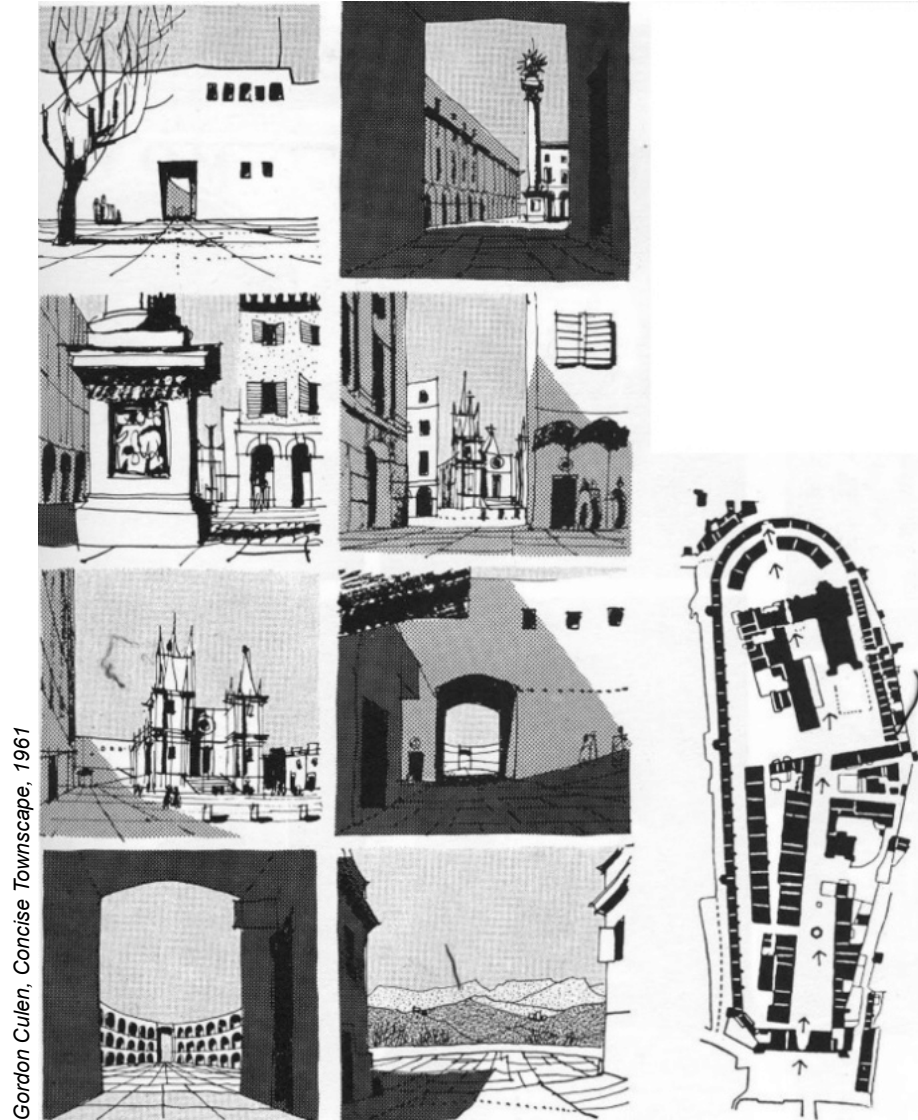


URBANISMUS PRACTICUM

PHENOMENOLOGY OF CITIES

Jaime Correa
Associate Professor in Practice

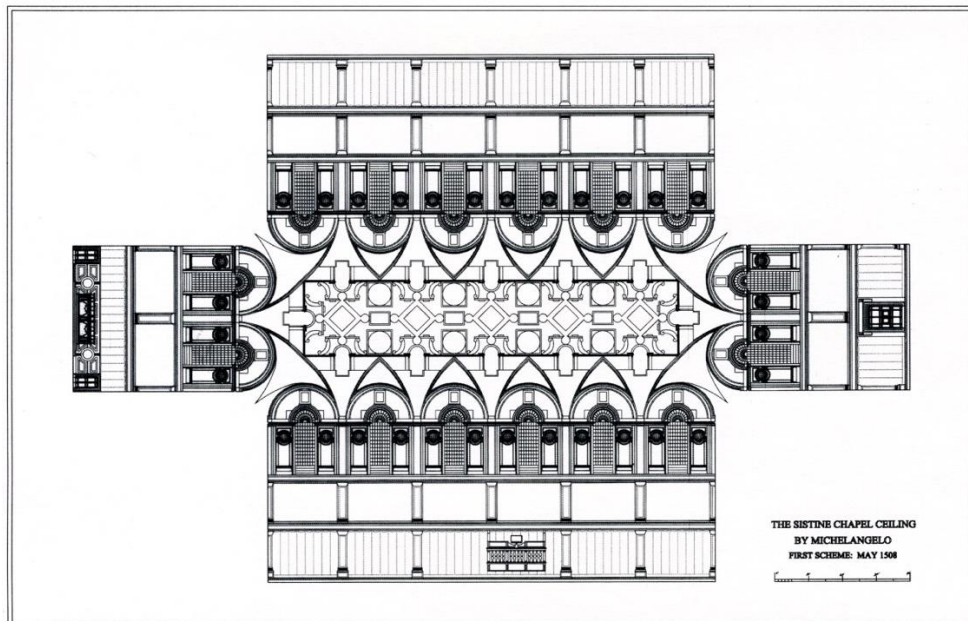


Gordon Cullen, Concise Townscape, 1961

At a time when our collective fascination with cities has gone global, it is important to learn how to recognize, evaluate, and understand the origin of physical objects, spaces, and landscapes composing our man-made world. This seminar contributes to the on-going debate that cities and material culture define who we are, determine how we live, and affect our personal interactions in the so-called “*analogue and digital worlds*”. As city dwellers we are constantly stirred by myriad emotions, images, and memories; as architects, urban designers, and real estate developers, we have the responsibility of orchestrating these shared sentiments into both our physical and imaginary worlds.

