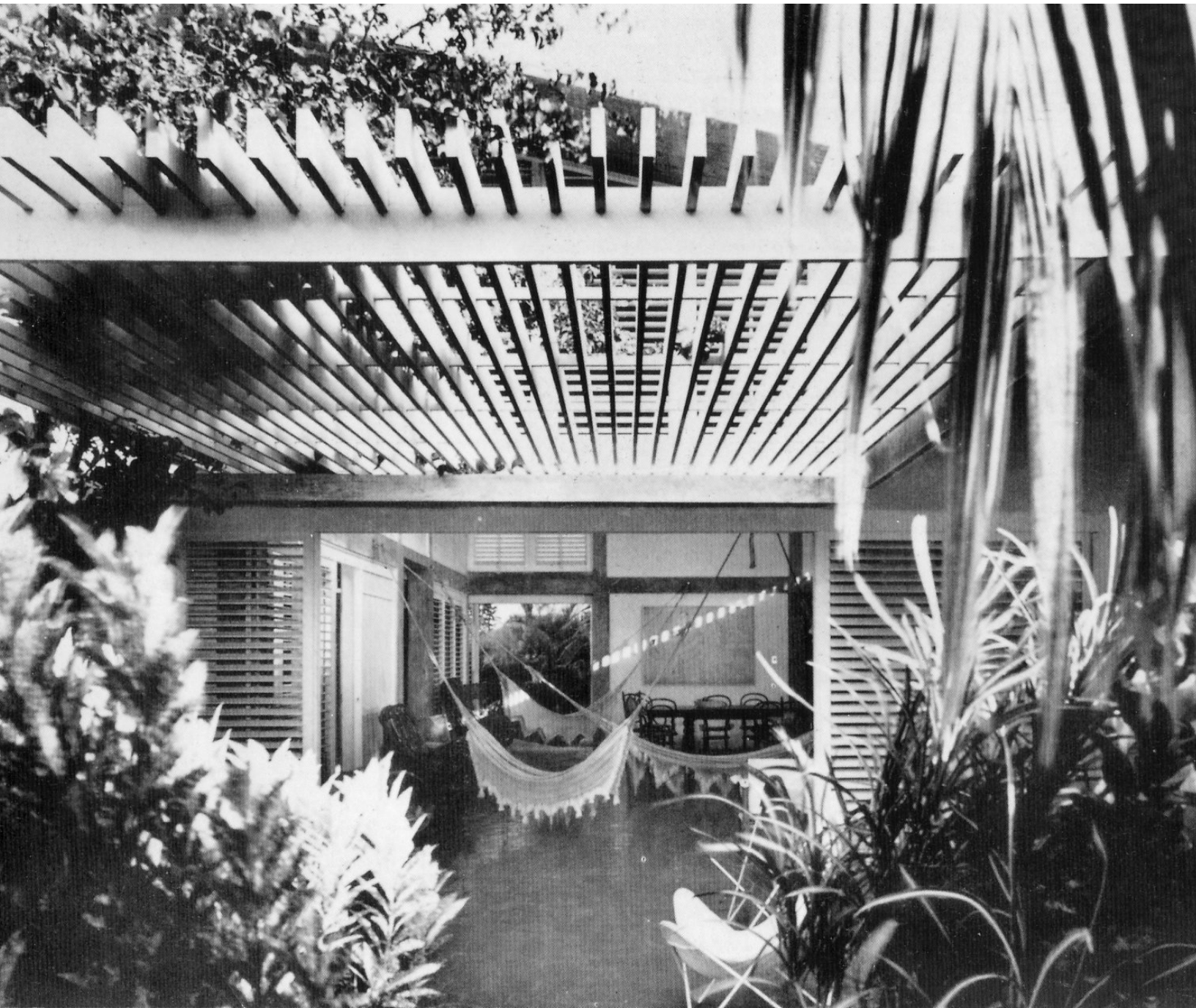
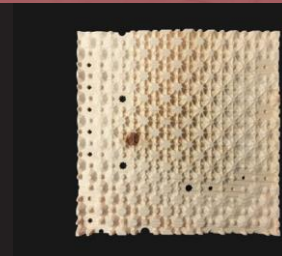
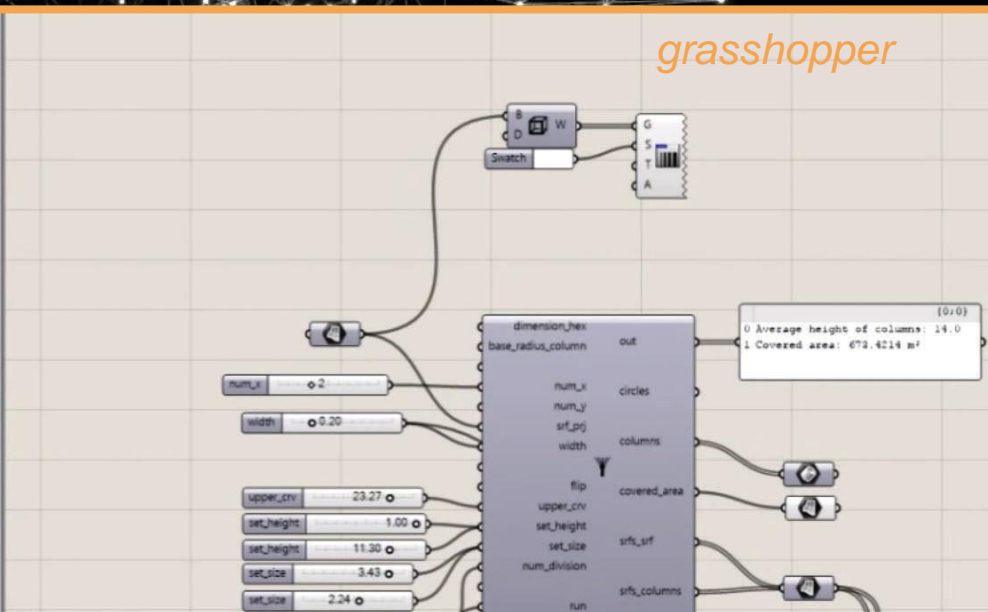
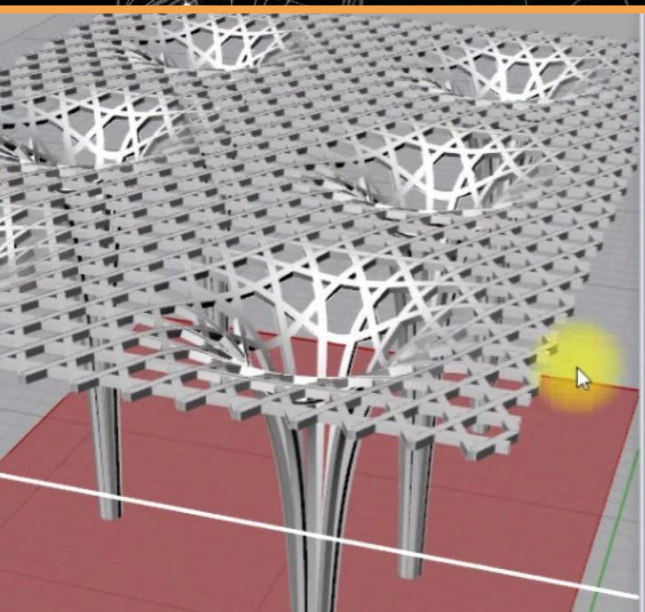


