

THE IRWIN S. CHANIN SCHOOL OF ARCHITECTURE OF THE COOPER UNION
M.Arch II Schedule
Fall 2020

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9AM	Grad Sem Tech ARCH 482.30 Smith 10AM-12:50PM online 2 credits	GradSemUrbanStu ARCH 483.24 Vidler 10-11:50AM online 2 credits	Grad SemThHistCrit ARCH 485.50 Makeka 9-10:50AM online 2 credits	Grad SemThHistCrit ARCH 485.48 Fizer,Forley,Sommer 10-11:50AM online 2 credits Grad Sem Tech ARCH 482.29 del Rio, Shlayan, Tzavelis, Wooton 11-11:50AM online ###1 credit### GradSemUrbanStu ARCH 483.08 Ockman 12-1:50PM online 2 credits	GradSemThHistCrit ARCH 485.32 Pollak 10-11:50AM online 2 credits Grad Sem Tech ARCH 482.31 4-5:50PM Kallipoliti online 2 credits Shop Tech FA 100RA 1-2:50PM online 1 credit
2PM		Grad Thesis ARCH 413 Akawi Vidler 2-5:50PM online 6 credits	Grad Thesis ARCH 413 Akawi Vidler 2-5:50PM online Grad Sem Tech ARCH 482.02 Oppenheimer 6-7:50PM online 2 credits	Grad Thesis ARCH 413 Akawi Vidler 2-5:50PM online	GradSemThHistCrit ARCH 485.08 Zuliani 3-4:50PM online 2 credits Grad SemThHistCrit ARCH 485.49 Akawi 3-4:50PM online 2 credits

THE IRWIN S. CHANIN SCHOOL OF ARCHITECTURE OF THE COOPER UNION
Fall 2020 Graduate Seminar Course Descriptions

ARCH 482.02 GRADUATE SEMINAR IN TECHNOLOGIES

Nat Oppenheimer
Wednesday 6-7:50PM
online
2 credits

Seminar course on advanced structural topics, including geometry (tall buildings, long span structures, shell and spatial structures), lateral forces (wind and seismic), and materials (prestressed concrete, glass, fabrics). Design projects will encourage students to seek innovative structural solutions and to integrate holistic and detailed design approaches.

ARCH 482.29 GRADUATE SEMINAR IN TECHNOLOGIES

Lorena del Rio (Architecture), Neveen Shlayan (EE), Cosmas Tzavelis (CivE), David Wooton (MechE)
Thursday 11-11:50AM
online
#####1 credit#####
SOLAR DECATHALON

We are pleased to announce the new VIP (Vertically Integrated Projects) structure. VIP is an undergraduate research initiative in which students work in multidisciplinary teams led by faculty, contributing to their research, innovation, and/or design efforts. Students earn 1 credit each semester, with three semesters minimum "adding up" to a typical 3-credit hour course. Students are encouraged to participate for at least 3 semesters and up to 6 semesters, providing deeper learning experiences and leadership opportunities. The long-term nature of VIP creates an environment of mentorship, with faculty and graduate students mentoring teams, experienced students. "The U.S. Department of Energy Solar Decathlon® is a collegiate competition, initiated in 2002, that has grown to showcase much more than solar technologies. Today, the 10 contests that are the foundation of Solar Decathlon inspire student teams to design and build highly efficient buildings powered by renewables, while optimizing for key considerations including affordability, resilience, and occupant health. The winners are those teams that best blend architectural and engineering excellence with innovation in how their building interacts with the world around it. Simply put, there's nothing else like it." For more info: <https://www.solardecathlon.gov/>

ARCH 482.30 GRADUATE SEMINAR IN TECHNOLOGIES

Austin Wade Smith
Monday 10AM-12:50PM
online
2 credits

BEYOND THE SCREEN: TOPICS IN SPATIAL MEDIA

Long after the mainframe era, digital media is increasingly ubiquitous, embedded, and oftentimes imperceptible. How does technology bias, augment, and coordinate our perceptions and experiences of space? Who authors these systems and to what ends? This Crossings elective explores media and computing as an environmental phenomenon. Organized as a survey, students will learn a range of emerging tools to create immersive environments and experiences *beyond the screen*, with critical context to architectural applications. Making use of new tools in the AACE Lab, the course will explore techniques and workflows in robotics, IoT, mixed reality, motion tracking, web development, and "bots". Emphasis is placed on how spatial media shapes our perception, behaviors, and daily rituals in space. Accompanying workshops are readings, taken from both contemporary and historical precedent, which frame and contextualize spatial media in relation to power structures and biopolitics. On rare occasion, this course will meet on Saturdays for workshops. No previous experience required.