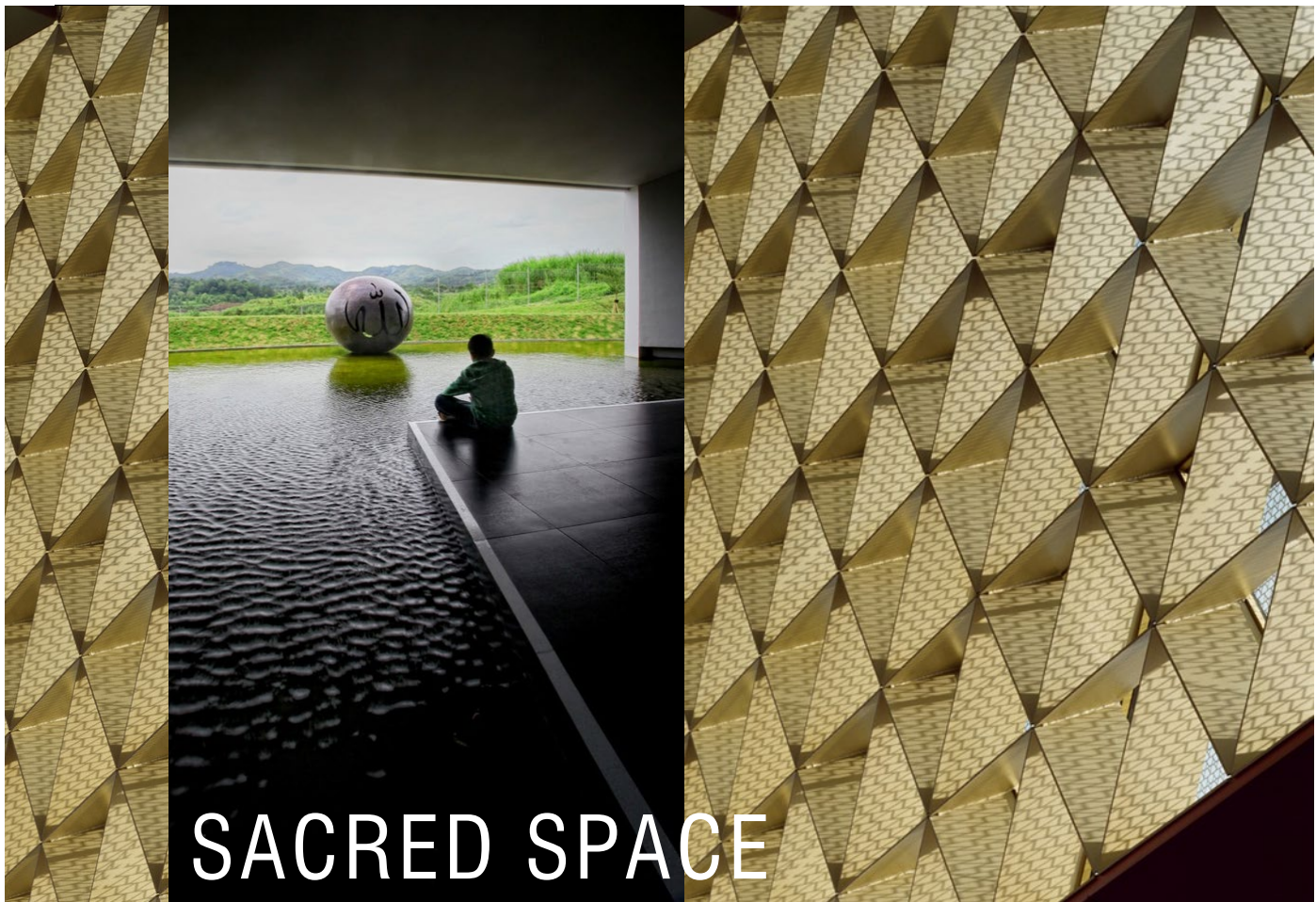
Weekly “*field trips*” and class seminars supplemented by discussions, exercises, and lectures shall allow participants to define individual hypothesis and critiques regarding the future qualities and effectiveness of the contemporary American city. For the sake of intellectual and practical development, faculty will introduce key references and conceptual frameworks that foster the healing of present-day urban forms, critique and explain our current socio-economic segregation, and provide a medium for the advancement of objects of architecture and urbanism engaged, morally and ethically, in the production of universal happiness.

School of Architecture | University of Miami
Fall 2022
ARC514/614 MICHELANGELO
Section R
T-TH 2:00 to 3:15 pm
Old Gallery
Professor Rocco Ceo, FAIA



Michelangelo's first scheme for the painted architecture of the Sistine ceiling. Drawing by Georgy John, c. 2001

This course addresses current preoccupations with drawing as a form of research. Through the seminar's readings, student research, and drawings, we will engage in an in-depth study of Michelangelo's work across mediums in order to understand historical research and interpretation. The intention of the course is to illustrate the value of developing a methodology to research through drawing. The goal of the course, using Michelangelo as a case study, is to develop new knowledge about his work through drawing and critical analysis. The methods learned in this course will then be applicable to other important subjects.



SACRED SPACE

ARC583/683 and REL406
a 3 Credit Elective on
Architecture and Religion
Fall 2022 – Tues. 5:00 – 7:50 pm

Faculty:

Dr. William Green, College of Arts & Sciences
Prof. Denis H Hector, School of Architecture

Content:

An inter-disciplinary seminar, **SACRED SPACE** explores the multiple and layered intersections of spirituality and architecture through case-studies of contemporary and historic religious buildings rooted in diverse cultures, eras, and places. Students and faculty from across the University discuss ideas of sacredness, place and form to identify relationships, connections, and fundamentals.

Topics are explored through readings, discussion, and case studies. Over the course of the semester, students prepare case studies for group discussion. This course is offered in the Harkness Table format which emphasizes discussion-based learning.

<https://www.archdaily.com/317862/the-jewish-center-in-munich-wandel-hoefler-lorch-hirsch>
https://www.archdaily.com/87587/al-irsyad-mosque-urbane/5012e84628ba0d06580004ec-al-irsyad-mosque-urbane-photo?next_project=no

Leave this area empty
(2" from left and right borders and 1" from the top)

**School of Architecture | University of Miami
Spring 2022**

**ARC 527 and ARC 627 (graduate students)
Architectural Photography and Composition**

Steven Brooke



UAE PAVILION, DUBAI EXPO 2020
Santiago Calatrava, Architect

This unique course develops the basic compositional and technical skills necessary to photograph architecture, landscape, and interiors. The emphasis is on composition and the taking of photographs in the field. Classes meet once a week for three hours. The course explores in depth: **(1)** History of the Depiction of Architecture. **(2)** Principles and Systems of Composition. Examples are drawn from artists such as: Caravaggio, Cezanne, Corot, de Chirico, Canaletto, de Hooch, Hopper, Piranesi, Poussin, Saenredam, Turner, Vermeer, Hugh Ferriss, and others. **(3)** Photographic Techniques. **(4)** Software Techniques. The subject matter includes: individual buildings, streetscapes, building complexes, high-rises, landscape, commercial and residential interiors, evening photography, room vignettes, still life, black-and white photography, and architectural models. Students may use either a 35mm digital camera (preferred) or a smart phone. Steven Brooke has been photographing architecture and design for over 40 years. He is a Fellow of the American Academy in Rome and winner of the National AIA Institute Honor Award for Photography. He has photographed over 40 books on architecture and design, ten of which he has also authored. His work may be seen at www.stevenbrooke.com. Questions may be addressed to steven@stevenbrooke.com.



