, including conventional and digital communication technologies.

A good working knowledge of CAD is required, as the course will demonstrate the various methods of organizing digital information and layer hierarchies in Model Space and the output set-up in Paper Space to provide legible and graphically clear hard copies.

PREREQUISITES: LAR 5164, LAR 5264



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ARCHITECTURE AND URBANISM SEMINAR

Re-presenting Modern Architectural Texts

ARCH 5706

CRN: 10994

Tuesday

1:30pm – 4:00pm

Cloud Room

Marcia Feuerstein

The second semester of Architecture and Urbanism will include playful yet precise readings of architecture and urbanism treatises written during the ‘Modern’ era of architectural practice: from the 18th through the 21st centuries. This course will look in two directions. In one, we will survey the tradition of architects as authors and designers within urban, cultural, and traditional contexts that ground their practice and their worlds. In the other, we will puzzle over the topics of architectural design, theory, and interpretation revealed through these texts. Theoretical texts frame the everyday practice of professional architecture and reveal a unique window that distinguishes particular and often peculiar points of view. These texts, both written and image-based, will invite interpretive and playful examination of implied world-views that will introduce and restate questions and topics that historically have enlivened architectural theory. These treatises, grounded in past practice, will guide us to puzzle into future architectural discourse and design.



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IDEAS, CONCEPTS, AND REPRESENTATIONS OF ARCHITECTURE

ARCH 4114 CRN: 10837 **(Undergrad Students Only!)**

Tuesday 1:30pm – 4:00pm
Secret Room
Jodi La Coe

In his *Dimensionist Manifesto* (1936), Hungarian poet Charles Sirató – inspired by theories of space-time and non-Euclidean geometry – challenged artists to raise their works to the next higher dimension. Fellow Hungarian artist and signatory of the manifesto László Moholy-Nagy extended such dimensional analogies into our conception of architectural space. In Moholy-Nagy's contemporary lecture at the Royal Institute of British Architects, he listed a number of spatial types, challenging his audience to think beyond the traditional constructs of Euclidean geometry and Cartesian space. These types included architectural, dance, pictorial, crystalline, cubic, hyperbolic, parabolic, lineal, fictive, absolute, relative, finite, infinite, and imaginary space, to name just a few. Eight years prior to the *Dimensionist Manifesto*, in his Bauhaus book, *From Material to Architecture*, Moholy-Nagy had formulated the precursor to Sirató's dimension-expanding trajectory as follows: "Thus a similar quest for expression by subduing or lightening the material is to be found in sculpture: from mass to motion; in painting: from colored pigment to light (play of colored light); in music: from instrumental tones to spherical tones (ether wave music); in poetry: from individual thoughts to sound relationships; in architecture: from restricted closed space to free fluctuation of forces." (Moholy-Nagy, *The New Vision*)

In this course, we will explore the role of representation in our notions of space and time and how these conceptions determine our understanding and experience of the world. As a tool of architectural design, such means of representation contain



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IDEAS, CONCEPTS (CONT.)

spatial and temporal prejudices which, without thoughtful consideration, have the potential to unduly influence the possible outcomes of a design, placing inherent limitations on design thinking. Considering both the tools and the techniques of representation in architecture, students will explore notions of space and time in a variety of media, including words, pigments, light, and other materials.



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COMPUTER APPLICATIONS IN DESIGN

Revit

ARCH 4164 CRN: 21688 (Undergrad Students)

ARCH 5064 CRN: 10961 (Graduate Students)

Tuesday 4:15pm – 7:00pm
Computer Lab
Samer Bitar

Computer Applications in Design will focus on key concepts of Building Information Modeling (BIM) and develop fundamental skills required to utilize this software as a designer. The course will integrate BIM into the design process by teaching methods of design, analysis, and production that compliment methods used in studio. Along with learning the fundamentals of BIM, we will also examine BIM's implications for the professional practice of architecture. The course will be structured as a series of workshop-style lectures with related tutorial assignments, including two project presentations (mid-term and final) showcasing the student's design project as developed in Autodesk Revit software.



