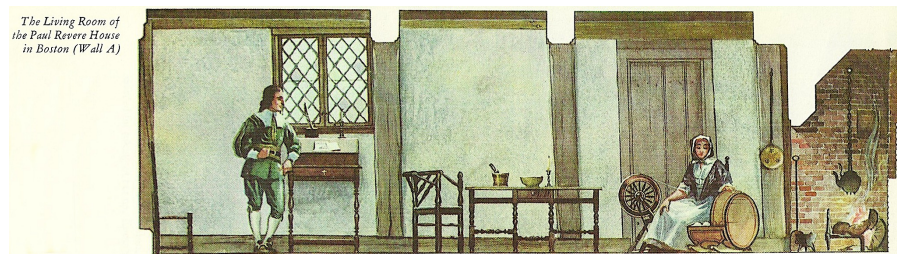
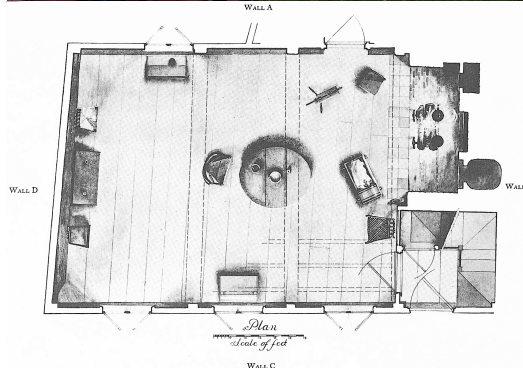


ARC 555/655:

18TH and 19TH CENTURY AMERICAN ARCHITECTURE & ARCHITECTS

Selected topics on Early American Architecture, Urbanism and Architects

F. Martinez



~ Plan and Interior Elevation of wall A, Paul Revere House, Boston, Mass. ~

The course concentrates on the history and development of Early American Architecture, Urbanism and Architects, primarily but not exclusively during the 17th, 18th and 19th centuries, with particular emphasis on theoretical, technological and cultural developments in America. Our approach on the topics of American Architecture and Urbanism will be focused on two areas of expression, the design and ordering of space, from pragmatic to delight, and the relationship of structure and material to form. This shall be explored primarily through the analysis of form and the built environment using four attributes relevant to both: **organization of space, proportion, scale and ornamental program**. In addition to the general awareness of the developments of architecture during the period covered, the course is geared toward providing students with the understanding of forces shaping architecture of any period but particularly the importance of theory and practice, which inform the built environment. The most significant intent of the course is the development of students' ability to apply this acquired knowledge and understanding of forces shaping architecture toward their own creative work in school and in their professional careers. The course relies heavily on slide-illustrated lectures, discussions, student research presentations and assigned reading. **On site study visits on the Architecture of Boston, Mass,** and Key West, Florida shall provide research opportunity and tangible involvement for experiencing "Early American Architecture and Urbanism".

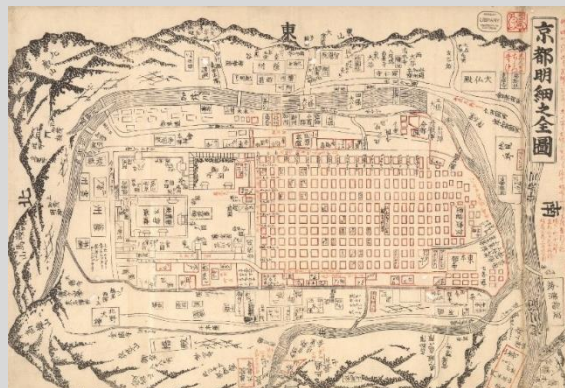
ARC 590/690 HISTORY OF CITIES

Fall 2019

Victor Deupi



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. Our survey begins with the development and evolution of urban form in Western antiquity (Mesopotamia, Greece and Rome), and the contraction and reconfiguration of the cities of classical antiquity in early medieval times and in the Muslim world. 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 Western city from the Baroque period, when the process of European urbanization is rekindled, until the Industrial Revolution. The course ends with new theories about the city (garden city, de-urbanization), Le Corbusier's seminal utopian vision of 1922 for the City for 3 Million Inhabitants, and the great housing developments of the 1920-30s in Germany, Austria, and the United States.