Thinking Lines. Drawing Thoughts.

The focus of this course is to teach students skills to successfully develop and communicate thought processes. We will start exploring "the line" as a mode of expression and carrier of meaning. Through "the line", students will be guided through didactic and challenging exercises exploring eye-hand coordination, gesture, space and composition. A wide range of drawing methods will be covered, allowing students to experiment and incorporate traditional and non-traditional approaches. Subject matter will alternate between figurative and still life, we will draw outside and inside the classroom, shift from dry to wet medium, as well as vary the size and scale of drawings. The course will focus on each student's personal development, with the sole purpose of enriching their own creative explorations.

Faculty: Gonzalo Fuenmayor
FALL 2018



World Architecture + Reflective Practice Architecture in the Age of Globalization

3 credits ARC 572-672 T/TH 6:25-7:40 Prof. Jose A. Gelabert-Navia

"Globalization is a disputed term, packed with a rich and intricate array of interpretive possibilities that, once released, raise important questions about architecture, its institutions and its outcomes. Conventionally, the word "globalization" has been associated with flows of capital, labor, products and ideas that have crossed, challenged and blurred established national boundaries. It often evokes images of a shrinking world, in which accelerating flows of information and travel technology compress time and space in the relationships between world cultures, political economies and the built environment. Today the idea of the global city, once characterized by nodes of high-rise towers associated with nexuses of capital flows vying for command and control of the world economy, is being reconsidered. With advances in electronic media and telecommunications, people can live simultaneously in both bounded urban public environments as well as highly constructed personal virtual environments. Such virtual connections permit national formations to be maintained across international boundaries, as individuals construct virtual neighborhoods that sustain a life of what theorist Benedict Anderson refers to as "long-distance nationalism." (Architectures of Globalization, Kirsten Walker, PLACES, 14:2, p.70)

World Architecture and Reflective Practice, is a three credit architectural history and theory course that seeks to examine the ways in which architecture and the built environment are shaped by, and shape, globalization. The course is organized around two major topics: **Places** and **Practices**. The course will consist of two weekly lectures and two research papers. Topics will include: **Critical Regionalism, Architecture in the Age of Globalization, Colonialism and Globalization, Mega-Cities, Archi-Tourism, China, Africa and the Middle East.**

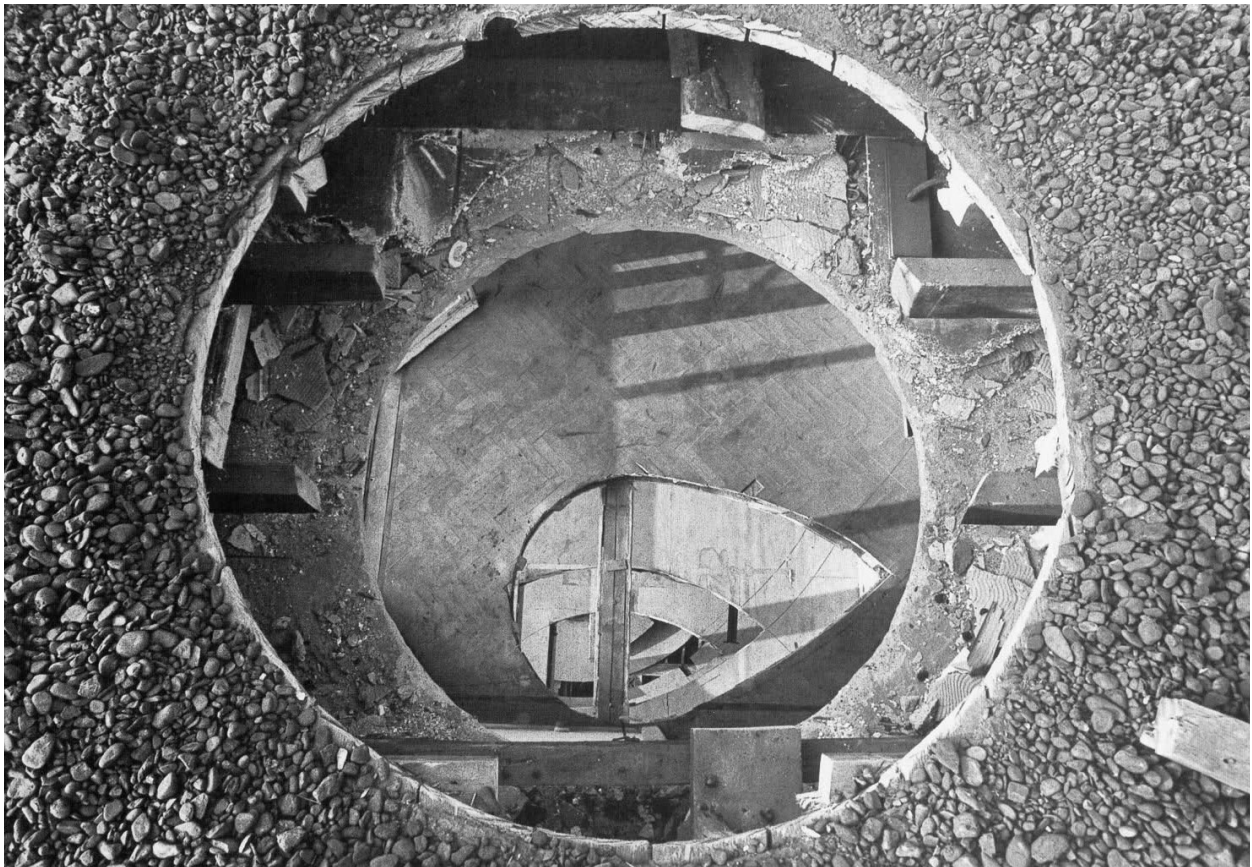
School of Architecture | University of Miami
Fall 2022

Elective Course

A ROCK WITH A HOLE CUT THROUGH

– REMODELING A SERIES OF GORDON MATTA-CLARK'S 'CUTTINGS'

Florian Sauter



Conical Intersect, Paris, 1975

Difficult to grasp in their spatial complexity, and even more so since the run-down buildings Gordon Matta-Clark appropriated for his sculptures were destroyed shortly after his interventions, the physical model appears to be the ideal instrument to capture the raw power of the American artist's "non.u.mental" work. On that basis, and for the first time in history, this seminar seeks to re-construct a series of Gordon Matta-Clark's "anarchitectural" interventions—*Splitting: Four Corners*, 1974; *Bingo*, 1974; *Day's End*, 1975; *Conical Intersect*, 1975; *Office Baroque*, 1977; *Circus: The Caribbean Orange*, 1978—through a set of large-scale models. At the same time, it introduces the student to the exact analysis of historical data. In a larger, ideological sense, the seminar is to "open a state of enclosure," especially towards the architectural community, which in Matta-Clark's opinion

for much too long ignored his evolving notion of what space is really all about: "In spite of no longer working as an architect I continue to focus my attention on buildings, for these comprise both a miniature cultural evolution and a model of prevailing social structures. Consequently, what I do to buildings is what some do with languages and others with groups of people: I organize them in order to explain and defend the need for change. However, unlike other artists, I feel the need to become directly involved in a context that is physically, politically and socially structured, in short, to leave the studio and go out on the streets. To leave the studio to relate to those buildings that have been abandoned by a system that doesn't look after them, that imposes the use and fate of property only as an end in itself. What I propose is to transform one of these industrial constructions in a liberated way."



