A striking split exists in American city form. Districts made up of classic elements - walkable, agreeably complex, well-scaled, accessible, humane - confront vast areas of low-density, automobile-dominated sprawl that are hostile to the pedestrian, environmentally destructive, and unapproachable except for narrow functional purposes.

Connecticut Avenue in Washington, DC, and the West Broad Street/Leesburg Pike corridor in Falls Church, Virginia, offer just such a contrast of urban experience. A major regional road, Connecticut Avenue presents a continuous and dense fabric of buildings and landscape, a compact set of contrasting experiences, and moments of friendly intimacy and contact with nature. Those terms do not apply to the W. Broad Street/Leesburg Pike corridor: other than short stretches near the center of Falls Church, this is an urban scene marked by discontinuity, intimidating scale jumps, and huge expanses of asphalt.
What the city is and what it is becoming: this is the basis of urban design. In this course, we will explore a method to grasp the enormity of the modern city, starting with the classic urban form represented by Connecticut Avenue and expanding our reach to the uncomfortable, but unavoidable, situations represented by the Falls Church corridor. We will question how to translate the human needs well supported on Connecticut Avenue into the contemporary urban realm of Leesburg Pike. We will address three aspects of pedagogy:

• **Urban Theory:** The ideas that have guided city-building from the mid-19th century to the present; the classic paradigms of the Parks Movement, City Beautiful, the Garden City, and Modernism; the contemporary contest between New Urbanism and Landscape Urbanism; and a challenging new perspective, tentatively represented by terms such as “Postmetropolis.”

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

• **Application:** Sketch exercises to explore how design can bridge the disjuncture we find in the contemporary city and bring social value to areas like the Falls Church corridor.

Requirements will include class discussion, sketch exercises, presentations, and a semester paper.
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 that join architecture, the city, and society. Discussions will focus on how these issues manifest themselves in current practice, in society, and in 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? How is architecture meaningful?
Furthermore, 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.
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).
In this course, we will learn human-centric design theories, basic biology and scientific methods, and methods of application to help justify their need in all design projects. The course will be divided into three parts: 1) History of Wellness and Theories, 2) Internalizing the Built Environment (the science), and 3) Theory and Science in Practice. Student journal/sketch entries will be 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 and reflective journaling. 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. As such, 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 the 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.
COMPUTER APPLICATIONS IN DESIGN
Revit 2022

ARCH 4164  CRN: 80926  (Undergraduate Students)
ARCH 5064  CRN: 81047  (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 with related tutorial assignments and a final project presentation showcasing each student’s design project as developed in Autodesk Revit software.
PROFESSIONAL PRACTICE

ARCH 4044    CRN: 80916    (Undergraduate Students)
ARCH 5044G   CRN: 81043    (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.
This course will provide an overview and introduction to landscape architecture at the scale of specific sites. Working through a small design problem, we will cover site design from initial site definition, to reshaping the land, infiltrating stormwater, and understanding the biology and ecology of vegetation. Students will encounter and apply site concepts in ways to influence the design of buildings and cities and also to become informed collaborators in future projects.
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 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 with 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.
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.
PHOTOGRAPHY

ARCH 3514  CRN: 80890  (Undergraduate Students)
ARCH 5115  CRN: 81051  (Graduate Students)

Thursday  4:15pm – 7:00pm
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.
THEORY SEMINAR
Beginnings, Serendipity, and Wonder

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

This advanced seminar will develop critical writing, reading, and thinking skills with texts focusing on the philosophy of architecture drawn from a variety of sources. We will study texts often read by architects/theorists, written by both non-architects and architects. These readings will be selected and presented by our participants each semester, and all participants will actively engage in their discussion. In addition to text-based study, we will also consider designs, performances, and installations. Some of this content will focus on ideas of the beginning, serendipity, wonder, and embodied thinking.

Throughout the course, guests will present their research, designs, experiences, and thoughts to the group. At the end of the semester, students will present their own research or design topics.

The seminar is required for PhD students, but also open to master’s and bachelor’s students interested in actively engaging with others to explore critical thinking and theoretical considerations while developing thesis or design topics.

Each student will participate by either leading or co-leading a seminar and creating an annotated bibliography of all texts. PhD students will lead one or two seminars and submit an academic paper that will act as an introduction to their beginning or continuing research. This research may develop from a seminar presentation.
THEORY SEMINAR (CONT.)

Master’s and bachelor’s students will co-lead a seminar focusing on a text, project, installation, and/or performance while considering their own design projects or future thesis/research questions. This will become the basis for a final written and graphic submission.

Final grades will be based on class participation and the development or expansion of a final project – such as a dissertation proposal or written paper – along with an interpretive representation of one’s ideas through each student’s choice of media: a drawing, collage, montage, model, performance, video, podcast, etc. Students will also develop an annotated bibliography of all source materials.