CONSTRUCTION MANAGEMENT



LAND



MULTI-FAMILY



OFFICE



INDUSTRIAL



RETAIL

ARC 549 / RED 670

Fall 2019

T 6:25 - 9:05

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

MASTER of
CONSTRUCTION MANAGEMENT

VIRTUAL DESIGN AND CONSTRUCTION BIM

2

B

1

A

This course examines the foundations of Virtual Design and Construction through the development and use of a Revit Building Information Model. Students will be introduced to a variety of Revit modeling strategies and practices as well as industry standards such as Level of Development (LOD). Students will use the Thomas P. Murphy Design Studio Building as a focus of their BIM development. Other VDC practices will also be reviewed to prepare students for 21st century practices.

Professional Lecture Series

ARC 550/650
Luisa Murai



Site visit to Grove at Grand Bay with Raymond Jungles, Landscape Architect

Case studies of current building project types from time of initial formulation through completion are analyzed and evaluated. A journal is kept by each student where research, lecture notes, diagrammatic studies, site visits and evaluations are recorded. The student is exposed to design and building issues of various professional disciplines in South Florida that make contributions to the design process.

The final grade is based on the journal.



Thinking Lines. Drawing Thoughts.

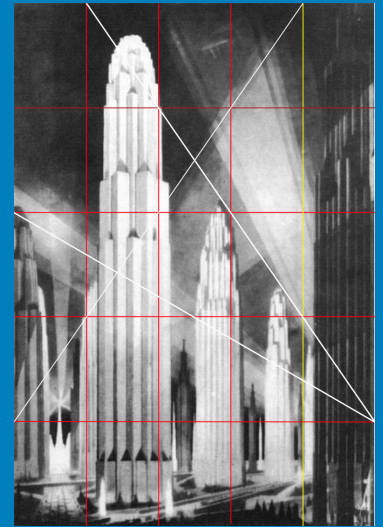
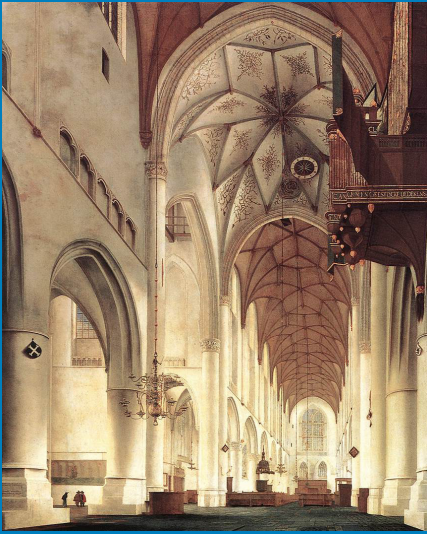
The focus of this course is to teach students skills to successfully develop and communicate thought processes. We will start exploring “the line” as a mode of expression and carrier of meaning. Through “the line”, students will be guided through didactic and challenging exercises exploring eye-hand 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 2019

ARCHITECTURAL PHOTOGRAPHY AND COMPOSITION

PROF. STEVEN BROOKE

Tuesdays 9:05-12:30 Third floor, Building 48E



This course explores the basic compositional paradigms for rendering architecture and design that have been established for over 500 years.

It also systematically develops the technical skills needed to photograph architecture, landscape, and interiors, including thorough camera and software techniques.

Subject matter includes individual buildings, high-rises, streetscapes, landscape, interiors, still life, model photography, and black-and-white photography.

STUDENT COMMENTS ON THIS CLASS:

"Lessons learned in this course are not easily forgotten and become second nature by its completion."

"It changes the way you see."

"The content of this course is highly relevant to other areas of design."

"Should be mandatory for all architecture students."

"This course will not only make you a better photographer, but will change the way you look at the world of architecture and design."

"Prof. Brooke has created one of the single most interesting and challenging courses I have taken at UM."

STEVEN BROOKE has been photographing architecture and design for over 35 years. He has photographed 40 books on architecture and design, including nine that he has written. His numerous awards and honors include the AIA National Honor Award, the highest award in this field, and the Rome Prize awarded by the American Academy in Rome. His work may be seen at www.stevenbrooke.com.



Craft is the skill involved in making things by hand.

It may also be understood as a common language that connects us to the collective skills and knowledge of those before us. By developing each our own craft we become part of that tradition.