MADE IN MIAMI

In 1986, Terunobu Fujimori and Genpei Akasegawa founded the Street Observation Society in Japan. The members of this Society came together to search for moments of beauty found in ordinary, everyday places. The group's activities were primarily a fusion of two complementary approaches to looking at the city including: historical fieldwork and the analysis of overlooked buildings throughout urban Japan; and the Dadaist sensibility of identifying and categorizing readymade objects lying latent in the streets of Tokyo.¹

Inspired by their efforts, MADE IN MIAMI will observe, analyze, and record the material culture and vernacular traditions of Miami, searching for the unique characteristics that arise from an understanding of the poetics of the prosaic. The course will be structured with informal lectures followed by a series of walks throughout the city's key neighborhoods. Students will be asked to function as urban detectives, recording their discoveries (by way of photography and drawing) to uncover an alternate reading of the city not readily advertised or promoted in contemporary depictions of Miami.

Faculty: Prof. Adib Cure / Fall 2022

¹ Daniell, Thomas. "Just Looking, The Origins of the Street Observation Society" in AA Files 64, pp. 60-68.

School of Architecture | University of Miami
Summer 2022

ARC 512/612: Advanced Visual Analysis
Thinking Lines; Drawing Thoughts

Gonzalo Fuenmayor



The focus of this course is to teach students skills to successfully develop and communicate thought processes. We will start exploring “the line” as a mode of expression and carrier of meaning. Through “the line”, students will be guided through didactic and challenging exercises exploring eye-hand coordination, gesture, space and composition. A wide range of drawing methods will be covered, allowing students to experiment and incorporate traditional and non-traditional approaches. Subject matter will alternate between figurative and still life, we will draw outside and inside the classroom, shift from dry to wet medium, as well as vary the size and scale of drawings. The course will focus on each student’s personal development, with the sole purpose of enriching their own creative explorations.

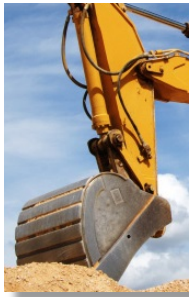


Re-combinant innovation

Urban policy innovations as
multi-**level**-multi-**value**
policy re-combinations

- ARC 586/686-T Crafting Urban Policy changes at international, national and regional levels to attain global resilience objectives
- Thursdays, 5.05 pm – 7.50 pm

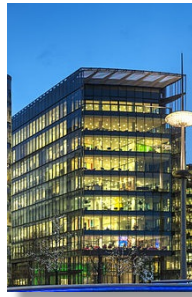
CONSTRUCTION MANAGEMENT



LAND



MULTI-FAMILY



OFFICE



INDUSTRIAL



RETAIL

ARC 549 / ARC 649

FALL 2022

INSTRUCTOR: VICTOR SANTANA RA, LEED AP

Real estate development is a collaborative, multi-disciplinary effort in which a group of professionals contribute their expertise to a project in a time-sensitive environment. Focusing on the five major development types: Land, Multi-Family, Office, Industrial and Retail; students will be introduced to the stages of development and the life cycle of a project. Due to the complexities of acquisitions, entitlements, financing, regulations, market fluctuations, and construction variances, the management of development projects has become a science. As a result, cost and time estimating tools have been established to assist in resource management and in the execution of projects.

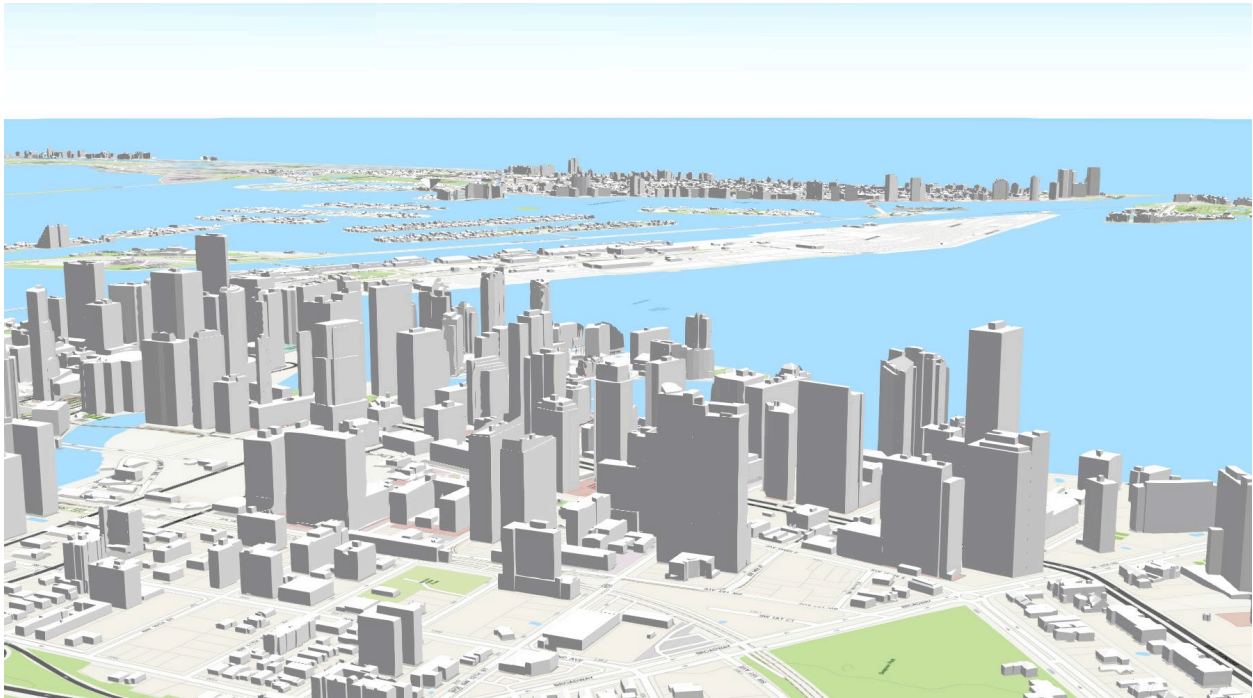
Students will be exposed to the development types; risks and responsibilities of the stakeholders; project organization standards; legal structures, entities and contracts; cost and time estimating methods; and the economics of project financing. Through a series of lectures, invited guest lecturers from the profession and a hands-on construction schedule term project, students will have the knowledge and understanding necessary to make informed decisions and impact the success of projects.

