



FALL 2016

MEDIA AND ENVIRONMENT

Photography

ARCH 3514 CRN: 80646 (UG)

ARCH 5115 CRN: 80782 (G)

Monday 7:00pm – 10:00pm
West Room, 1001 Building
Dan Snook

This course will explore the medium of photography through documentation, analysis, and creation in the visual environment. The course will also discuss the work of historical and contemporary photographers as a vehicle for studying the issues and methods of the medium.

This is not a technical course in photographic technique. This is a studio course with emphasis on the images that each student will create. Each student will produce both a self-assigned, cohesive body of work and a documentation of architectural projects or the built environment. No previous knowledge of photography is required.

EQUIPMENT: This course focuses on the images you create and not so much on the tools of creation. We will discuss tools, but it will be in the context of the best way to use the tools that you have effectively. You can use your phone, fancy DSLR, or 35mm camera for any of the projects in this course.

The school has a full darkroom for the processing of black-and-white silver-based film that all students are welcome to use. Basic darkroom technique will be taught but students are not required to work there unless they are interested in the process.



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MEDIA AND ENVIRONMENT (CONT.)

Access to your own digital (phone is ok) or analog camera is highly preferred, but the school does have a limited number of analog 35mm, medium format, and 4x5 cameras available for students to borrow.

COST: Students will be expected to cover their own costs for printing, paper, matboard, and other materials for the course. Most students spend between \$150 to \$250.



FALL 2016

LANDSCAPE TECTONICS II

Site and Process

LAR 5264

CRN: 85073

Tuesday

12:00pm – 4:00pm

Secret Room, 1001 Building

Paul Kelsch

This course gives an overview of site construction practices with particular emphasis on applied grading, site layout, hydrology, stormwater design, and vegetation management. It also addresses the ways in which sites are constructed in theoretical discourse. The theoretical readings serve to bridge a perceived separation between theory and practice, and between design and construction. Because site construction is a broad and expanding topic, the theoretical perspectives also serve to organize the material in a coherent framework and relate it to other discourses of landscape architecture.



FALL 2016

ARCHITECTURE AND URBANISM SEMINAR

Decisions, Decisions ...

ARCH 5705

CRN: 80804

Tuesday

1:30pm – 4:00pm

Middle Room, 601 Building (and out in the city)

Susan Piedmont-Palladino

“Young people go to university with the aim of becoming architects, of finding out if they have got what it takes. What is the first thing we should teach them? First of all, we must explain that the person standing in front of them is not someone who asks questions whose answers (s)he already knows. Practicing architecture is asking oneself questions, finding one’s own answers with the help of the teacher, whittling down, finding solutions. Over and over again.”

– Peter Zumthor, *Thinking Architecture*

Architecture and the city are the products of an endless transformation of natural resources into cultural resources through 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 that surrounds us represents a series of choices – this, not that; here, not there; this with that – regarding the joining or separating of materials, environments, and populations. Thus, the most difficult task facing the design professional is making decisions.

Focusing on contemporary issues, this class will combine urban excursions with lectures and discussions, with each of you playing a significant part in the selection of topics. We will use the city of Washington DC as the vehicle for examining the decisions made, avoided, and pending about architecture and its urban setting. Lectures will explore the historical context, present manifestations, and future possibilities of persistent issues that join architecture, the city, and society. Discussions will focus on the questions raised in the lectures about how these issues



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ARCH AND URBANISM SEMINAR (Cont.)

manifest themselves in current practice, society, and the cultural landscape as a whole. Some of our questions include: How is architecture political? How does architecture communicate? What is sustainability? Is ornament a misdemeanor or a felony? How is architecture meaningful? What is 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 all incoming 2-year Master of Architecture students and recommended for Urban Design students; others are welcome if size permits.