ARCH 482.31 GRADUATE SEMINAR IN TECHNOLOGIES

Lydia Kallipoliti
Friday 12-1:50PM
online

CONTESTED HISTORIES OF ECOLOGICAL DESIGN

The term "ecological design" was coined in a 1996 book by Sim van der Ryn and Stewart Cowan, where the authors argued for a seamless integration of human activities with natural processes to minimize destructive environmental impact. Following their cautionary call, William McDonough and Michael Braungart published in 2002 their manifesto book *From Cradle to Cradle*, which announced a circular political economy replacing the linear logic of "Cradle to Grave." These books have been foundational in architecture and design discussions on sustainability and in establishing the technical dimension, as well as the logic of efficiency, optimization and evolutionary competition in environmental debates. *Cradle to Cradle* evolved to a production model implemented by a number of companies, organizations and governments around the world, and has also become a registered trademark and a product certification. Popularized recently, these developments imply a very short history for the growing field of ecological design. Their accounts, nevertheless, are as longstanding as Ernst Haeckel's definition of the field of "ecology" in 1866 as an integral link between living organisms and their surroundings (*Generelle Morphologie der Organismen*, 1866); or Henry David Thoreau's famous manual for self-reliance and living in proximity with natural

THE IRWIN S. CHANIN SCHOOL OF ARCHITECTURE OF THE COOPER UNION
Fall 2020 Graduate Seminar Course Descriptions...page 2

surroundings, in the cabin he built in Walden Pond, Massachusetts (*Walden; or, Life in the Woods*, 1854). Since World War II, contrary to the position of ecological design as a call to fit harmoniously within the natural world, there has been a growing interest for a form of “synthetic naturalism” (“Closed Worlds; The Rise and Fall of Dirty Physiology,” 2015), where the laws of nature and metabolism are displaced from the domain of wilderness to the domain of cities, buildings and objects. This idea of architecture and design producing nature paralleled what Buckminster Fuller, John McHale and Ian McHarg, among others, referred to as “world planning;” that is to understand ecological design as the design of the planet itself, as much as the design of an object, building or territory. Unlike van der Ryn and Cowan’s argumentation focusing on a deep appreciation for nature’s equilibrium, ecological design might in fact commence with the synthetic replication of natural systems. These conflicting positions reflect only a small fraction of the ubiquitous terms used to pronounce the field of ecological design, including “green,” “sustain,” “alternative,” “resilient,” “self-sufficient,” “organic,” “biotechnical” et-al. In the context of this course, we will discuss, examine and analyze different worldviews as manifest in various perceptions of architecture and the environment; we will debate the timeline of positions, genealogies of ecological design and methods in which histories are constructed thematically, chronologically or arbitrarily while ideas migrate in time.

ARCH 483.08 GRADUATE SEMINAR IN URBAN STUDIES

Joan Ockman

Thursday 12noon-1:50PM

online

2 credits

NEW YORK AS INCUBATOR OF TWENTIETH-CENTURY URBANISM: FOUR URBAN THINKERS AND THE CITY THEY ENVISIONED
This seminar is designed as a hypothetical debate among four influential thinkers whose differing conceptions of the twentieth-century city were shaped by their response to New York City’s urban and architectural development: Lewis Mumford (1895–1990), Robert Moses (1888–1981), Jane Jacobs (1916–2006), and Rem Koolhaas (1944–). We explore the central issues that preoccupied each, from civic representation and environmental sustainability to large-scale infrastructure and urban renewal, from community and complexity to architecture’s role in the urban imaginary. New York has been called the capital of the twentieth century. The focus of the seminar is twofold: on the contribution of the “urban intellectual” to the production of culture; and on modern New York’s physical and architectural history. More broadly, the seminar aims to reflect on the future of New York and of cities in general by reassessing the ideas and legacy of this quartet of visionary thinkers. Supplementing our discussions of key texts by and about Mumford, Moses, Jacobs, and Koolhaas is much other relevant historical and theoretical material. requirements: two in-class case-study presentations (12 minutes each); a thematically related term paper (15 pages).