**School of Architecture | University of Miami
FALL 2022**

**ARC 581/681-T2: GEOSPATIAL VISUALIZATION – 1 credit
ARC 594/694-T2 Geographic Information Systems in Urban Design - 3 credits**

GIS and Cartography in Architecture and Urban Planning

Timothy B Norris, PhD – Librarian Associate Professor Data Science
Christopher Mader – Institute for Data Science and Computing



This course introduces the student to Geographic Information Systems (GIS) and how to apply GIS technologies in sustainable and resilient urban planning and architectural design contexts. Three principal activities will be emphasized: how to find, access, and use pre-existing GIS datasets; how to use industry standard tools such as ArcGIS and QGIS to perform basic analysis of geospatial data; and how to use ArcGIS and QGIS to transform and export geospatial data for use with applications such as Illustrator and AutoCAD. A series of hands on lab based exercises will build student GIS skill sets and encourage students to produce materials applicable to real-world projects for their respective research projects or design studios. The one credit option is designed to provide a basic introduction to geographic information systems, to foster spatial literacy, and to generate skills that will enable students to engage in geospatial storytelling and advanced cartographic projects. The three credit option introduces tools to enable students in more advanced geospatial data analysis and visualization with a focus on sustainable and resilient urban design and planning.

* H * A * B * S *

Summer 2022 ~ ARC 518/618 Documentation of Historic Architecture
Session A, Section D; TR 1:15-4:25 pm; A48 120, Old Gallery ~ Ricardo Lopez, SoA Instructor

HISTORIC AMERICAN BUILDINGS SURVEY

In 1933 the Park Service established the Historic American Buildings Survey following a proposal by Charles E. Peterson, a young Park Service landscape architect. It was founded as a make-work program for architects, draftsmen and photographers left jobless by the Great Depression. Guided by field instructions from Washington, D.C., the first HABS recorders were tasked with documenting a representative sampling of America's architectural heritage. By creating an archive of historic architecture, HABS provided a data base of primary source material for the then fledgling historic preservation movement. Today at the University of Miami, the Institute for Data Science and Computing (IDSC) has the tools to enhance the documentation effort with new technologies. Drone photography and lidar scanning, coupled with advanced software processing, can yield high resolution photogrammetry and 3D point clouds. By combining these new methods with the HABS standards and guidelines, this course aims to uncover a new standard for the documentation of historic buildings.



CORAL GABLES CONGREGATIONAL CHURCH

As part of George Merrick's plan for Coral Gables, he envisioned an iconic church to serve as a meeting place in the heart of the city, in honor of his father, Solomon, who was a Congregational minister. The Coral Gables Congregational Church was organized in 1923 and initially met at a parsonage on Columbus Boulevard that was donated by Merrick. He hired the famed Pittsburgh architectural firm Kiehnel & Elliott to design the elaborate Spanish-style edifice on DeSoto Boulevard. After its completion in 1925, the church embarked on community involvement through civic service, Christian education and promotion of music and the arts. One of the city's first public buildings, the Church served as a hall for city government meetings, educational events and other gatherings.

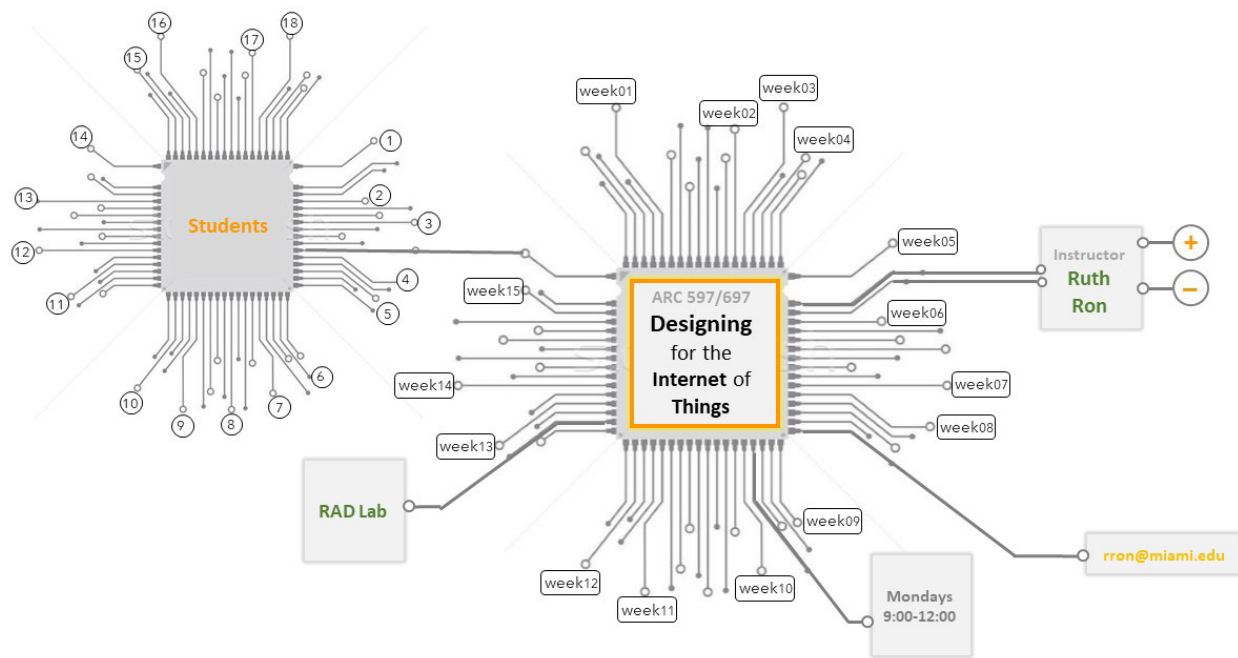
Undergraduate and Graduate Architecture Students will learn to use the HABS Standards and Guidelines for measuring and drawing historic buildings. There will be lectures introducing them to new documentation technologies and their applications. The students will be required to travel to the site to produce Field Notes including proportional sketches and recorded dimensions of the subject building in its current conditions. Faculty from IDSC will demonstrate data collection techniques and on site. Back at the studio students will draft a set of plans including site plan, floor plan, elevations, sections, and details. They will learn to incorporate photogrammetry and point clouds into their plans which will expose the accuracy of the drone- and lidar- based documentation and also expand the reach of traditional methods. By the end of the semester they will be expected to complete the documentation drawings up to the highest standards in preparation for submittal to the Library of Congress in Washington. A final presentation will be held on campus at the Visualization Laboratory where one can fully appreciate the level of detail in drawings, models, and orthophotos.