FALL 2016

ADVANCED TOPICS IN LANDSCAPE ARCHITECTURE

Taxonomies, Ecologies, Technologies

LAR 5304G

CRN: 85078

Tuesday

1:30pm – 4:00pm

Reading Room, 601 Building

Nathan Heavers

This course introduces students to plant taxonomy, ecology, and horticultural techniques through field investigations of plants in natural and designed landscapes throughout the National Capital Region. Students will identify and sketch plants at sites along a transect from the Blue Ridge Mountains to Virginia's Tidewater, analyzing the natural and human processes that have shaped the vegetation of each site visited and investigating the tools and techniques used to seed, establish, and manage plantings within the ecosystems. The course begins with plant identification focused on local trees and shrubs. Next, it discusses the basic structure and function of vegetated ecosystems at the range of sites. The semester concludes with studies of how we design with vegetation.



FALL 2016

IDEAS, CONCEPTS, AND REPRESENTATIONS

Sustenance in Sustainable Design

ARCH 4114 CRN: 80673 (UG)

ARCH 5134 CRN: 80795 (G)

Tuesday

4:15pm – 6:45pm

Cloud Room, 1001 Building

Arezou Khalili and Meredith Sattler

Architects today are increasingly expected to design for "sustainability." Meeting current sustainability performance criteria (think compliance with energy codes, LEED standards, etc.), often requires "technological plug-ins," use of best practices, and adherence to predetermined performance targets.

While this emphasis on quantifiable components of sustainability is critical for reducing carbon emissions, protecting freshwater resources, and preserving ecosystem service function (among other goals), it ignores the human side of the equation.

This course seeks to cross-pollinate qualitative approaches with quantitative frameworks applicable to the design of sustainable architecture. Students will learn a qualitative approach to sustainable design with emphasis on the important roles of cultural, historical, and physical contexts, and consider how our senses and memories create relationships with the built environment around us.

Designed for both undergraduate and graduate students, this seminar-style course introduces key histories and theories of sustainability through critical analysis of texts and films. Organized by weekly themes, the course explores an expanded field of theories and practices of sustainability. The final course assignment will link to students' studio projects.



FALL 2016

TOPICS IN DESIGN METHODS

New Regional Architecture: Decomposition, Alienation, Transformation

ARCH 4304 CRN: 80686 (UG)

ARCH 4304 CRN: 80687 (G)

Tuesday 4:15pm – 6:45pm
West Room, 1001 Building
Eva Held

Since the beginning of the Industrial Revolution, regionalism has operated as a countermovement to global systems. In the architectural discourse of the late 20th Century, Critical Regionalism positioned itself an alternative to the universality of the International Style. The Critical Regionalism movement not only deduced the spatial and tectonic articulation of a structure from its local conditions, but also made ecological, environmental, and historical context central to the design process.

While the architecture industry promotes globalization, contemporary architectural discourse repeatedly emphasizes the regional elements of projects, perhaps to offer regional identity as a counterpoint to the undistinctive urban agglomerations of the contemporary city.

So, how does contemporary regionalism differ from Critical Regionalism of the late 20th century? In recent years, various internationally-recognized architectural projects have featured innovative forms and material applications with local historical ties and environmental design implications. The new regional architecture operates simultaneously within the notions of the nostalgic familiar and the unfamiliar. Modern avant-gardes have experimented with concepts such as defamiliarization, estrangement, and alienation in art. By surprise, shock, or distancing, the art object estranged from its own image opens the beholder up to a new experience.



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TOPICS IN DESIGN METHODS (CONT.)

Are we to understand contemporary regionalism as a critique or as a practice of Modernism? Does contemporary regionalism reflect a longing for sentiment, identity, and authenticity or for alienation, displacement, and ambiguity?

This seminar will discuss correlations between contemporary regionalism and Modern art, in particular the meaning of place, regional building traditions, and objects as artwork. We will forgo an anachronistic replication of a stylistic “model” (de Quincy). Our goal is enrichment through the study of regionalist architecture and Modern art theory, allowing students to experience unfamiliar approaches for future design projects.

