A sponsored studio focused on the production of ur-JAIME CORREA ban design and architecture alternatives for one of the oldest neighborhoods in Mexico City: Barrio de **On-line Studio** La Merced. There will be a potential collabortion with students/faculty at the Universidad Nacional Autonoma de Mexico (UNAM); students enrolled in the TO BE DETERMINED studio will intervene in public spaces and building areas around one of the most important and surreal retail markets in Mexico City: Mercado de La Merced. This is a sponsored research studio where innovation and experimentation are fundamental pre-requisites for its successful completion. FIERMINED BARRIO DE LA MERCED, MEXICO CITY THE BRIAN CANIN URBAN DESIGN STUDIO

ARC 407, 408, 509, 510, 601, 609 An Introduction to Urban Design Health and Climate Response

Fall 2020 Professor Elizabeth Plater-Zyberk





Clematis Street, West Palm Beach, Dover Kohl Partner

This studio will introduce students to the principles, processes and practice of urban design through a series of design projects varying in scale and location.

The semester will engage four projects in a sequence that builds the student's understanding of the elements of urban design. These will include: 1) a synoptic survey (design analysis) of a place (neighborhood street) of the student's experience; 2) a design analysis of an internationally admired public space; 3) the design of an urban infill site with buildings and streets; 4) and the design of a new neighborhood of specific context and program to make a place of convenience, character, and beauty.

Students will learn about place-making, designs that invite pedestrian use of public space, promoting a sense of community, neighborhood structure, the Transect, building types, modes of mobility, and site-specific concerns of environment, health, and climate.

The studio will be run in a dual format, with in-person meetings on campus and on-line sessions that include all in the studio, as well as individual sessions. Once a week, guest lecturers on the topic of urban design will be assembled from around the world to make presentations and converse with studio participants. Students will be asked to suggest the names of urban designers they would like to meet in this manner.

LA PLAYA



mage: Viva Cecilia 1a, Noe Leon, 19

The sweet charms of the shanty town and other urban myths A Fundacion Tecnoglass Sponsored Studio

"At that time Macondo was a village of twenty adobe houses, built on the bank of a river of clear water that ran along a bed of polished stones which were white and enormous, like prehistoric eggs. The world was so recent that many things lacked names and in order to indicate them it was necessary to point." One Hundred Years of Solitude, Gabriel Garcia Marquez, 1967.

The Vernacularology Studio is preoccupied with the extent to which the ordinary and the colloquial resonate in architecture and the construction of the city today. According to the World Bank, since WWII global population has increased from two billion to 7.8 billion, and nearly all this growth has taken place in the developing world, where the urban population has grown from 300 million to 1.7 billion today. Most of these urban dwellers live in communities that, while composed of buildings that range from simple shacks to permanent structures, belong to an urban geography that is literally "off the map": undocumented, illegal, mobile, ephemeral, and generally beyond the reach of government services and infrastructure. Lacking even an agreed-upon descriptive term- they are variously referred to as slums, informal settlements, shantytowns, or Unplanned Cities – they are often seen as nothing but undifferentiated pockets of misery, wracked by poverty, crime and unsanitary conditions: in other words, an unfortunate but inevitable waste product of the uncontrolled urban growth that characterizes our time. This view is as unfortunate as it is misguided. While undeniably precarious in construction, Unplanned Cities exhibit underlying urban and architectural patterns of remarkable resilience, and that moreover reflect their inhabitants' enduring cultural values. Given this framework, this studio will initially focus on the mapping of the La Playa informal city in Barranquilla, Colombia. However, the primary objective of the semester is to initiate urban regeneration through the design of sustainable urban and architectural proposals within this neighborhood. The proposals will constitute an opportunity to investigate building types that would foster a sense of community ownership, and provide a variety of spaces serving an entire urban environment. At the same time, while rigorously studying the principles of architecture and town building found in these communities and documenting our findings, we will also position our research within the framework of local cultural history, aesthetic tradition, and popular culture, arriving at suggested solutions that derive organically, in a sustainable fashion, from the immediate social, topographic and cultural environment.



PHYSICAL AND SPATIAL COMPUTATION IN ARCHITECTURE—A RAD STUDIO

Rodolphe el-Khoury; Christopher Chung; Maxwell Jarosz

Course Description:

The course has a twofold aim:

- 1. To explore the potential for spatial and ubiquitous computing to change the ways we conceive, construct, inhabit and interact with our cities, buildings, and objects of everyday life.
- 2. To explore the potential of Mixed Reality (MR) as a medium for distance learning and collaboration.