Tropicalism + Tropical Architecture

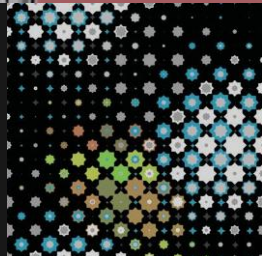


Casa Sotavento (architect's beach house), Carabellada, Carlos Raul Villanueva, 1957-58

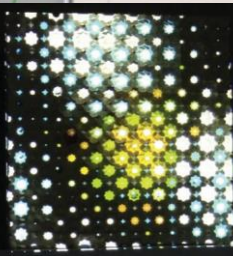
Across a wide swath of equatorial lands, tropical architecture has evolved in response to regional identity, culture, history, building typology and contemporary lifestyle. It has also, at times, distilled natural facts into exotic and symbolic fantasies. As a theme, tropical architecture came to prominence in the modern era. Tropicalist architects used modern architecture to achieve an unparalleled degree of openness to the environment, yet they also aspired to a spirit of authenticity that had deep roots in vernacular traditions and naturalist ideals. Tropicalism + Tropical Architecture surveys the numerous facets and manifestations of tropical architecture, using locations around the tropical belt – including Brazil, Venezuela, Cuba, India, West Africa, Australia and Miami – as case studies. Students will produce new research and materials to be used in future publications and exhibitions.



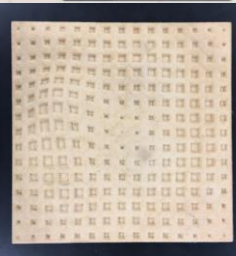
grasshopper



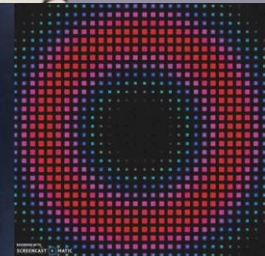
processing



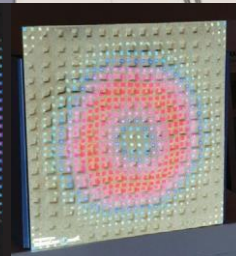
projection mapping



grasshopper



processing



projection mapping

INTRODUCTION TO PROGRAMMING FOR ARCHITECTS

ARC 598-698

TUESDAYS + THURSDAYS: 2:00 - 3:30 p.m.

Christopher Chung christopher.chung@miami.edu

As digital tools continue to play an increasing role in the Architect's toolkit, it is becoming increasingly important that Architects not only understand how to use and navigate these tools but to customize and adapt them to their specific needs. Learning how to program allows Architects to start to fully utilize the potential in digital tools by maximizing the possibilities in not only 3D modeling and digital fabrication but in responsive architecture, embedded computation and animating spaces contributing to a more dynamic and potentially inter-connected built environment.