In this course students will develop their craft by designing and building a furnishing or case work starting from rough-sawn lumber. The course will focus on a hybrid approach to woodworking that will integrate both hand tool and machine tool work. Students will be able to incorporate digital fabrication techniques into their pieces if desired, but hand work will be the focus. Throughout the course, students will produce sketches, formal drawings, maquettes and prototypes culminating with their final piece for presentation.

A suggested list of tools will be provided and there will be a field trip for students to select and purchase their own lumber.

Michael Galea is a UM School of Architecture alumnus (Class of 2012) with a passion for design and woodworking. He co-developed and co-founded Wee Rock Toy Co. and he currently works in Development and Construction Management with Turnberry Associates.

Course Description
ARC 579/679
An Introduction to Resilient Building & Community Design
Prof. Sonia Chao
Fall 2019



Seminar Course

AN INTRODUCTION TO RESILIENT BUILDING & COMMUNITY DESIGN

PROJECT CASE STUDY SITE: MIAMI BEACH

COURSE DESCRIPTION

This course introduces students to the relationships between climate, resiliency, architecture and urbanism; building awareness of the growing challenges and opportunities ahead, and the intersections between these disciplines. What does resilience mean in this broader context, and how should escalating stressors and shocks be addressed? Students learn about climate sciences, then research, document, and analyze evolving resilient design strategies, at the scale of buildings, neighborhoods and cities, in the end, applying those lessons to a given case study site; developing a holistic set of resilient design recommendations. During the course, students interact with specialists in the fields of architecture and urban design, as well as related fields, such as engineering, social, marine and environmental sciences, and/or policymakers, to better comprehend first-hand the interwoven scientific, social, environmental, and governmental ramifications to resilient design. Lastly, students learn the mechanics of participatory design methods employed to engage communities in related efforts.



Retail Placemaking

Our community is the center of our lives; we each have the capacity to impact it.

This course provides an introduction to placemaking with a focus on retail real estate and its impact on communities. Development, architecture, and urban design are all critical elements and will be discussed in the class and evaluated in the field.

The course will also identify leadership roles and participants in placemaking, which include developers and investors, architects and urban planners, tenants, and customers. A developer who can match the right concept with the right location can generate substantial profits. Similarly, a well-executed placemaking plan creates value for all the participants in a community. The class will investigate the science of retail leasing and designing an executable placemaking plan.

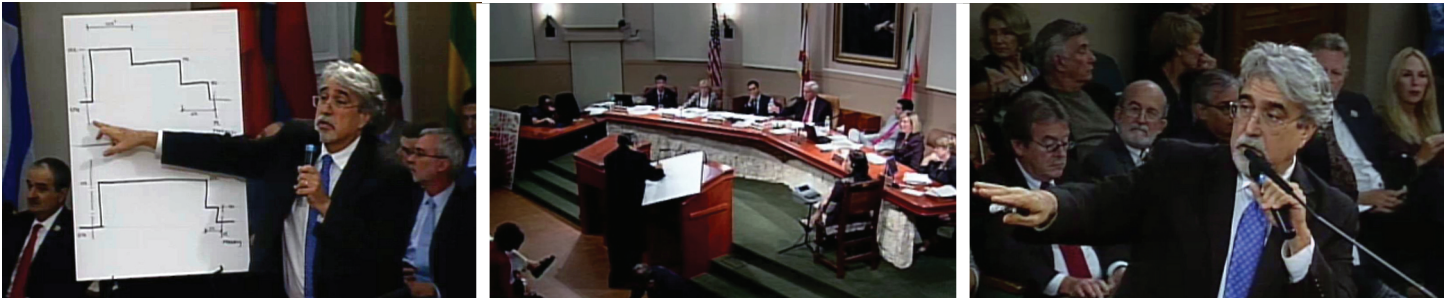
1 Credit Elective

Mondays 6:25-9:05 PM

Oct 29-Dec 4

ADVOCACY FOR ARCHITECTS

The Regulation of Land & Design: How to Build the Case for Your Design & Avoid Legal Landmines