Computing is migrating from dedicated static appliances to mobile devices, objects of everyday life, and physical environments thanks to proliferating microchips, ever-expanding information networks, and new interactive interfaces such as Augmented/Mixed Reality. Soon every object around will be inherently or virtually equipped with some computational power and become enmeshed in a network of communication. The built environments will take on functionalities we usually reserve to computers and hand-held communication devices. This functionality becomes particularly desirable in a post-COVID-19 world where the manipulation of digital content that is virtually layered on top of things becomes preferable to physical contact with objects and user interfaces. MR allows for engaging interactions in the real word with non-substantial content. Surely one of the greatest benefits of MR in times of social distancing and confinement is the capacity to meet, interact, and collaborate remotely: to be virtually *present*

without being physically exposed. The studio course explores this new reality and propose designs for its non-substantial environments.

The course seeks synergies between Mixed Reality (MR) and the Internet of Things (IoT), using Magic Leap's platform for spatial computing as well as other digital tools that facilitate remote learning and collaboration. We will focus on the domestic environment and how it may overlap with and accommodate various aspects of everyday life by means of technology: working, learning, leisure, health, shopping, and storing. Particular attention will be given to how the home could become an augmented site for new forms of interaction and socialization.

We will emphasize and probe the use of MR in course delivery, communication and collaboration methods; students will be supplied with their individual Magic Leap device for the duration of the course—the device will be delivered to students who won't be on campus for Fall 2020. The intent is to explore and test the potential of MR for distance learning and collaboration. Students are thus invited to explore new ways to deploy MR tools in shaping the learning environment of the course. **Given this pedagogical framework, the course will be conducted remotely, with emphasis on virtual interaction.** But while studio instruction is held in virtual environments, the course will link to physical output infrastructure on campus for rapid prototyping and material-based exploration.





THE MEDICAL CITY

Fall 2020 6 credits ARC 509-609 MW 1:30-6:00PM Prof. Jose A. Gelabert-Navia

The last few months has seen a dramatic change in the lives of everyone in the world. Every single continent has been afflicted by a pandemic which has challenged the way we all live. From the way we interact to the way we work, COVID 19 has left a mark which will have a direct impact in the way that buildings are being designed now, but more profoundly, the way in which we will conduct our lives in the future. The University of Miami is the second largest healthcare center in the United States and its Medical Campus has never had a cohesive vision. A unique opportunity has appeared where partnerships with the private sector could possibly create a new Medical City in which healthcare, wellness, research, and hospitality co-exist in one single campus. The Studio will explore the design of such a center, focusing on 4 specific programs: A Medical Education Center; a Research Facility; a Residential Building and a Hotel, all within the same complex. We will begin with a Master Plan for the complex, and then we will produce individual building designs for each of the program components. The course will be taught on-line and will involve lectures by outstanding experts in the design of Healthcare and Mixed-Use facilities. We will have on-line reviews and design critiques which will be scheduled so that students will have individualized one-on-one attention

FALL 2020 ARC 407-510

ROME STUDIO A NEW PALAZZINA IN THE AVENTINO

Carmen Guerrero, Professor Mon & Wed 1:30-6:00 Combination of virtual and in person sessions

In comparison to other European capital cities, the historic center of Rome has remained largely untouched by contemporary architecture. This studio will be an exciting opportunity to transform one of the oldest neighborhoods in Rome by proposing a new housing project. Students will develop a new and contemporary housing solution that is informed by modern Mediterranean architecture.

In light of the global pandemic, lower density housing projects with generous interiors and exteriors, offering healthy, well ventilated spaces and green areas, will become more attractive solutions for urban centers. For this studio, a lower density housing type known as the Roman palazzina will be considered to be the most viable precedent.

The methodology for the studio will require an in-depth analysis of the Roman palazzina and research on Mediterranean architecture. Students will translate the spirit of modern Mediterranean models to a housing idea that is inclusive of a larger demographic than the palazzina and one that proposes an alternative to the unsuccessful, unhealthy and oversized housing projects of contemporary times.