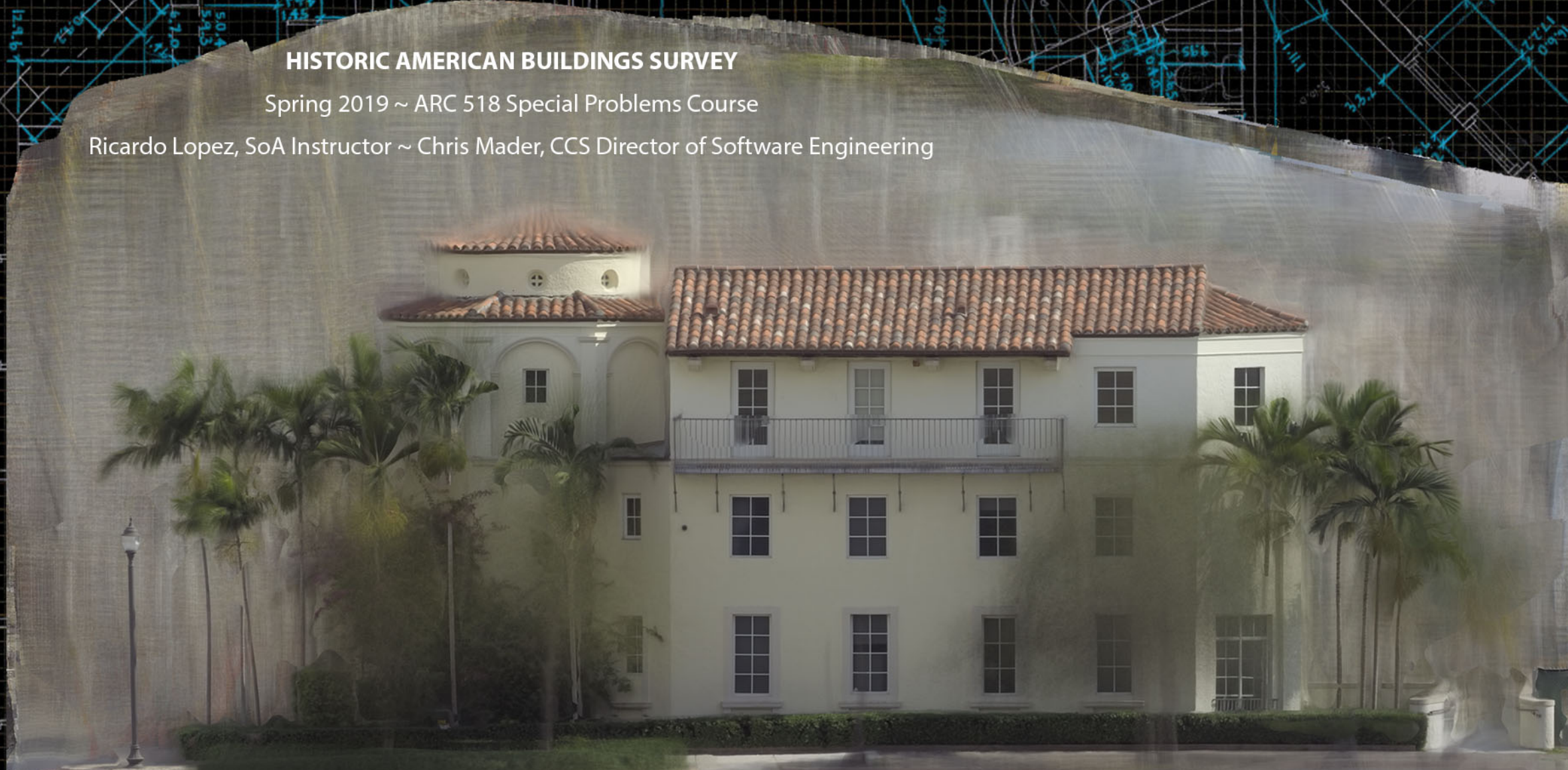
This course will be split into two parts. The first part of the course focuses on fundamental programming concepts — data types, control flow statements, functions, and classes — using Processing, an open source programming framework built with the purpose of teaching the fundamentals of computer programming in a visual context. Processing can be used for interactive media installations, data mapping and visualization, spatial analysis and much more. The second part focuses on parametric design. The course will be working with Grasshopper for Rhino, a popular visual programming IDE for parametric design, looking at its nuances and its various plugins while also applying programming concepts to create custom components within the application.

* H * A * B * S *

HISTORIC AMERICAN BUILDINGS SURVEY

Spring 2019 ~ ARC 518 Special Problems Course

Ricardo Lopez, SoA Instructor ~ Chris Mader, CCS Director of Software Engineering



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 Center for Computational Sciences (CCS) has the means to enhance the documentation effort with new technologies. Drone photography 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.

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 the CCS will demonstrate the drone photography process 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 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.

ARC 539/639 Adaptation to Climate Change
Professor Elizabeth Plater-Zyberk
Spring 2019, Tuesdays 6:25 – 9:00 pm



We live in a time of widespread concern about better ways to live on the planet. The rapid consumption of non-renewable resources, shrinking habitat of flora and fauna, toxic emissions into air, water and earth, and human crowding in un-healthy conditions, all present challenges that will require creative responses for years to come. Related to all these is the overarching natural phenomenon of climate change.

Scientists in many fields are studying its evolving conditions with a steady rate of benchmark announcements. For non-scientist observers, climate change information may seem confusing and the prospects overwhelming. It is difficult to assess one's own role in the problems or potential solutions.

This course is intended for the student interested in developing a foundation of basic knowledge of climate change, including its evolution, impacts, and emerging responses, to facilitate personal and professional response.

The course sequence will be based on the assumption that in the face of global climate concerns there are two kinds of human response. The first is *mitigation*, a universal approach to reducing emissions and other causal actions. The second is *adaptation*, acknowledging and responding to changing conditions that vary regionally. For instance, sea level rise may be a concern in South Florida but likely not in Nebraska.

Faculty members from across the University and outside protagonists will present their work on the topic, as cross-disciplinary background. The first weeks will be devoted to the science of natural phenomena and a discussion of mitigation. The remainder of the semester will be dedicated to various scenarios of adaptation under study in the fields of health, engineering, architecture, and government. Visits to local sites of recent adaptation initiatives will be included as well.

At the outset of the course, students will be asked to choose one aspect of the topic to research for a term paper or a creative project, to be presented in the classroom. Performance will be graded according to participation in classroom activities, the paper/project and a final exam.