Note: There will be regular site visits to the building site across the street from the Biltmore Hotel; 8 min drive / 15 min bike ride from campus.

School of Architecture | University of Miami
Spring 2022

ARC 597/697: DESIGNING for IoT
Designing for the Internet of Things

Ruth Ron



The **fourth industrial revolution** is characterized by the integration of technologies into everyday objects and blurring the boundaries between physical and digital realms. Information technology and automation converge in innovative ways and change our surrounding environment. We have “things” that measure and sense activities and changes and broadcast them to the rest of the world via a network. We call this the “**Internet of Things**” (IoT).

While IoT is penetrating every aspect of our lives, we, the architects, are slow in responding to this challenge! Smart cities, smart homes and smart personal devices are enveloping us, but we have yet to create many examples of “smart spatial design” or “smart architecture”.

Over the semester, students will analyze their context, will learn **basic electronics** and **basic programming** with the goal to build a simple sequence of working IoT prototypes.

Fall 2022

University of Miami School of Architecture

Jacqueline Gonzalez Touzet, LEED ap AIA

ARC 584/684-H (3 cr)



High Performance Building and Envelope Design for Coastal Subtropical Regions

This will be a (3) credit seminar on resilient and sustainable building technology and design, with a focus on Subtropical and Coastal climates. This science and construction-based course will explore high impact solutions to the way we need design and build to meet the needs of the future.

1. *What is High Performance Design for the Coastal Subtropics? What does that entail with respect to envelope design, water and energy consumption and materiality?*
2. *What does Flood Resistant Construction mean? What materials and methods are best suited for “living with water”?*
3. *What are the most impactful and scalable changes we need to make to Building Codes in order to actually meet the UN Climate Goals? What are the current barriers to progress on making these changes?*
4. *What does “future ready” design look like for the region?*

Students will participate in round table conversations and lectures by innovative designers, contractors, infrastructure and materials scientists and engineers, and other construction industry leaders to look at real case studies and examples of innovation and solutions in building envelope design. We will encourage critical thinking and debate to really examine how viable solutions are for our region and climate. We will be visiting concrete, pre fab manufacturers and LEED platinum buildings to see where the industry is going and what progress has been made to date. We will review new Resiliency codes and examples of new Resiliency Standards and Coastal Climate Action Plans and how they will affect building, design and real estate.

The Course will focus on solutions that can be scaled and deliver maximum impact in protecting our communities while cutting back on emissions caused by current construction practices.

School of Architecture | University of Miami
Fall 2022

ARC 557/657: Design + Fabrication Techniques
Prototyping Within the Domestic Space

Max Jarosz



Washington Skeleton Side Chair by David Ajaye

Domestic furniture is often viewed as a mass-produced commodity, which conceals the design and engineering processes inherent in its production. This course seeks to explore the process of producing furniture from engineering through fabrication to uncover opportunities in the process to experiment with novel methods of producing furniture. The course will explore topics ranging from structural computation, material properties and efficiency, fabrication processes, and design. The projects will enable students to explore a variety of fabrication methodologies ranging from traditional woodworking to CNC machining and 3D printing. Students will be encouraged to iteratively test rapid prototyping strategies to evaluate their furniture designs with a final deliverable of producing a full-scale piece of domestic furniture.

**School of Architecture | University of Miami
Fall 2022**

ARC 559: Sustainability and LEED Exam Prep

The Theory, Science, and Practice of Green Building and Sustainable Development

Jonathan Burgess, LEED Fellow



Photo Credit: Palm Court - LEED Core & Shell Gold, in Miami Design District - LEED Neighborhood Development Gold Certified

Sustainability and Leadership in Energy and Environmental Design (LEED) Exam Preparation. Over the last 50 years, early pioneers in environmental activism have been joined by architects, design professionals, business leaders, product manufacturers and elected officials to advocate for environmental justice and social equity in the built environment. Climate science has advanced tremendously, as have clean energy and green building technologies, and our understanding of human health and wellbeing. Ecological design based on restoring both human and environmental health has become one of the most pressing and popular issues of this generation. This course will introduce you to some of the current best practices in green building design and construction, while providing you with opportunities to begin preparing for the LEED Green Associate exam. While this course is intended to provide an initial overview on LEED, additional exam preparation and self-study will be required for students wishing to eventually take and pass the LEED GA exam (held at a third-party testing center unaffiliated with the University of Miami).

School of Architecture | University of Miami
Fall 2022

ARC 581-681: Special Problems
Retail Placemaking

Emran Ally (Instructor)