At the beginning of the term, students will choose a contemporary regionalist project from a list of preselected case studies. Each student will research a representative image of the chosen regionalist project as well as a representative image of a conceptually-related art object. During the first half of the term, students will produce an iconographic analysis of both images, focusing on similarities and differences as well as addressing issues of identity and defamiliarization. This study will also include aspects of a traditional architectural drawing analysis, discussing the formal order of the architectural composition and the positioning of the building on site.

By the end of this course, students will have learned how to situate their chosen regionalist project within its historical context, with an understanding of relevant ideas, theories, and traditions. The course will culminate with an essay and in-class presentation.

As a field trip, we plan to visit the National Museum of African American History and Culture, which will open in Fall 2016 on the National Mall in DC.



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TOPICS IN DESIGN METHODS (CONT.)

CASE STUDIES

- Adjaye Associates, Francis Gregory Library in Fort Davis Park, Washington DC, USA (2012)
- Alison Brooks Architects, Newhall Be, Newhall, Great Britain (2012)
- Amateur Architecture Studio/Wang Shu, Ningbo Museum, Ningbo, China (2008)
- Amateur Architecture Studio/Wang Shu, Vertical Courtyard Apartments, Hangzhou, China (2007)
- Bernardo Bader Architekten, Islamischer Friedhof, Altach, Austria (2012)
- De Architectengroep und SeArch, Niederländische Botschaft, Addis Ababa, Ethiopia (2005)
- Elemental/Alejandro Aravena, Quinta Monroy, Iquique, Chile (2004)
- Ralph Erskine, Greenwich Millennium Village, Greenwich, Great Britain, (2000)
- Grafton Architects, University of Limerick, Medical School, Limerick, Ireland (2013)
- Herzog & de Meuron, Perez Art Museum, Miami, USA (2013)
- Lederer Ragnarsdóttir Oei, Ravensburger Kunstmuseum, Germany (2013)
- Miller | Hull Architects, Northwest Maritime Center Port Townsend, Seattle, USA (2009)
- Mumbai Studio/Bijoy Jain, Palmyra House, Nandgaon, Maharashtra, India (2007)
- MVRDV, Glass Farm, Schijndel, Netherlands (2013)
- Nieto y Sobejano, Centro de Arte Contemporáneo, Cordoba, Spain (2013)
- Soe Fujimoto, Palm Court Retail Complex, Miami, USA (2013)
- Smiljan Radic, Casa A, San Clemente, Chile (2008)
- Rafael Moneo, Cathedral of Our Lady of the Angels, Los Angeles (2002)
- Richard Murphy Architects, The Canongate Housing, Edinburgh, Great Britain (1999)
- Richard Murphy Architects, Murphy House, Edinburgh, Great Britain (2014)



FALL 2016

THEORY OF URBAN FORM

From the Parks Movement to New Urbanism – and Beyond

ARCH 5614

CRN: 80801

Tuesday

7:00pm – 10:00pm

Middle Room, 601 Building

David Lever

THE MODERN URBAN PROBLEM: Since the early 19th century, the functions and physical qualities of the modern city have radically changed. The compactness, human scale, clear boundaries, logical hierarchy, and interconnectedness of the pre-industrial city have given way to vast conurbations with spatial logic based thoroughly on technology.

Modern transportation, communication, industrial processes, and social changes have caused cities to become regional in geographic extent, dissolved the traditional logic of place, introduced enormous and abrupt transitions of scale and insuperable barriers to human movement, and presented a complexity of functions that undermines a unified vision. Every dimension of urban life has been affected, from social relations to the quality of the neighborhood to the form of the home. Through its influence on natural processes – the energy cycle, the hydrological cycle, and the materials cycle - the form of the contemporary city has worldwide importance for the health of the human species.

THE SEARCH FOR SOLUTIONS: From the mid-19th century to the present, methods of urban design have evolved to meet these new conditions. The Parks Movement, City Beautiful, the Garden City, and the Modernist City attempted to bring visual and spatial order to the modern city and transform it into a humane site for human activity. In our day, New Urbanism continues this search, and Landscape Urbanism further seeks to integrate nature and city.