Architecture and the City

Lars Lerup

The Scully Seminar:
Introduction to Urban Analysis

a new vocabulary
Megashapes

weather

downtown

speedzone

zoohectic canopy

field room

University of Miami
School of architecture
Spring 2019



ULI/Hines Student Competition Elective

14 -28 January 2019
1 Credit

2019

Faculty: Veruska Vasconez

Associated ULI Hines Faculty Team:

Architecture & Urban Design, Elizabeth Plater-Zyberk, Joanna Lombard, Veruska Vasconez; Real Estate Development + Urbanism, Chuck Bohl, Mark Troen; Business School, Alex Morcate

Description:

The ULI Hines Student Competition Elective is an intensive charrette. Working daily over the course of the two-week competition period, students develop and produce a comprehensive ULI Hines Competition submission for an integrated urban design and development proposal for a large-scale, urban site with representation of design, as well as marketing, and financial projections. The specific project requirements will be released at the competition opening. The requirements of previous years have been: a 72" x 36" presentation board of the design proposal; a development pro forma; a 500-word narrative summarizing the design and development plan; and a 500-word narrative describing the financing plan. The faculty members structure the two-week engagement through a series of information sessions, critiques and reviews with invited experts. The primary goal is for each student to emerge with a significant understanding of the process of originating a development proposal in its entirety, and representing the proposal as a transformative urban project and effective investment opportunity.

Eligibility:

Graduate Student status and 5th-year B.Arch. students

Advance Requirements:

Team assembly and Registration by 10 December 2018.

Each team is required to have 5 members, with at least 3 disciplines represented on the team- ideally, M.Urban Design; M. Real Estate Development +Urbanism; M. Business Administration; M.Architecture I/II ; B.Architecture (5th year). When the Competition Registration opens, teams submit an online application with each team member's name, résumé, and confirmation of academic program enrollment to demonstrate that the team meets the criteria for interdisciplinary participation. ULI/Hines will review the team application and send an email confirming team eligibility.

Post Course Options:

Internal Review and ULI/Hines Student Competition Jury Process

UM holds an internal review of the UM submissions with internal awards. The ULI/Hines Jury meets in February to select 4 finalists, and fund a member of each finalist team to visit the site. Finalists then expand their original proposal to greater detail. The 2018 Competition awarded the UM "Garden District" proposal an Honorable Mention. In 2016, the UM "Matrix" team was one of the four finalists. The ULI/Hines Student Competition Elective/Studio faculty team will continue to provide assistance as needed. In April, ULI/Hines funds the 4 finalist teams to travel to the site to participate in a mandatory dress rehearsal with an advisory jury of local experts. The following day, each team presents to the full jury, ULI guests, students, and others in a public event, after which the winning team receives \$50,000 and the finalist teams receive \$10,000 each.

ULI Hines Website:

<http://uli.org/programs/awards-competitions/hines-student-design-competition>

PROFESSOR JEAN-FRANÇOIS LEJEUNE



FENAISSANCE, C. VOLCKMAN, 2006



STALKER, A. TARKOVSKY, 1979



L'AVVENTURA, M. ANTONIONI, 1960

CINEMA AND ARCHITECTURE

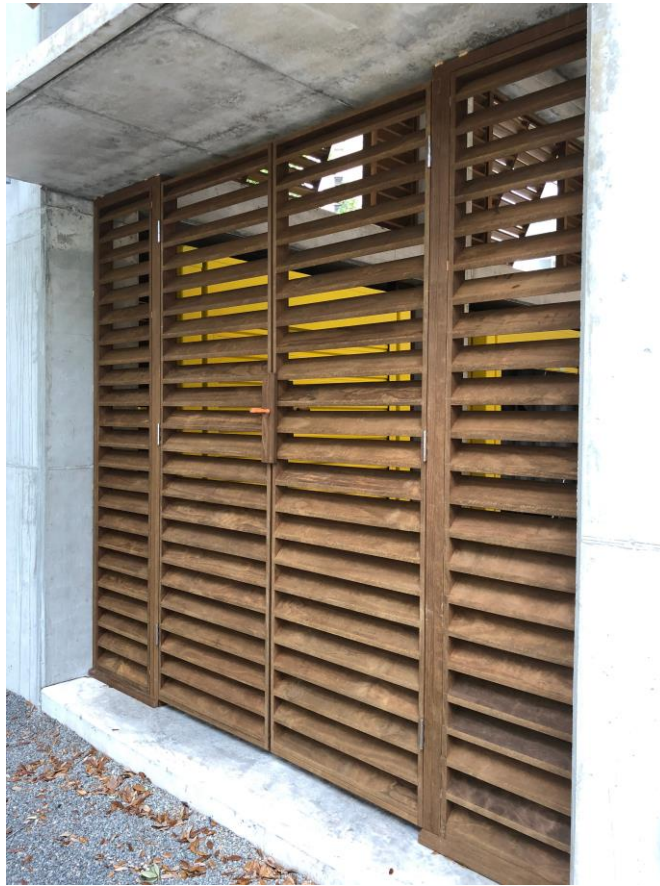
Tu-Th 2:00 to 3:15pm



The class studies the relationship between architecture and film. Lectures, film screenings, and readings explore the origin and development of filmic space with an emphasis on its relation to art and the image of the city. The class analyzes selected films as they relate to, comment, criticize, and anticipate the development of contemporary concepts of space, urban space, decoration, etc. As principal assignment, students will conceive and produce a short film.

L'AGE D'OR, L. BUÑUEL, 1930

ARC 585/685 Design/Build Workshop
Thursdays 1:00-5:00PM
Professor Rocco Ceo
B.E. & W.R. Miller Design Build Professor Jim Adamson



This course will introduce students to the tools and techniques of Building through the finish detailing of the Buildlab louver system and buildout of the container's interiors for tool storage and use. The semester will culminate in the construction of two 16' doors that will become the primary/monumental entry to the Miller Buildlab. The course focus is on detailing and the mastering of higher levels of **craft**.