ARCH 483.24 GRADUATE SEMINAR IN URBAN STUDIES

Anthony Vidler

Tuesday 10-11:50AM

online

2 credits

“COUNTRYSIDES”: Extraction, Exploitation, Representation from the Renaissance to the Present
The recent exhibition, “Countryside: The Future,” mounted by Rem Koolhaas, at the Guggenheim, surveyed the history of rural space in a number of vignettes, drawn, photographed, archived, and videoed. This seminar will take up the question of “countryside” historically and conceptually, tracing the various understandings of the word and its object over the period of what is now called the Anthropocene, from the “Humanist” Anthropocene of the Renaissance to the present post-industrial Anthropocene. Shifting definitions of the “country” and the “city”; successive ideas of “nature” and “non-nature” will be seen as having authorized mineral and geological extraction, modes of pre-industrial and post-industrial cultivation and exploitation, visual representations from aerial views to the picturesque, iconographies and symbolic images, formulations of landscape in painting and photography.

ARCH 485.08 GRADUATE SEMINAR IN THEORY, HISTORY, CRITICISM

Guido Zuliani

Friday 3-4:50PM

online

2 credits

UNTIMELY ARCHITECTURES. JOHN HEJDUK’S OEUUVRE, 1955-2000.

The whole of the architect John Hejduk’s *Oeuvre*, spanning with consistent progression the entire second half of the 20th century, is the result of a long and intense artistic and intellectual journey that extends from the immediate post-war era to the threshold of the new millennium. Hejduk’s unbroken series of highly original and emblematic projects collected in more than 20 volumes, each of them treated as the development of a specific conceptual reflection, constitutes one of the most lucid and intellectually coherent and provocative artistic investigation on the nature, destiny and possibility of architecture, and of the artistic work in general, in the context of late-capitalist society. Through the lens of John Hejduk’s work, through the close reading of 13 of his published books, and with an approach that will engage a

THE IRWIN S. CHANIN SCHOOL OF ARCHITECTURE OF THE COOPER UNION
Fall 2020 Elective Course Descriptions...page 3

variety of disciplines and subjects, the seminar will have the opportunity to encounter and discuss, directly or indirectly, as points of contact or objects of opposition, some of the major theoretical positions, projects and personalities that formed a significant part of the multifaceted architectural, urban and political discourses of our most recent past.

ARCH 485.32 GRADUATE SEMINAR IN THEORY, HISTORY, CRITICISM

Linda Pollak

Friday 10-11:50AM

online

2 credits

CONSTRUCTING GROUND SEMINAR

In his 1974 book, *The Production of Space*, the philosopher Henri Lefebvre defined social space as the “*encounter, assembly, [and] simultaneity ... of everything that is produced by nature or by society, either through their cooperation or through their conflicts.*” The objective of the seminar is to inspire and support students in architecture to integrate landscape thinking and design into their own creative practice. The framework of “constructing ground” enables inclusion of living systems in research and design without segregating them within an exclusive domain of “nature.” The idea of constructed ground registers the fact that the ground of any site is always already constructed, and, therefore, not background or origin or *tabula rasa*. The seminar will reveal and reflect upon projects and processes integrating landscape through a range of perspectives. We will explore works by architects, artists and landscape architects; landscape representation; inside outside, landscape as agent of urban regeneration, and play.

LANDSCAPES

During the first half of the seminar, each student will present her/his analysis/interpretation of three works of landscape-- one by an architect, one by an artist, and one by a landscape architect. Each presentation should begin with an outline, and include the following: a plan (with scale and north arrow) and other drawings; a drawing diagram by the presenter; photographs, annotated and captioned; quote(s) of writing by the designer.

READINGS

Each student is responsible for reading and discussion. Readings (available on Google Drive) include essays by Michael Corajoud, James Corner, Rosalind Krauss, Liane Lefaivre and Linda Pollak. Supplementary readings will be available as desired.

STUDIO CLASS

In this class, each student will present a drawing or model about “landscape” in the project s/he is working on in studio, as basis for discussion.