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THEORY OF URBAN FORM (CONT.)

We will study how these major schools of urban thought address the fundamental urban form-types and urban functions. Concurrently, we will undertake a series of sketch exercises to formulate guidelines for the 21st Century neighborhood and town unit.

The course will consist of lectures, discussion, student presentations, and a semester paper.

SELECTED TEXTS

- Original texts by Olmsted, Howard, Wright, Geddes, Stein, Garnier, Le Corbusier, others
- Robert Fishman, *Urban Utopias in the Twentieth Century*
- Peter Hall, *Cities of Tomorrow*
- Richard LeGates and Frederic Stout, *The City Reader* (2nd Edition)
- Mel Scott, *American City Planning Since 1890*
- Charles Waldheim, *The Landscape Urbanism Reader*

TOPICS

- An Urbanizing World
- The 19th Century City: An Urban Revolution and its Cures
- The Parks Movement: Frederick Law Olmsted and the Origins of American City Planning
- City Beautiful: Columbia Exposition, Washington, Chicago, Canberra; Totalitarianism and Colonialism
- The Garden City: Sir Ebenezer Howard and the British Experiment
- Garden Cities in America: Sunnyside, Radburn, Greenbelt, the New Towns
- Regional Planning: Patrick Geddes and the Regional Planning Association of America
- The Roots of Modernism: Linear City, Futurist City, Industrial City, Broadacres City
- Orthodox Modernism: Le Corbusier and the Radiant City; the Legacy of Modernism
- The Reaction to Modernism: Post Modernism and New Urbanism
- The 21st Century City: Landscape Urbanism



FALL 2016

PROFESSIONAL PRACTICE

ARCH 4044 CRN: 80663 (UG)

ARCH 5044G CRN: 80772 (G)

Wednesday 7:00pm – 10:00pm
West Room, 1001 Building
Randall Mars

This course covers the basic elements of professional architectural practice, from marketing to product delivery. We'll discuss the history of the profession, noting how the industry has developed through time. We'll 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 the options for delivering construction documents, 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 are encouraged to participate in class lectures and discussions. Comprehensive understanding will be tested in midterm and final exams.



FALL 2016

TOPICS IN ARCHITECTURE HISTORY AND THEORY

Word and Image in Architectural Treatises

ARCH 4214 CRN: 80678 (UG)

ARCH 5134 CRN: 80796 (G)

Thursday 1:30pm – 4:00pm
West Room, 1001 Building
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 and drawn by architects. Unlike handbooks which give rules for design, a treatise describes the philosophical framework within which design occurs. In short, a treatise defines an architect's cosmology. This course will read the words and images that past architects have left for us in their treatises from the ancient world to modern times. Their study reveals fundamental continuities and discontinuities about the conception of architectural practices. The knowledge of history opens up apparently fixed present assumptions to critical examination and therefore allows us to project new futures. Theory as the study of architectural treatises is intended to resist the faddish consumption of architectural celebrity and instead examine the sources and modes of architects' poetic descriptions of human dwelling.

REQUIREMENTS: In addition to completing readings and participating in class discussion, students will write a scholarly ten-page paper with ten footnotes. The paper will explore an architectural element of your choice (see list of recommendations below). Your study can be a comparison of treatises, or comparison to historic or contemporary built work. A frontispiece of your design



FALL 2016

ARCH HISTORY AND THEORY (CONT.)

with ten elements will serve as a hybrid cover for your paper. A draft paper, bibliography, and frontispiece will be due at midterm. The final paper, frontispiece and a brief ekphrasis on the frontispiece will be due at the end of the term.