HOTEL DESIGN, PLANNING & DEVELOPMENT

A PROJECT BASED WORKSHOP DELVING INTO
HOSPITALITY BASICS TO ACHIEVE SUCCESSFUL PROJECT

THE PROGRAM IS DESIGNED TO INTRODUCE STUDENTS TO HOSPITALITY STRATEGIES
WHILE DEVELOPING A HOTEL THROUGH THE CONCEPT AND SCHEMATIC PHASES.

PROGRAM BASIC STRUCTURE

HOSPITALITY ESSENTIALS
FEASIBILITY STUDIES
ZONING CODE RESEARCH
ARCHITECTURAL CONCEPT
STORYTELLING PRESENTATION
PROJECT DEVELOPMENT
BUDGETING REVIEW
FINAL PRESENTATION

- WHAT MAKES A HOTEL SUCCESSFUL
- HOTEL TYPE, CATEGORY & BRAND SELECTION
- LIMITATIONS AND REQUIREMENTS
- BASIC DESIGN THAT WORKS
- SELLING YOUR IDEAS
- BRINGING CONSULTANTS ON BOARD
- SAVING YOUR DESIGN FROM VALUE ENGINEERING
- MAKE YOUR PROJECT A REALITY

PROGRAM WILL FEATURE EXPERT GUEST SPEAKERS, JURORS AND WORKING SESSION LEADERS, SITE VISITS
AND STUDENT LED WORKSHOPS.

ARC 551/651 SPRING 2019
Special Problems
Monday 6:25-9:05 PM
Architecture 48 120

Prof. Roberto Behar
University of Miami
School of Architecture

CONTEMPORARY ARCHITECTURE



This course introduces the student to relevant examples of twentieth century and contemporary architecture. Particular attention will be given to the compositional mechanisms whereby this architecture participates in the construction of urban identity and the image of cities. The subject will be presented through case studies that will relate architects and projects to specific cultures, times and places. Lectures and seminar sessions will include presentations on architects Loos, Leonidov, Ostberg, Asplund, Malaparte, Bo Bardi, Rossi, Venturi-Scott Brown, Moneo, Gehry, Koolhaas, Siza Viera, Herzog de Meuron, Sanaa, Hadid and others. The class may include a field trip to New York City.

Dept. of Civil, Arch. & Envir. Engineering / School of Architecture

Course	Sustainable Construction
Code	CAE 560 / 660 – ARC 583/683
Academic calendar	2018-2019
Semester	SPRING 2019
Credits	3
Class hours	Tuesday & Thursdays 5:00-6:15 pm
Professor	Esber Andiroglu, PhD, PE, LEED AP
Professor email	e.andiroglu@miami.edu

1. Course designation

Elective – (3 Credits)

2. Course (catalog) description

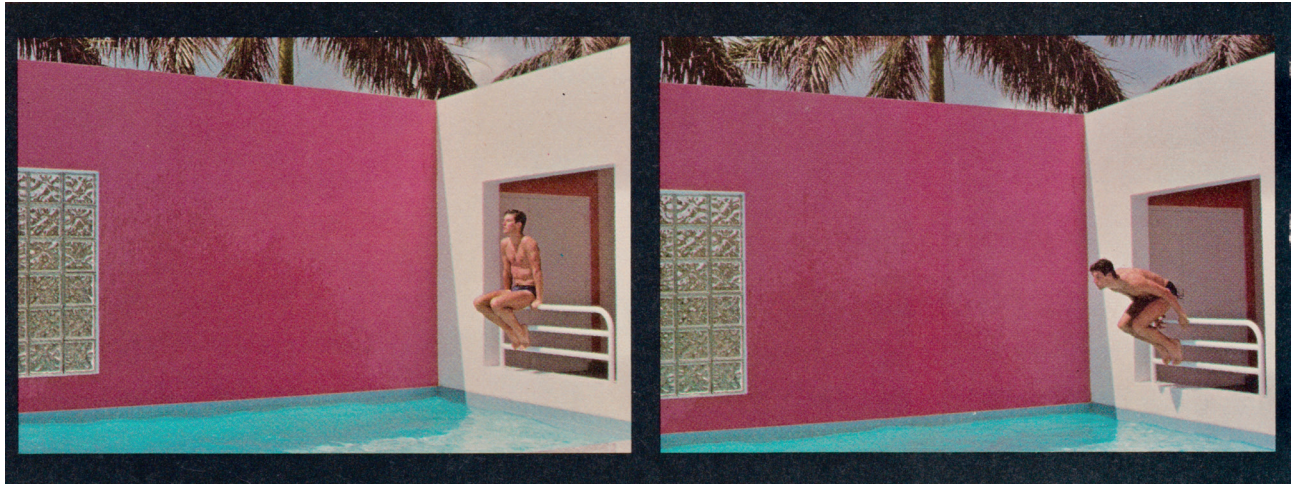
This course reviews principles of sustainable design and construction, green building initiatives, rating systems (LEED, BREAM, Living Building Challenge, etc.). A comprehensive investigation of ecological and environmental factors coupled with building construction materials, mechanical systems and electrical systems when developing sustainable architecture are carried out. This course provides students with general understanding of main factors contributing to energy consumption, water resources, waste management, and material resources in context with buildings and built environments. In addition emphasis is placed on minimizing impacts associated with resources while also considering issues of light, temperature, indoor air quality and psychological aspects of buildings that affect health. Concepts discussed are demonstrated in multiple interactive case studies and presentations documented by interdisciplinary teams. A quantitative understanding of energy fundamentals, examples from practice, and design exercises using computer simulation programs are emphasized.