JOURNAL JOURNEY

Each seminar participant will keep a Landscape Journal—a physical notebook—in which s/he records notes, sketches, observations, and questions. The journal will respond to each class session, as well as preparation for presentations and discussions. Objectives of the journal are to enable

exploration, enhance reflection, and promote critical thought. Students will be asked to submit journals periodically for review. At the end of the semester, students will share their journals, in support of review and reflection on the seminar.

ATTENDANCE

Attendance is fundamental to the workings of the seminar, and therefore mandatory. Any person's lateness or absence affects the entire group. Students are expected to attend all class meetings and to arrive at or before 10:00 am.

GRADING: Attendance mandatory, Participation 25%, Presentation 25%, Reading 25%, Journal 25%.

ARCH 485.48 GRADUATE SEMINAR IN THEORY, HISTORY, CRITICISM

Natalie Fizer, Glenn Forley, Richard Sommer

Thursday 10-11:50AM

online

2 credits

ARCHITECTURES OF TIME: MAKING OVER THE MONUMENT

Structure:

wk. 01	Introduction
wks 02/03	Deep/Geological Time
wks 04/05	Linear/Historical Time
wks 06/07	Technological/Mediated Time
wks 08/09	Memory/Dream Time
wks 10-13	Student-Led Proposals
wks 14/15	Conclusion

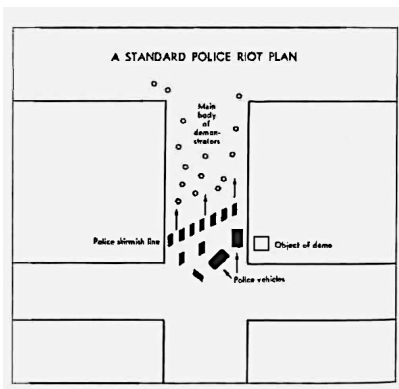


diagram: “A Standard Police Riot Plan” from a Manual for Direct Action, Martin Oppenheimer and George Lakey

Description:

Architecture’s political function, and its ability to represent a given society’s values and aspirations is most clearly understood through the lens of the monument and the history of monument-making. The monument is often proffered as a timeless object that fixes the past, embodying and establishing the heritage of persons, places and things. This course is built upon an alternate thesis that explores the monument as a timely, prospective art capable of shaping/reshaping public memory and changing history. The course will engage students in a series of thematic and case-based studies on the geographies and techniques associated with modern monuments, with a specific focus on the challenge of monument-making in the American Landscape. The recent uprising of consciousness concerning the legacy of racism in the United States – and elsewhere – has hastened a much-needed public discourse on the history, meaning and position of monuments in the spaces of society. The Black Lives Matter movement, and the many conflicts and equations between indigenous understandings of land and sovereignty, colonialism and white supremacy, have brought needed attention to the troubled creation, and legacy of a wide array of monuments. These include monuments devoted to the ‘heritage’ of the Southern Confederacy, and the many American monuments celebrating the country’s ‘manifest destiny’, ‘exceptionalism’, and pioneering of the ‘frontier’, such as Mount Rushmore. Following from our thesis that the monument is time-full, the course will be organized around a series of overlapping temporalities (or concepts-of-time) that underlie the creation of many American monuments, including deep/geological time, linear/historical time, technological/mediated time and memory/dream time. We will examine an array of historical examples, including some important, and not well-known monuments in the New York, and the New York region, and more contemporary, critical and experimental approaches to the monument taken by designers and artists such as Kara Walker, Rafael Lozano-Hemmer, Rebecca Belmore, and Krzysztof Wodiczko.

Coursework:

Class meetings will combine presentations by the instructors, invited scholars, artists and designers, with assigned readings for each class. Students will undertake a study and project aimed at reforming/remaking a series of assigned monuments in preparation for an exhibition at the Cooper Union.