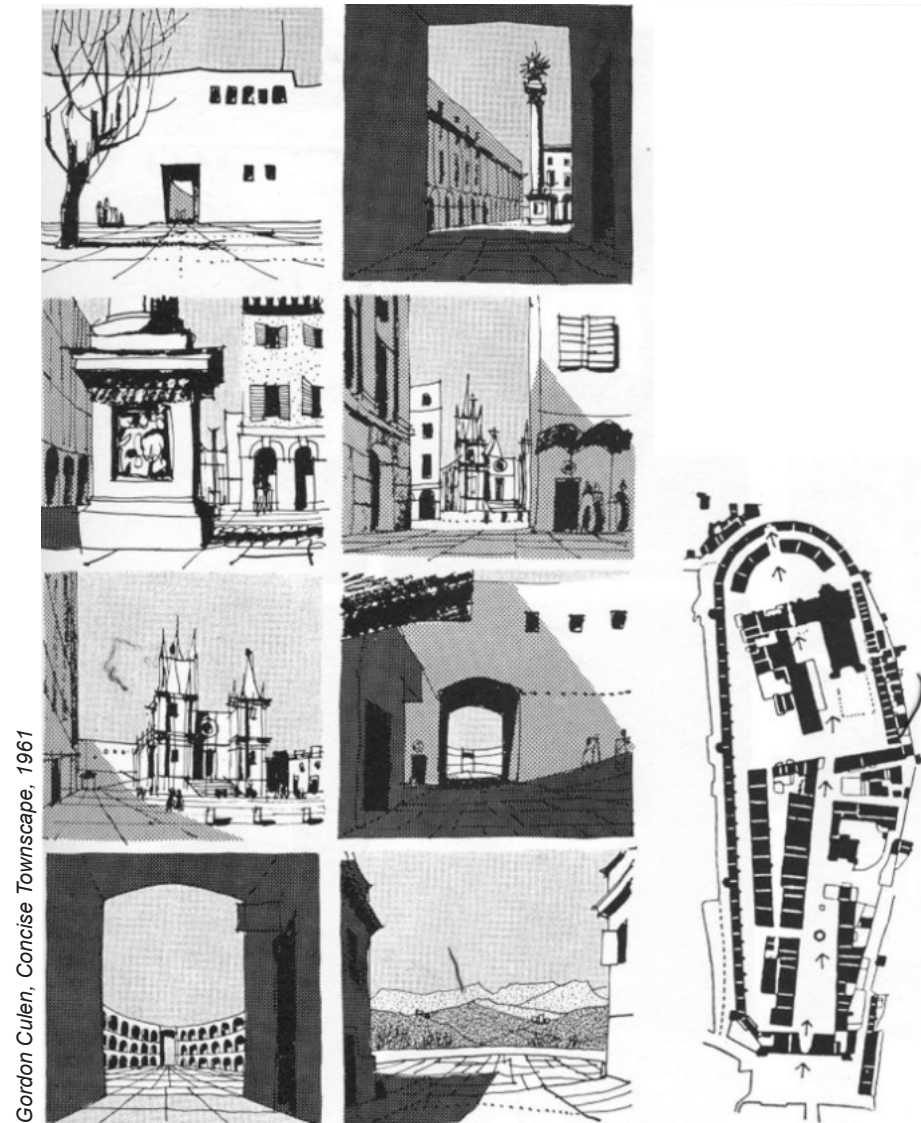
ARC 581/681 is an exercise in pragmatism for design and real estate professionals. It aims to increase literacy in the basic legal doctrines that regulate property rights, development, and design. Students receive instruction on the basic elements of successful advocacy, public presentations, and the nuts and bolts of the public hearing approval process. A particular emphasis is placed on the reading of codes together with case studies involving the legal doctrines that architects and developers are likely to confront in their careers. Experts from within the design community are invited to share their first-hand advice and counsel.



URBANISMUS PRACTICUM

PHENOMENOLOGY OF CITIES

Jaime Correa
Associate Professor in Practice



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 open-city field trips and class seminars supplemented by in-situ discussions, class exercises, and lectures by field experts, 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.