Only a new seed will yield a new crop.

— Maharishi Mahesh Yogi

3. Prerequisite

Senior or Graduate standing, or permission of instructor.



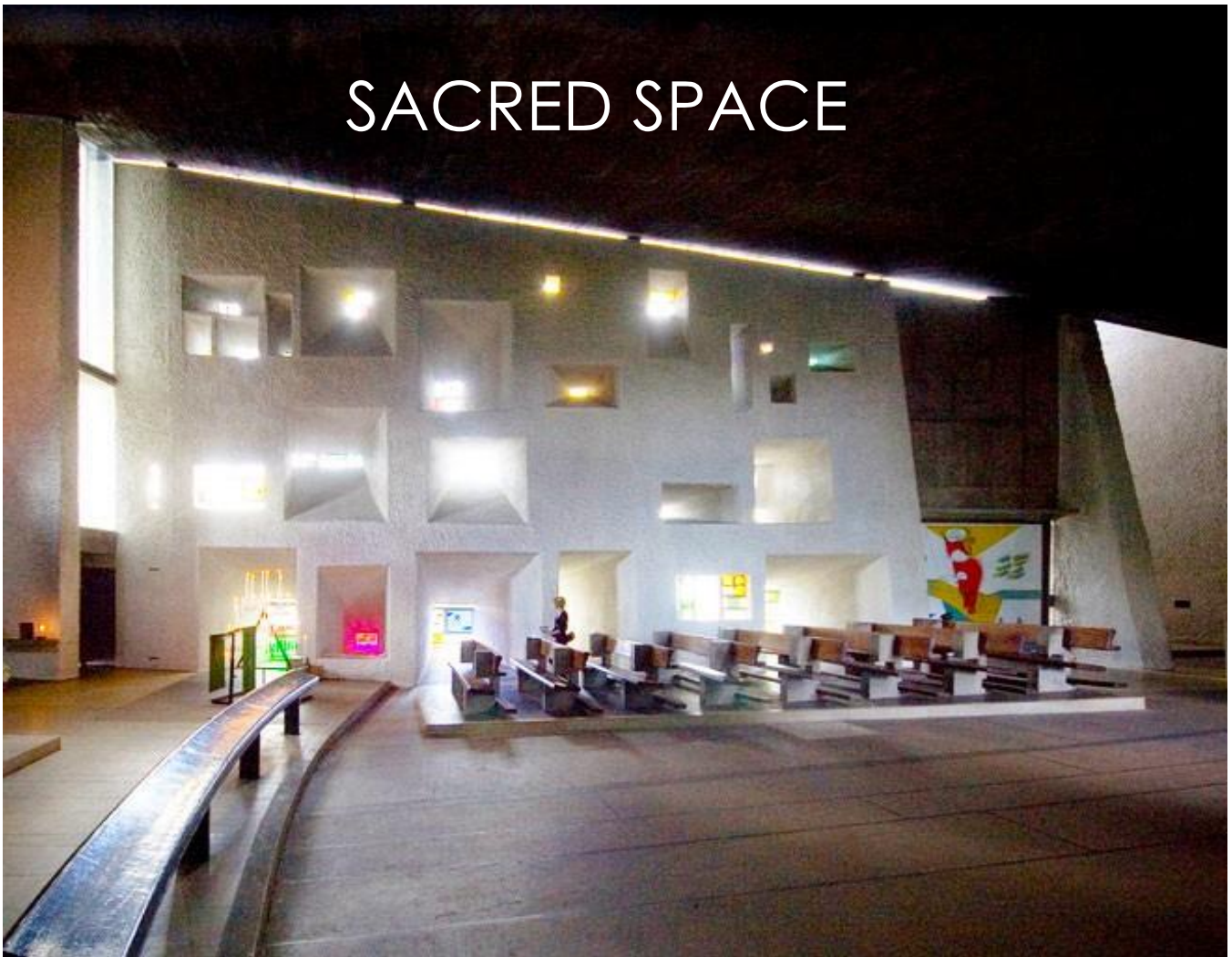
Pink House (Laurinda Spears & Rem Koolhaas, 1976–79),
photographed by Bruce Weber, *Gentleman Quarterly*, February 1980

in Miami in the 1980s

In this seminar we will critically revisit the architectural production of Miami during the 1980s. With a fresh eye we will discover and survey projects of the time, exchange with key figures and study – through a broad selection of material evidence – the cultural, economic and academic context which influenced the development of these intriguing designs with their “power of the inexplicable” according to Paul Rudolph. This deep dive into the past shall likewise serve as a reflection on design, skill, craftsmanship; broadly the context in which we practice architecture today.

Seminar, 3 credit points
mandatory site visits in Greater Miami area
voluntary study trip to the exhibition *Architecture Itself and Other Postmodernist Myths* at the CCA Montreal
Prof. Charlotte von Moos

SACRED SPACE



ARC 583-683/REL 406, 3 Credit Architecture Elective

Tuesday, 5:45 - 8:15 pm., Mahoney 137

Faculty:

Denis Hector, School of Architecture and William Green, College of Arts & Sciences

Content:

An inter-disciplinary seminar, SACRED SPACE explores the multiple and layered intersections of religion and architecture, through a close study of contemporary and historic religious buildings across culture, time and place. Students and Faculty investigate if, how, and to what extent architecture and the sacred require one another.

Format:

Topics are explored through readings and discussion in a dinner-meeting, situated in a Harkness Table setting in Mahoney Residential College, designed to support lively and engaging dialogue. Over the course of the term, students prepare a case study for discussion.