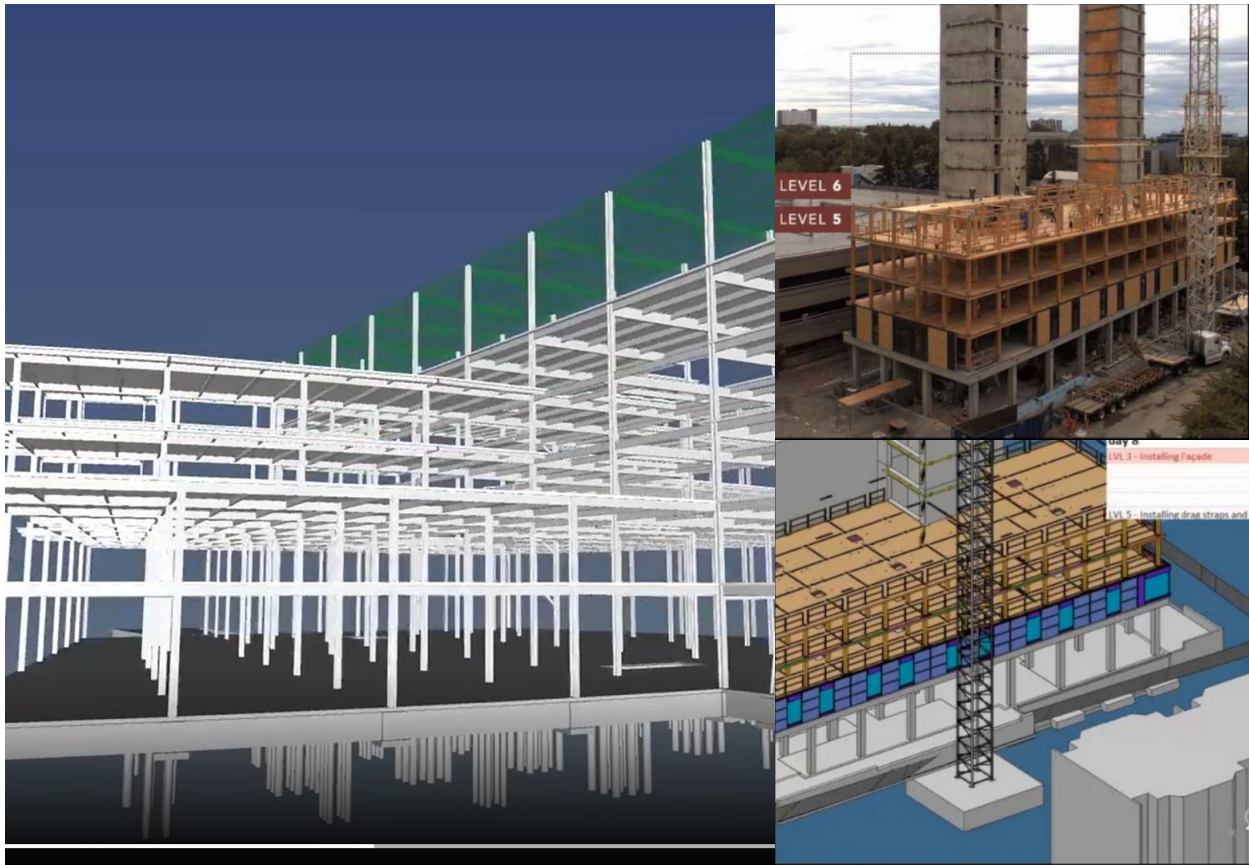


Retail real estate has a powerful impact in communities. Public institutions, private investors, and developers play a critical role in the built environment and therefore should be well versed in retail placemaking. Disruptive technologies and generational shifts have added layers of complexity to an already complex, \$12 trillion dollar enterprise. Topics covered include leasing, design, merchandising, and engagement. Students will focus on connectivity and how to identify a third place. In addition to touching on general principles and concepts, each student will develop a placemaking plan that not only creates investment value but improves the community.

School of Architecture | University of Miami
Fall 2022

ARC 585 | ARC 685 | CMA 640

SPECIAL PROBLEMS | VIRTUAL DESIGN & CONSTRUCTION
Adam Demler (*Lecturer*)

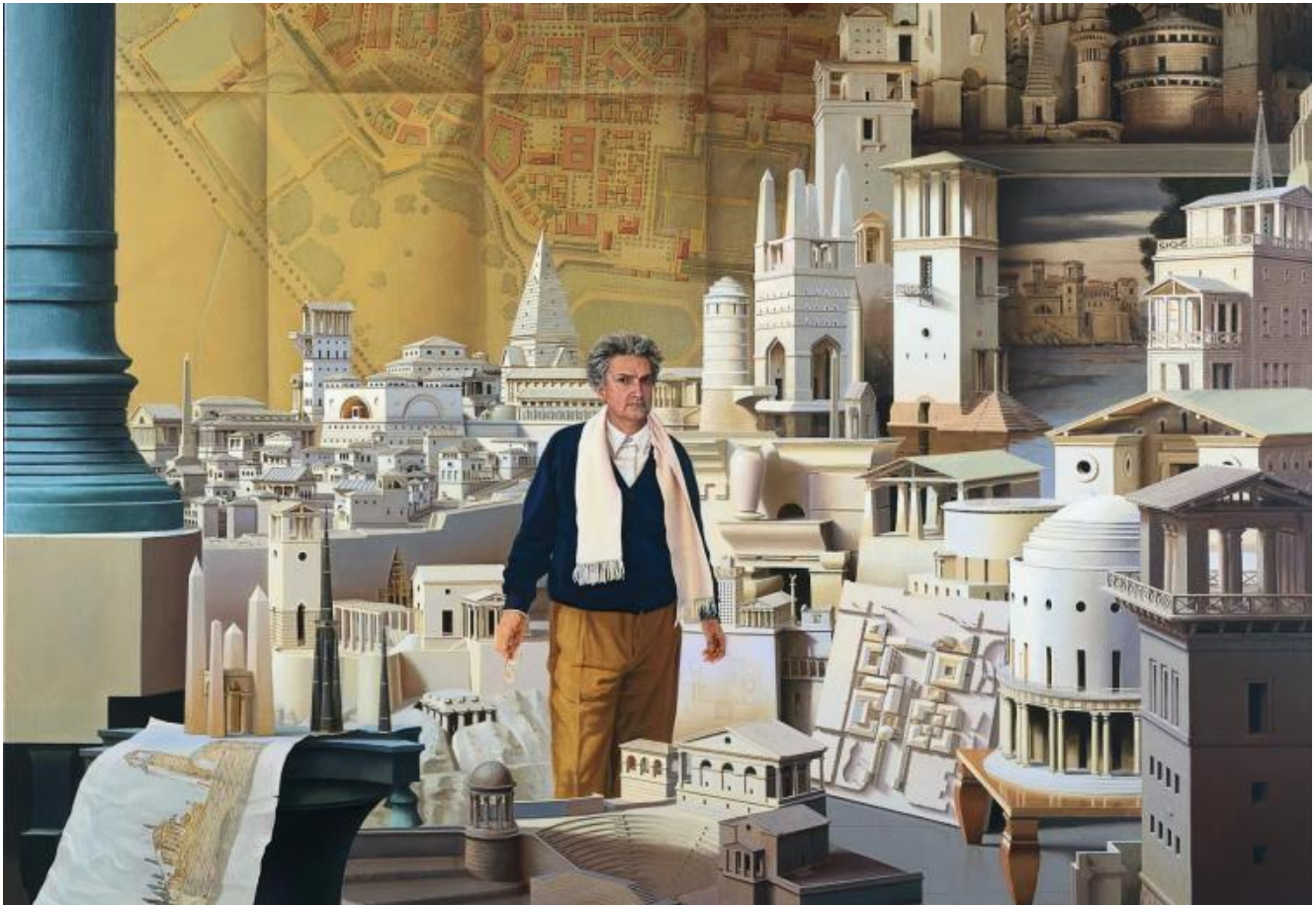


Partial Left Image: Autodesk Navisworks 4D and 5D simulation
Top and Bottom Right Images: CADMAKERS / DASSUALT SYSTEMES

This course will explore the use and applications of virtual design and construction (VDC). Students should have previous knowledge of BIM applications (e.g. Revit, Navisworks, Dynamo, etc.) and a strong interest in the use and application of VDC technology. You will work on a 3D Building Information Model (BIM) that includes Architectural, Structural, Mechanical, Electrical and Plumbing (MEP). You will also learn about material takeoff schedules, develop Revit families for the “I” in BIM, develop a construction schedule with Navisworks, perform clash detection with Navisworks and explore visual programming with Dynamo. Comparisons between different VDC software solutions, their pros and cons, will also be examined. Lets explore and learn more about Virtual Design and Construction.