POSSIBLE ARCHITECTURAL ELEMENTS

Air	Arch	Balcony	Body	Brick
Ceiling	Chimney	City	Color	Column
Concrete	Corridor	Diagram	Door	Earth
Elevation	Empathy	Fireplace	Floor	Foundation
Garden	Glass	Ichnographia	Kitchen	Measure
Model	Name	North Arrow	Ornament	Perspective
Plaza	Proportion	Roof	Room	Section
Shadow	Sun	Staircase	Street	Temple
Theater	Threshold	Time	Toilet	Wall
Water	Weaving	Window	Wood	



FALL 2016

COMPUTER APPLICATIONS IN DESIGN

Revit

ARCH 4164 CRN: 89276 (UG)

ARCH 5064 CRN: 80778 (G)

Thursday 4:15pm – 6:45pm
Computer Lab, 1001 Building
Samer Bitar

This introduction to Revit focuses on key concepts of BIM (Building Information Modeling) and develops fundamental skills in using Revit software as a designer.

The goal of the course is to integrate BIM into the design process by teaching methods of design, analysis, and production that compliment methods used in the academic studio. Along with learning the fundamentals of BIM, we will examine its implications on the professional practice of architecture. Students are expected to leave the course with the competence required to contribute to a professional practice with BIM.

The course is structured as a series of workshop-style lectures with related tutorial assignments and two project presentations (mid-term and final) demonstrating students' Revit 2016 design projects.



FALL 2016

MATERIALS PROCESSES WORKSHOP

Design Build

ARCH 3514 CRN: 80641 (UG)

ARCH 5125 CRN: 80786 (G)

Thursday 4:15pm – 6:45pm
Red Room, 1001 Building and Shop, 1021 Building
Ryan Pieper

“The mass of the subject matter, like a lump of wax, is at first resistant to handling; but if diligent application kindles the intellect, suddenly the material softens under this fire of the intellect and follows your hand wherever it leads, docile to anything.”

- Geoffrey de Vinsauf, ca. 1200

Ever since L.B. Alberti famously declared in the Renaissance that, “the carpenter is but an instrument in the hands of the architect”, the constructing of buildings has been increasingly separated from their construing. While various efforts have been made throughout history to re-unify the architect and the builder, a clear schism remains between those who conceive of building and those who carry out the conception. With new software technologies (BIM) promising a reunification of hand and mind through the rise of a ‘digital’ master builder, the desire to resurrect the pre-Renaissance notion of the architect as master builder is as powerful as ever.

The directness of touch is largely absent from the daily work of a modern architect. Stuck on cellphones or behind the screens of computers, architects nowadays 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 becomes the singular and proper instrument with which to explore the realm of matter, allowing one to not only physically, but mentally, grasp architectural concepts. The hand thus becomes a direct extension of the architect's imagination.



FALL 2016

MATERIALS PROCESSES (CONT.)

Design Build students undertake projects that involve the skilled application of both hand and mind, engaging in the full spectrum of constructive thinking, from conception to drawing and modeling, all the way through to execution and reflection. Many Design Build projects 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.

ORGANIZATION: Class meetings will be devoted primarily to group work and workshop instruction. Occasionally, we will hold a short seminar to discuss project progress and pertinent theoretical topics. Shop demonstrations, field trips, and relevant readings will be utilized as necessary. Given the conversational nature of building projects, no pre-determined schedule is provided. Rather, the direction of the course will depend on the progress of students' projects.

REQUIREMENTS AND ASSESSMENT: Students will be evaluated based on participation and personal initiative in the workshop, as well as on contributions during seminar discussions. In addition to completing one's chosen Design Build project, each student must finish an initial workshop-based project and participate in final presentations.

- Introductory Project: 25% of grade
- Attendance and Participation: 25% of grade
- Final Project and Installation: 50% of grade

Students will be expected to allocate appropriate time outside of class toward the production of their projects. A GTA will be available during posted hours (exact days and times TBD). The workshop will be open 6:00am to midnight, seven days a week.



FALL 2016

COMPUTER APPLICATIONS IN DESIGN

Parametric Design (Grasshopper and Rhino)

ARCH 4164 CRN: 89277 (UG)

ARCH 5064 CRN: 89789 (G)

Thursday 7:00pm – 10:00pm
Computer Lab, 1001 Building
Joseph Iwaskiw

The goal of this course is to explore the fundamental notions of parametric design and its role in architecture. The primary tool for this exploration will be Grasshopper.