Questions: Contact Denis Hector, dhector@miami.edu or text 305 987 7531

Image: Notre Dame du Haut, Ronchamp, France, Le Corbusier, 1955

https://www.archdaily.com/84988/ad-classics-ronchamp-le-corbusier?ad_medium=gallery

CONSTRUCTION MANAGEMENT



LAND



MULTI-FAMILY



OFFICE



INDUSTRIAL



RETAIL

ARC 549 / RED 670

SPRING 2019

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 term project, students will have the knowledge and understanding necessary to make informed decisions and impact the success of projects.



SCHOOL of ARCHITECTURE

ARC 586 – U1 Special Problems ARC 686 – U1 Special Problems CMA 642 – U1 Emerging Technologies in Design and Construction

Instructor: Adam Demler

The course will review, use, discuss and study the application of emerging technologies in design and construction. Students must have previous knowledge of BIM and associated software like Revit as well as a very strong interest in technology.

Many students simply do not understand the myriad of technologies that will confront them in the workplace and what will be required of them in 21st century practice. This course helps architecture and construction management students prepare for what currently exists and what is emerging. The course is intensive, practical and comprehensive.

Subjects covered include advanced BIM practices, information management skills, industry adopted standards, emerging visualization tools, visual programming methods, new materials, building fabrication methods, IoT, ai and machine learning.

RED 650/ARC 583 – Complex Real Estate Transactions

Professor Mark L. Troen, FRICS
Spring 2019 - 3 credits

COURSE DESCRIPTION

This course analyzes real estate transactions and deal structuring from the developer's perspective. Using the case study method, the course explores the key components and the disciplines needed for successful real estate transactions and projects.

The class focuses on the complex nature of the real estate development process. Course materials, lectures, and case studies provide a detailed investigation and analysis of the essential disciplines and functional areas in the real estate development process including:

- Market & Financial Fundamentals
- Acquisition & Site Selection
- Entitlements & Public-Private Sector Issues
- Design & Construction
- Development Marketing
- Financing & Deal Structures
- Legal Issues
- Sales & Leasing
- Management & Operations

Deal-making aspects such as negotiation, structuring, and acquisition strategies are the focus. The course consists of lectures, case study assignments (individual and team), a mid-term exam & final group project. Guest speakers will include leading practitioners and developers from the local real estate community who will present real deals and lessons learned.

Each week, the case studies will highlight a central topic such as pro forma market & financial analysis, land development, land use regulation, dealing with the public sector and the community interests, planning & design, construction management, and the life cycle of deals.

COURSE OBJECTIVES

The course is intended to provide a decision-making framework that offers students a detailed understanding of the real estate development process. It will provide the student with the ability to recognize and analyze a broad range of real estate development issues and make effective managerial decisions.

The course will also provide students with an understanding of the components and chronology of the real estate development process and how these elements can be integrated to create viable and successful projects. The course will provide the student with the fundamentals of how to analyze, develop and operate a broad range of real estate development projects.

Mondays
6:25 PM – 9:05 PM
Rinker Classroom / Perez Architecture Center
Theo Dickinson Drive
Coral Gables, Florida 33146

Mark L. Troen, FRICS
Professor
MRED+U School of Architecture
mtroen@miami.edu
(561) 855-4415



Contemporary Latin American Architecture

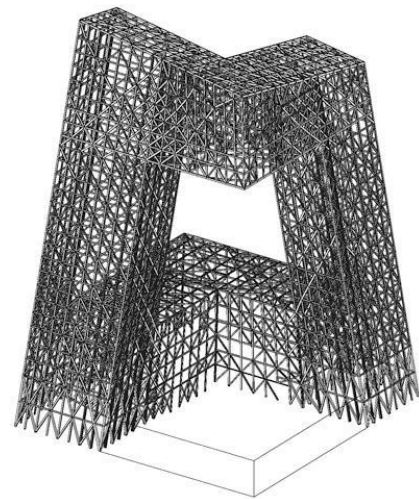
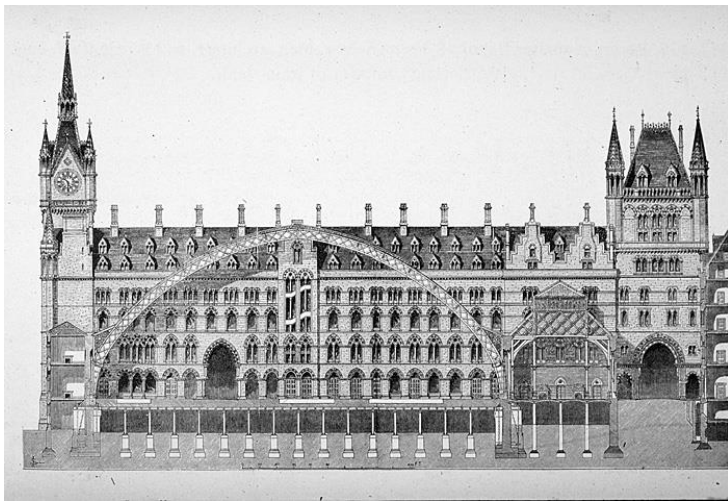
Spring 2018 3 credits ARC 583 T TH 6:25-7:40 Professor Jose A. Gelabert-Navia

An examination of Contemporary Latin American Architecture and Urbanism from the turn of the 20th Century to the present day. The work of some of the great figures on Latin American Modernism such as *Niemeyer* and *Barragan*, to contemporary figures such as *Paulo Mendes da Rocha* and *Isay Weinfeld* will be discussed. The influence of the Modern Movement in Europe and *Le Corbusier* will be reviewed. Large scale City Plans such as *Lucio Costa's Plan for Brasilia* and *Roberto Burle-Marx's designs for Flamengo Park and Copacabana* in Rio de Janeiro will be analyzed.