LEON KRIER AND THE CRITIQUE OF MODERN ARCHITECTURE

Dr. Richard John



The architect, polemicist and urban designer Léon Krier has been one of the most influential and controversial figures in European and American architecture and urbanism of the last fifty years. He is the intellectual godfather of the New Urbanist movement which is transforming patterns of development across the globe. Locally, he has played a key role in the evolution of the UM SoA, designing our signature building, as well as the Town Hall in Windsor, FL, and his own house at Seaside.

This research seminar will focus on Krier's development as an intellectual and a designer through analysis of his teaching, writings, drawings, buildings, and master plans. The major influences and interactions in Krier's life will also be investigated, including: Le Corbusier, James Stirling, Rob Krier, The Architectural Association, Peter Eisenman, Colin Rowe, Michael Graves, Aldo Rossi, Massimo Scolari, Maurice Culot, Albert Speer, HRH The Prince of Wales, Andrés Duany, and Elizabeth Plater-Zyberk. This course counts as a History elective.

Leave this area empty
(2" from left and right borders and 1" from the top)

School of Architecture | University of Miami
Fall 2022

ARC 586/621
Housing, Infrastructure & Transportation

Eric Firley



Source: Eric Firley

What if? - concrete descriptions of future situations

The seminar provides an introduction to housing and the relationship that it entertains with transportation and other types of infrastructure as vital components of city making and community building. It balances different perspectives and interdisciplinary approaches, and understands applied research as a tool for learning. While being consistently international and comparative in its use of case-studies, the course will focus on Miami as an opportunity to analyze existing paradigms and mechanisms that shape the built environment. How did we get there, and how can we progress on a path towards more resilience? What are the right questions to ask?

The backbone of the course is constituted of a work-intensive research and visioning project during which the students will go through different stages of analysis, debate, conceptualization and visualization.

School of Architecture | University of Miami
Spring 2022

ARC 590/690 HISTORY OF CITIES & URBAN FORM
From Polis to Metropolis

DR. VICTOR DEUPI



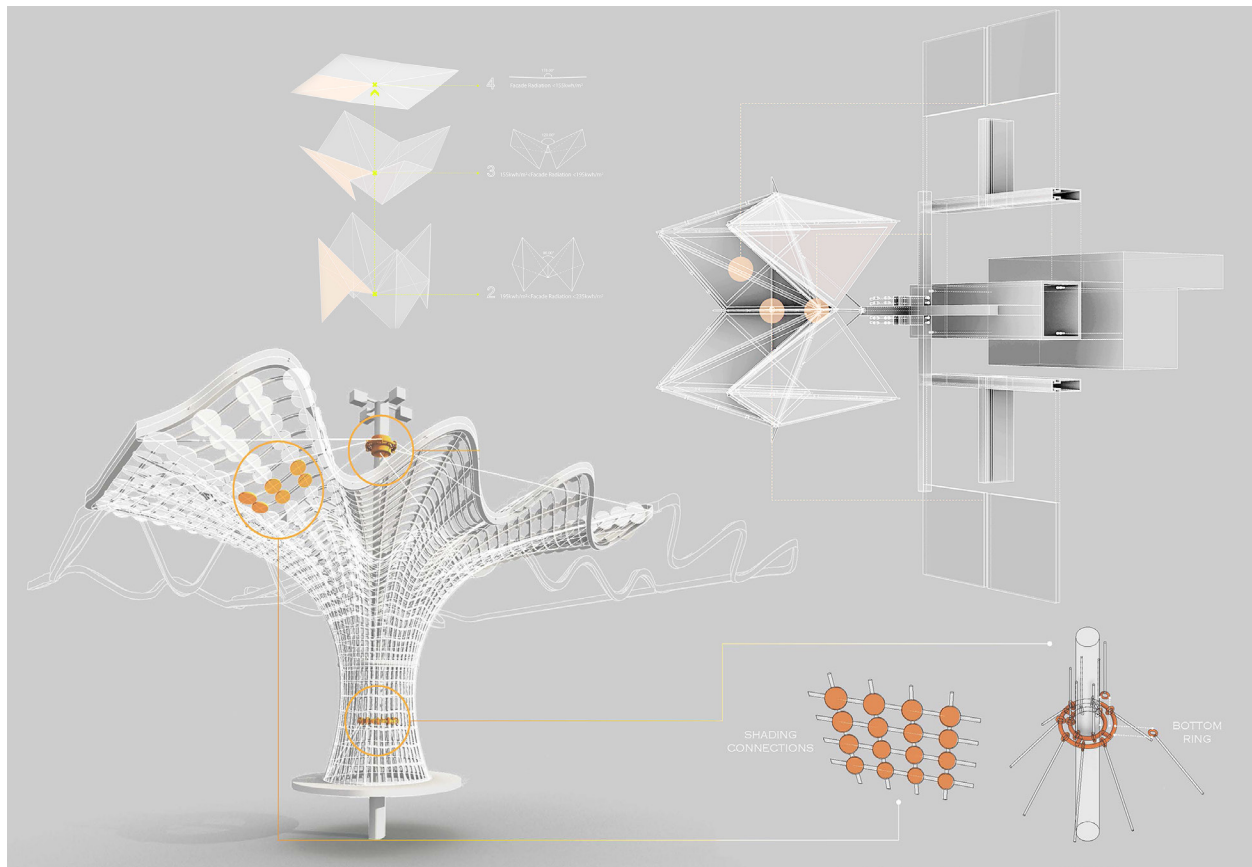
Anonymous, *Città ideale*, 15th century (Galleria Nazionale delle Marche, Urbino), Detail

This course examines the emergence and development of the city, with a specific emphasis on how urban form is created and transformed over time and is invested with cultural meaning through architecture and building typology. The survey begins with the development and evolution of urban form in the ancient world, and the contraction and reconfiguration of the cities of antiquity in early medieval times and in the Muslim world and the East. We will examine the impact of American colonization and the encounter between the Renaissance dreams of order and the pre-Columbian civilizations. Lectures and readings will then consider the evolution of the city from the Baroque period, when the process of global urbanization is rekindled, until the Industrial Revolution. The course ends with new theories about the city leading up to the start of the 20th century.

School of Architecture | University of Miami
Fall 2022

ARC 583 / 683: Parametric Tectonics
Explorations Through Iterative Design and Solar Optimization

Juan Manuel Yactayo



Past student projects from this course: Wei Wang (top) and Jingshi Wang (bottom)

Visual scripting tools, such as “Grasshopper”, enable designers to automate processes and to translate complex data into architectural language. Beyond stylistic expressions, these tools allow for a highly efficient workflow that is becoming a standard in today’s practice. This introductory course will focus on the production of a facade and pavilion prototype derived from a parametric-based approach to design. Students will work with several media including Grasshopper, animation software, and fabrication tools. At the end of this 3-credit elective, students will understand the benefits of computational tools for iterative design explorations and accurate climate analysis. In parallel, students will be exposed to different construction methodologies as well as experimental graphics techniques.