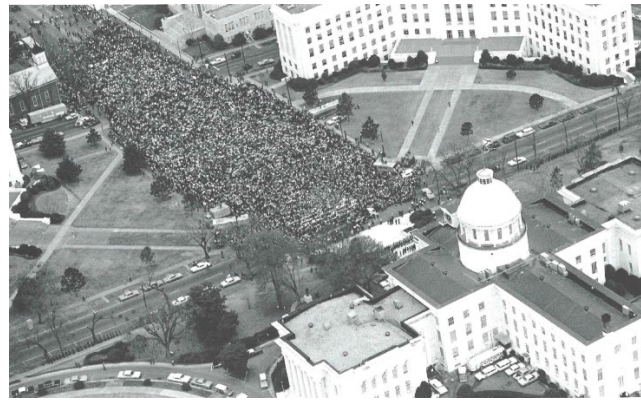


photo: *The 1965 Voting Rights March from Selma to Montgomery* (arrival in Montgomery)

ARCH 485.49 GRADUATE SEMINAR IN THEORY, HISTORY, CRITICISM

Nora Akawi

Friday 3-4:50PM

online

2 credits

BORDERLANDS: The Architecture of Exclusion and its Opposition

In the midst of a global health crisis, we see the thickening of borders around the world through massive mobilization of border patrols, the closing of airports, and the enforcement of quarantine. As the novel coronavirus pandemic illustrates the rapid flows of movement across borders, the extreme blockade measures we see are designed to contain the spread of disease. They do, nonetheless, shed light on a long-standing apparatus of enclosure that is in place to exclude groups based on race, class, and origin: anti-immigration policies, military sieges, and planned segregation. In this seminar, students critically engage in readings and discussions on border and migration theory to learn about border conditions around the world: from the maritime borders of the Mediterranean, to the urban blockades in Israel/Palestine, and the desert along the US/Mexico border. Working through Arjun Appadurai’s notion of “process geographies” as opposed to “trait geographies”, students in the course embark on the challenge to represent borderlands while focusing precisely on the processes and flows that traverse them.

ARCH 485.40 GRADUATE SEMINAR IN THEORY, HISTORY, CRITICISM

Mokena Makeka

Wednesday 9-10:50AM

online

2 credits

“DON'T TOUCH MY HAIR.”

Global inequality has co-produced emergent local adjacencies which confound, warp and twist the static social imaginary of cities, cultural production and architecture. Although not new, contemporary architecture, symbols, and the structural framework of civic identities and institutions which ground the anchor points of these frameworks; are under a nuanced and profound scrutiny. These inflections are topological points in the body politic which demand a contested reframing of the self to the other and suggests that new territories of meaning and possibility can be unveiled. These meanings are fluid, discontinuous and animate, blurring the tangible and the intangible and compel engagement. With what lens do we fix our gaze on the broken horizon of a re-imagined world? Climate? Race? Taste? Power? Capital? Culture? Time? Justice? Wonder? How does subjectivity reproduce or contest fragile [in]sights, and inform the act of design and architecture? How may we blend agency, urgency, duty and private desire? Reflexivity, in the context of perspective, critical bias, aesthetics and the gaze of privilege is proving to be the lingua franca of an emerging agonistic architecture that resonates within and beyond its morphological attributes. Conceived as a 12 part seminar, we explore these thematic tipping points in broad trajectories: ways in which *Seeing and Being* has historically grounded architecture, recalibrating *Conceptions of Beauty*, the *Cruel genius of Colony*, and re-situation of colonial artifacts, by design in art, music, and public space politics into the *Flat CITY*. Our gaze will span from Plato, to S. Kubrick to Q. Tarantino, Liebowitz, Brunelleschi and Nnedi Okorofor, the New York Five, D. Adjaye and various other architectures of hegemony and resistance in their myriad manifestations- from statues, memorials, street culture, and state sanctioned expressions of power and virtue. Format: 12 seminars, 4 surprise guest lecturers. Outputs: A visual diary and a summary reflection artifact/drawing.

Mokena Makeka, ARCHITECT | ARTIST | CREATIVE | CURATOR | DESIGNER | GLOBAL LEADER | SCHOLAR | SPEAKER | URBANIST, is a South African raised in Maseru, Lesotho and New York, USA and is an accomplished architect, artist, creative, curator, designer, global leader, scholar, speaker, urbanist. He holds a B.Arch Dist. Hons, Magna Cum Laude, University of Cape Town (UCT), and various executive leadership qualifications, from the Harvard Kennedy School, Oxford University and others. Mokena believes that good architecture is a basic human right and that through the design process one can harness the power to change not only the spaces we inhabit, but the socio-economy reality of communities, and stakeholders. Design is increasingly a critical tool to negotiate conflict, identify opportunities and to address the transformation of the environment and to create resilient cities and economies. As a result, DesignWorks an agile strategic design practice focussed on impact and scalar solutions for humanity through design.