The course meets twice a week for a lecture/seminar. There will be assigned readings to complement the lectures. Attendance and two Term Papers are required: The first on a specific building that was significant to the Movement and the Final Project on the work of an individual Architect.

ARC 476/ARC 676: 19TH-20TH CENTURY ARCHITECTURE
HISTORY ELECTIVE
3 CREDITS (WRITING CREDIT)
Prof. K. Wheeler, Ph.D.
ARC476/ARC576 19th and 20th-Century Architecture
University of Miami School of Architecture

ARCHITECTURE AND TECHNOLOGY IN THE 19TH AND 20TH CENTURIES



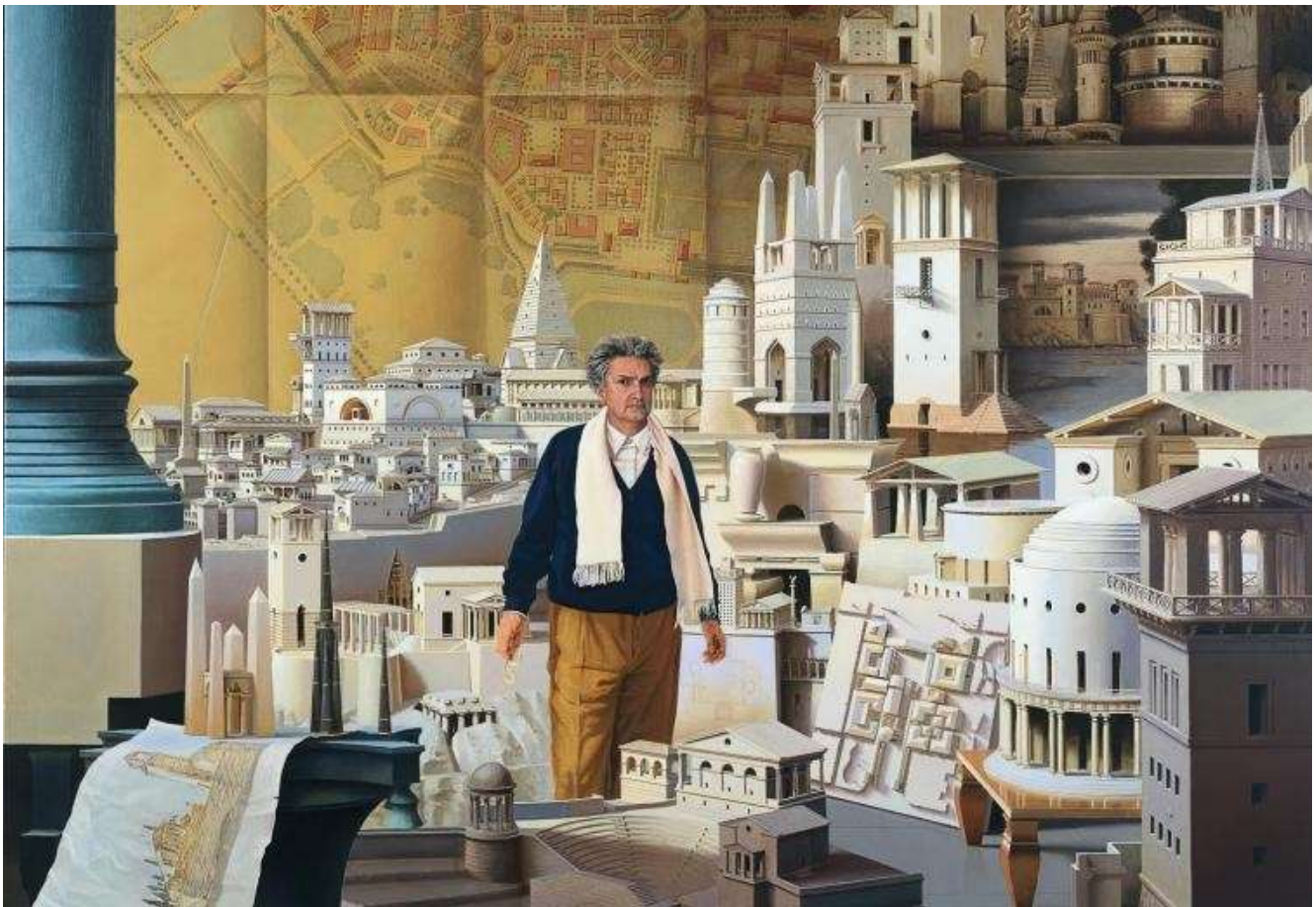
Architecture and Technology in the 19th and 20th Centuries surveys the history of architecture in this period as it specifically relates to changes in engineering, materials, technology, and methods of construction. It addresses the development of the modern city with classes on sewers and underground infrastructure in the Victorian age as well as the impact of the car and the highway in the 20th century. Specific attention is paid to the development and production of materials, including glass, iron, steel, and concrete, and how they influenced architectural form. Other topics include the development of air conditioning, the skyscraper, mega-structures, and alternative approaches from Arts and Crafts to the 1960's counter-culture.

The course includes both lecture and seminar format to create discussion between architecture and engineering students. It also serves as a writing credit, as students present a case study during the course of the semester and a research paper on a topic of their choice.

LEON KRIER AND THE CRITIQUE OF MODERN ARCHITECTURE

Dr. Richard John

ARC 585/685, 3 Credits, Spring 2019, Tuesdays 6.25-9.05 pm



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 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.