SLICES

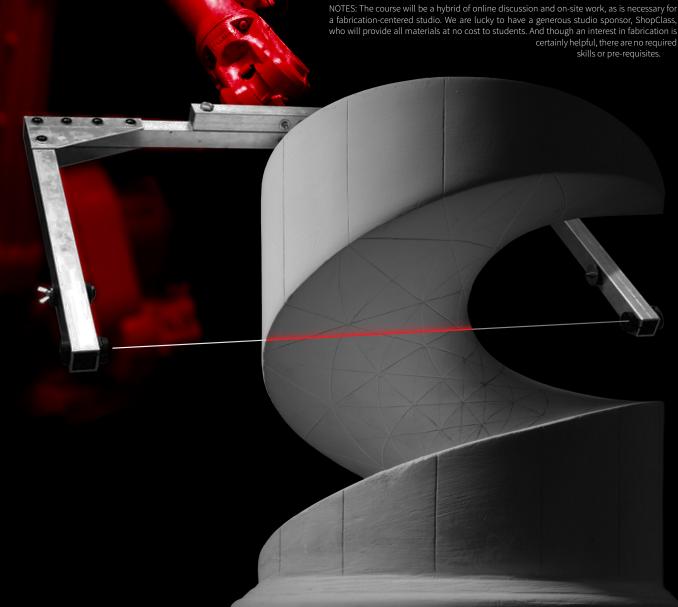
STRUCTURAL FOAM + ROBOTIC STEREOTOMY

The relationship between form and function, and in particular the reciprocity between geometry and structure, is among the oldest preoccupations in architecture. And despite the liberatory promise of structural surfaces (especially as exemplified in the work of Felix Candela, Frei Otto, Heinz Isler and their kin), the extruded beam, uniform slab and plumb wall still reign. This persistence is equal parts a failure of our collective imagination, and a limitation imposed by industrial production. An example: the steel beam has been produced the same way for some two hundred years. It is straight, uniform and flat because it has been rolled or extruded. The structurally perfect beam, in contrast, is shaped, allocating material where it most needed and best used. In short, structural geometry and efficient production are at odds under the prevailing industrial paradigm.

Emerging technologies, specifically computational design and robotic fabrication, promise to transcend the limitations of aging industrial production processes. It is possible, only in our moment, to have it both ways: structural geometries that can also be produced efficiently. The aim of this studio is to explore the radical new possibilities engendered by this shift. We will focus on one method (among many) for this exploration: using the robot arm, equipped with a hot-wire cutter, to slice foam blocks. The solids formed this way, by definition bounded by ruled surfaces on all sides, will have inherent structural properties that we will leverage to compose larger assemblies. Two common building systems will serve as our real-world precedents for foam acting as structure: Insulated Concrete Forms (ICFs) and Structural Insulated Panels (SIPs).

Put another, equally truthful and much less verbose, way: this studio will be using a robot to cut blocks of foam into spectacular shapes. We will imagine them at many scales, combine them with other materials in interesting ways, and add them together to make larger things still. We will discuss geometry, structure, pasts and futures. You will get hands-on time with the Kuka robotic arm, and learn the software necessary to use it. Through playing, testing, experimenting, prototyping and other modes of making, you will transform raw material into

a fabrication-centered studio. We are lucky to have a generous studio sponsor, ShopClass, who will provide all materials at no cost to students. And though an interest in fabrication is certainly helpful, there are no required

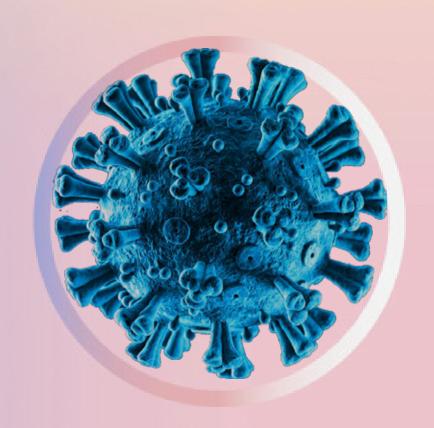


PROF. JOEL LAMERE jlamere@miami.edu

Online Design Studio

Topic

What should the hospital look like after COVID-19? As we view hospitals in the midst of the pandemic, it is clear that current design strategies in many cases exacerbate contagion. Reports from across the globe suggest healthcare workers represent from 14 to 30% of the reported coronavirus cases. This studio explores the foundations of the western hospital, historic pandemic impacts, and current COVID-19 impacts, to develop a new prototype with greater capacity to deal with crisis conditions, better protect caregivers, patients, families and communities, and contribute positively to overall individual and community health and well-being.



Re-Imagining the Hospital after COVID-19

6 credit studio: ARC 407, 408, 509, 510, 609

FALL 2020

An online interdisciplinary studio

Professor: Joanna Lombard

jlombard@miami.edu (305) 793 9195

UNIVERSITY OF MIAMI SCHOOL of ARCHITECTURE





"... the organism which destroys its environment, destroys itself."

Gregory Bateson, English Anthropologist / Social Science 1904-1980

In the simplest of terms, Bateson acknowledges the act of environmental alteration as a potential act of self destruction. Consciously or unconsciously the decisions made at the scale of the building impacts both geological and ecological systems near and far; consequently, architectural provocations must address both the built and natural environments simultaneously.

The studio Wood and Everything After will explore the resurgence of wood as a building material through the simple question, what is the architectural morphology of wood? Student driven research will delve into architecture as a conscious act of design linking territory, industrial processing, logistics, tectonics, form and space. These elements will stand as the alibi to strip away the ambiguity of wood as a commodity and serve to understand the diversity of wood's architectural building morphology: frame, hybrid, mass based, and-everything after. Deleuze and Guattari unveil the first act of the studio: surrender to the material so we can uncover the specificity of wood architecture.