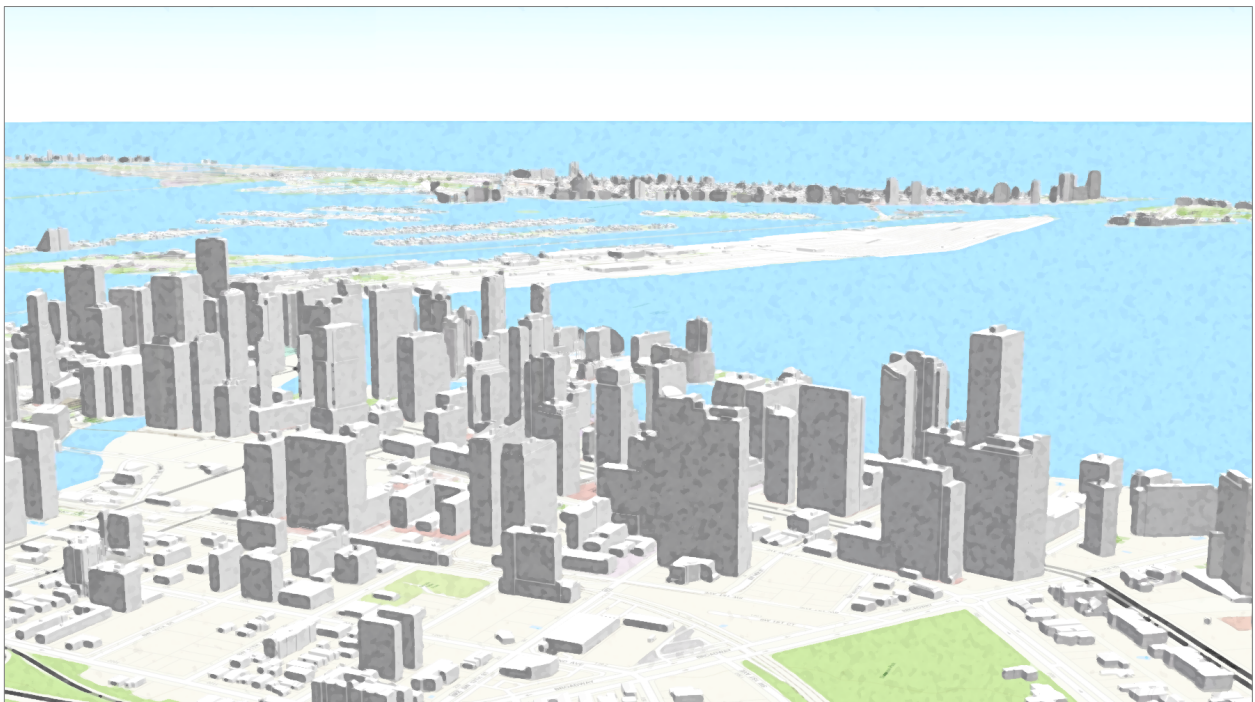
ARC 581/681
FALL 2019

Dr. Timothy Norris
University of Miami Libraries
Center for Computational Science

Chris Mader
Center for Computational Science

GEOSPATIAL VISUALIZATION

GIS and CARTOGRAPHY in ARCHITECTURE



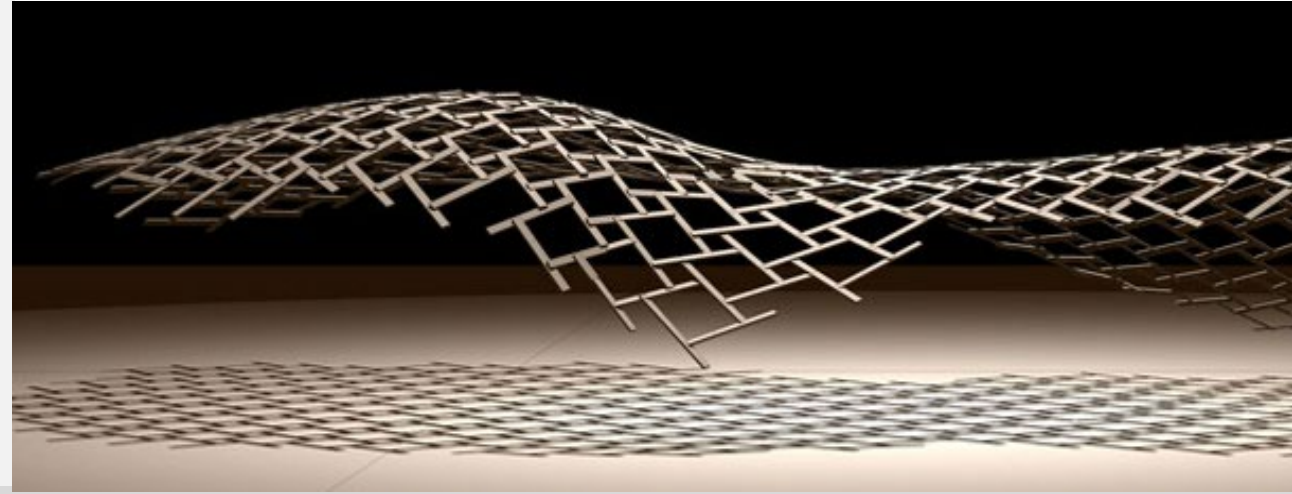
This course introduces the student to Geographic Information Systems (GIS) and how to apply GIS technologies in architectural design and urban planning contexts. Three principal activities will be emphasized: how to find, access, and use pre-existing GIS datasets; how to use industry standard tools such 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, AutoCAD and Rhino. 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 in their respective design studios.