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PROFESSIONAL PRACTICE

ARCH 4044 CRN: 10827 (Undergrad Students)
ARCH 5044G CRN: 10956 (Graduate Students)

Wednesday 7:15pm – 10:00pm
Cloud Room
Randall 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.



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TOPICS IN ARCHITECTURE HISTORY AND THEORY

The Mirror of Design: Imagination and Embodiment in Architectural Drawing

ARCH 4214 CRN: 21687 (Undergrad Students)
ARCH 5134 CRN: 10983 (Graduate Students)

Thursday 1:30pm – 4:00pm
Cloud Room
Paul Emmons



By inscribing a mark, an architect vivifies a drawing surface in order to divine in its depths the conception of a future edifice. Drawing, as a mirror of design, is itself a fertile wellspring of ideas that emerge from within the effort of drafting. Since architects make drawings, not buildings, the question of how drawings affect and reflect the architect's imagination is central to any theory and practice of architecture. The act of projecting a complex, habitable three-dimensional structure through the making of two-dimensional drawings is the magic act at the center of architectural creation.



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MIRROR OF DESIGN (CONT.)

The current dominant rationalist approach to drawing overlooks its double act of embodiment, which includes both the drafter's visceral engagement with a drawing under construction as well as the imagined bodily projection of inhabiting a future building. Hand drawing practices first developed to make palpable this imaginative bodily connection. In this course, we will study numerous elements of manual architectural drawing that exemplify this condition, including dashed lines, scale measures, and material symbols. Rationalist approaches treat architectural marks as conventional symbols, while embodied approaches reveal the process of vestiture as a material practice. At the close of the era of hand drawing, it is critically important to engage the significant aspects of manual drafting in the development of, and interaction with, electronic representational modes.

REQUIREMENTS: Each student will construct four elegant and meditative drawings of one's own design project or of an existing building, landscape, or city, using at least two different media. Students will provide with each drawing a two-page ekphrasis including a reflection on the project's relationship to electronic drawing. The final drawing will include a visual documentation (movie) of its process of construction.



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BUILDING CITIES/ COMPARATIVE URBANISM SEMINAR

ARCH 4034 CRN: 10824 (Undergrad Students)
ARCH 5644 CRN: 10991 (Graduate Students)

Thursday 4:15pm – 7:00pm
Secret Room
Scott Archer

Minneapolis and St Paul. Chicago and New York. Washington and Berlin. Paris and Buenos Aires. We inevitably compare cities: they often come in pairs as twins, rivals, siblings, or offspring, in form, culture, and power. In this seminar, we will deepen our experiences of pairs of cities, augmenting personal knowledge with research in order to share through discussions and presentations the ways in which these pairs are alike and different. You will choose your cities and the lens through which they will be examined based on your area of concern.

This course will take the format of a true seminar. The majority of the course will involve collaborative academic discussion over assigned short readings, contemporary urban issues, student projects, and guest presentations. We will also analyze the histories of cities and urban development through our discussions and student projects.

This class is required for graduate urban design students and for undergraduate VT architecture students who have not already completed the Building Cities requirement. However, the course is also open and useful for other students of architecture, landscape architecture, or planning.



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MEDIA AND ENVIRONMENT

Printmaking

ARCH 3514 CRN: 10800 (Undergrad Students)

ARCH 5116 CRN: 10966 (Graduate Students)

Thursday 7:15pm – 10:00pm
Printmaking Studio
Matt Dreher

This semester's printmaking lab will look to engage, activate, and reimagine both public space and public discourse. In a city of politics, partisanship, and culture, how can we challenge ourselves as well as our audience?

The beginning of the semester will cover traditional techniques of linoblock and monoprinting, but students will be challenged to try new printmaking techniques as the semester progresses. The printmaking lab will include an introduction to color theory as well as to traditional and non-traditional concepts of symmetry, composition, and hierarchy. We will explore the works of painters, graphic designers, industrial designers, printmakers, sculptors, musicians, architects, and landscape architects, discussing common themes and distinctions between them.

Throughout the semester, students will engage with local communities and present artwork in public spaces. No printmaking experience is required for this class.