'It is a question of surrendering to the wood, then following where it leads by connecting operations to a materiality, instead of imposing a form upon a matter: what one addresses is less a matter submitted to laws than a materiality possessing a nomos. One addresses less a form capable of imposing properties upon a matter than material traits of expression constituting affects.'

Gilles Deleuze [French Philosopher] & Félix Guattari [French Psychoanalyst]

Wood and Everything After Upper Level Option Studio U|SoA Fall 2020 Assistant Professor Christopher Meyer

Studio Description:

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¹ Bateson, Gregory. "Form, substance and difference." *ETC.: A Review of General Semantics*, vol. 72, no. 1, 2015, p. 90+. *Gale OneFile: Educator's Reference Complete*, https://link-gale-com.access.library.miami.edu/apps/doc/A424874913/PROF?u=miami_richter&sid=P ROF&xid=d05919bf. Accessed 7 July 2020.

² Deleuze, G. & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis, MN: University of Minnesota Press.

Studio Modality:

The studio is slated to meet in person two days a week at the School of Architecture campus facility. All in-person meetings will strive to meet social distancing guidelines for the protection of the students and faculty. All in-person meetings will require facial covering or a protective mask worn by the students and faculty at all times. If necessary, accommodations for hy-brid or remote learning modalities will be provided with the intent to maintain the highest level of architectural education and experience. Studio Modality is at the discretion of the University of Miami and the School of Architecture and will be evaluated as COVID-19 guidelines are updated to reflect the evolving conditions.

Studio Travel:

The Wood and Everything After studio is projected to travel to northern Florida, Southern Alabama and Georgia to visit a working forest(s), meet with forestry/wood utilization groups and observe a cross-laminated timber [CLT] manufacturing plant. Student travel will be subsidized by the LU_Lab through a U.S. Forestry Wood Innovation Grant. Studio travel is at the discretion of University of Miami policies and will need to be assessed in advance of the travel dates for evolving conditions of COVID-19 and associated protocols.



/ITHOUT

Openly alluding to Ed Ruscha's seminal publication Twentysix Gasoline Stations from 1963, this studio proposes to document Miami's gas stations in a "dead-head, straight on" way so as to discover the worthiness and beauty of these everyday structures. After a thorough examination and visual collection of gas stations along Miami's main axes of mobility, we will select the ones with the most transformative potential so as to mutate them into something new. Metamorphosing from the real into the surreal, on an evolutionary basis we will attempt to envision another Miami full of possible architectures and magical surprises, fluctuating between issues of bizarre change and radical continuity. However, with all this optimism at hand, each initial concept will be rigorously tested in its utopian potential as it faces the more pragmatic—structural, constructive and thermo-dynamical—realities inherent to the discipline and specific to the tropical climate. Large-scale models and visual montages will be important instruments to achieve the desired transfigurations which in a meaningful way should contribute to their urban settings. The results of the studio are planned to be exhibited in 2021.

STUDIO SAUTER VON MOOS, 6 credit points | mandatory site visits & physical model building (if possible) | Prof. Charlotte von Moos

After the Pandemic



Winslow Homer, Hurricane, Bahamas 1898, Water color and graphite on off white wove paper, 1898

Resiliency and Recovery Master Plan for Cultural Patrimony in the Abaco Cays

Architecture and Urbanism, Historic Preservation, Classical and Vernacular Building Traditions, Social Geography and Material Culture, Resilient Planning, Sustainable Urban and Community Development, Transportation, Island Geo- Culture, Ocean Civil Engineering, Water Resource Management

After the storm is a time of recuperation and reconstruction. It is also a time of introspection and memory. Memory of what is lost and passed in our own lives and in our consciousness as a people in community. Cultural Patrimony of the built environment is the common and shared heritage where the collective memory of a society, in time and place, resides and is manifest.

The settlements of the Abaco Cays are such patrimony for the peoples of The Bahamas and, to the extent these towns and places share a common history and culture with a broader Caribbean and mid-Atlantic heritage, have a greater ethno-geographic meaning. The studio is a focused and committed effort towards a designed planned recovery for the island settlements based on architecture, landscape, urbanism and infrastructural practice, which is at once resilient, projects forward and preserves, for future generations, the meaning and beauty of a distinct culture.

The Studio is an extension of the *After the Storm Studio*, which addressed the destruction of Hurricane Dorian in the Abaco Cays, and contextualizes the effect of the pandemic unto a broader fabric of disaster response and the stewardship of cultural patrimony.

HYBRID STUDIO