Grasshopper is a graphical algorithm editor that operates within the Rhino 3D modeling platform. This course will cover only the basic skills of Rhino necessary to operate Grasshopper.

Throughout the course, students will explore uses of computational algorithms in the development of architectural ideas, analysis, and digital fabrication. In parallel to learning the software itself and developing algorithms, the class will investigate and debate the complex and delicate relationship of this emerging technology to architecture through group discussions, readings, and projects.



FALL 2016

MEDIA AND ENVIRONMENT

Printmaking

ARCH 3514 CRN: 80642 (UG)

ARCH 5115 CRN: 80783 (G)

Thursday 7:00pm – 10:00pm
Printmaking Studio, 1001 Building
Matt Dreher

How do you convey spatial experiences and emotions in a 2D medium? Are architecture, graphic design, sculpture, painting, printmaking, and photography all distinct languages, or are they merely different dialects within a single language? This lab will explore various artworks, spaces, and events within DC, focusing on qualities of atmosphere, emotion, and the sublime.

Although this course will present traditional techniques of linoblock and monoprinting at the beginning of the semester, students will be encouraged to try new printmaking methods as the semester progresses. The lab will include an introduction into 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, sculptures, musicians, architects, and landscape Architects, noting the common themes and distinctions between them, while also seeing and experiencing places within DC.

At the end of the semester, students will produce a final series of prints and a portfolio. No previous knowledge of printmaking is required for this class.



FALL 2016

PHD SEMINAR

Serendipity in Writing Architecture

ARCH 6005

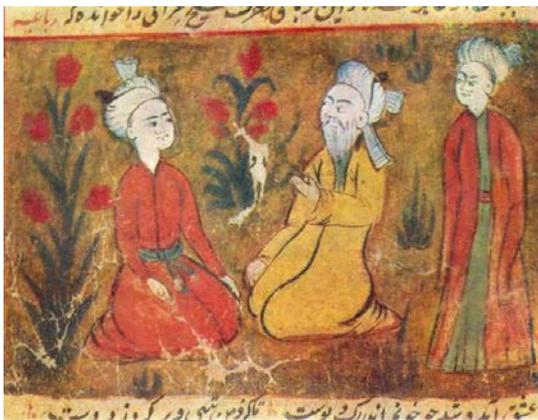
CRN: 80858

Friday

10:00am - 12:30pm

Secret Room, 1001 Building

Marcia Feuerstein



Three Princes of Serendip

This advanced seminar is devoted to developing critical writing, reading, and thinking skills with texts focusing on the philosophy of architecture drawn from a variety of sources. Specific readings are selected by participants each semester and all participants actively engage in their discussion. Invited guests will present their research to the group throughout the semester. Presentation of specific research topics to the group by the participants will also be scheduled. Final grades will be based on class participation and the development or expansion of a final project, which may include a written paper and an interpretive drawing.



FALL 2016

TOPICS: ENVIRONMENT AND BEHAVIOR

Environment and Behavior Studies

UAP 5424

CRN: 88953

Monday

4:15pm – 6:45pm

1021 Building

Shalini Misra

Why do people over-consume scarce natural resources? How can they be motivated to adopt more environmentally sustainable lifestyles? How does the design of our cities, neighborhoods, and buildings affect our health and well-being? What impact do crowding, noise, and poverty have on people? How is the increasing use of information and communication technologies affecting the quality of our lives? Questions like these are of interest to environment-behavior scholars and professionals. Through the readings, lectures, exercises, activities, and assignments in this course you will: (1) learn about major theories, concepts, and principles of environment and behavior studies; (2) appreciate the linkages between the social, cultural, and physical aspects of our environments; (3) be acquainted with the research methods, tools, and techniques used in this field; (4) understand and critically evaluate empirical research and its findings in the field of environment and behavior studies; and (5) create a research evidence-based product to address a real environment-behavior issue in the local community.