ARC586/686

Fall 2019 - 3 Credits

Structural Design Theory: Models & Prototypes

Faculty: Denis Hector



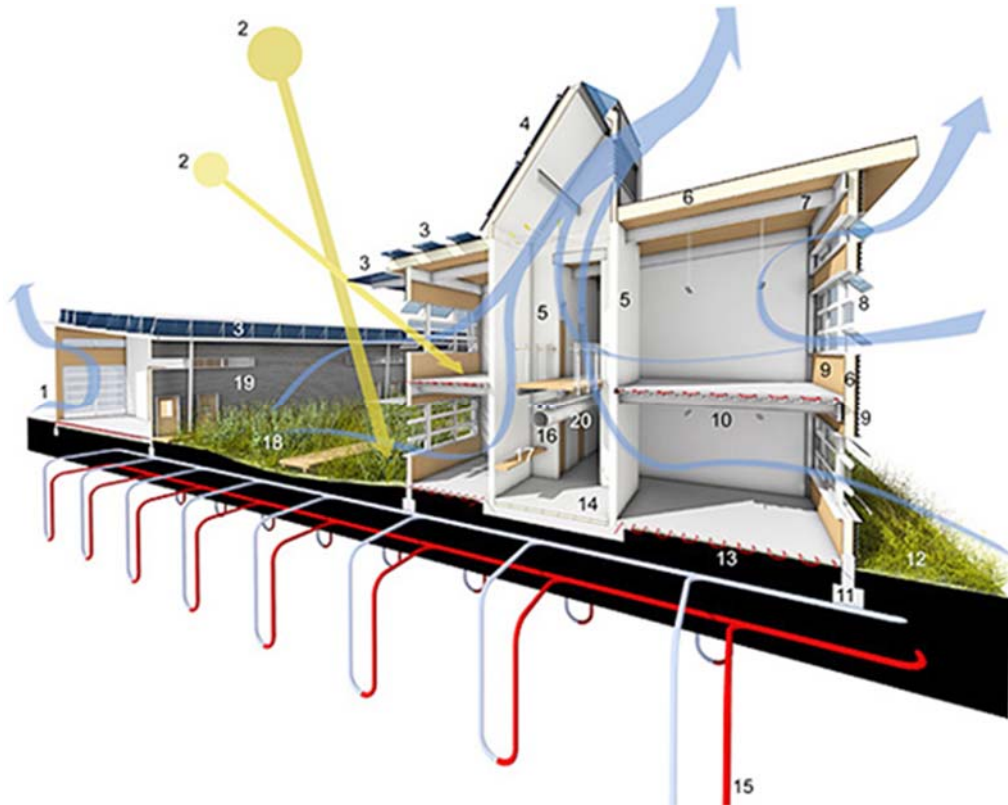
An investigation into the relationship of structure and architectural design. Through an exploration of form, force, design and construction; participants in this course will explore contemporary structural types.



Discussions and case studies will be used to clarify the behavior and potentials of the structural systems using digital modeling and physical prototyping. All levels of interest & inquiry are encouraged.

Image credits: FTL Design Engineering, Balmond Studio





Intro to LEED: Sustainability and the Built Environment

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

course description

This course will introduce students to some of the current best practices in green building design and construction, while providing you with opportunities to research both local and international examples of sustainable Architecture and LEED certified projects. In addition to our classroom lectures and group discussions, this course will help prepare you to take the LEED Green Associate exam.

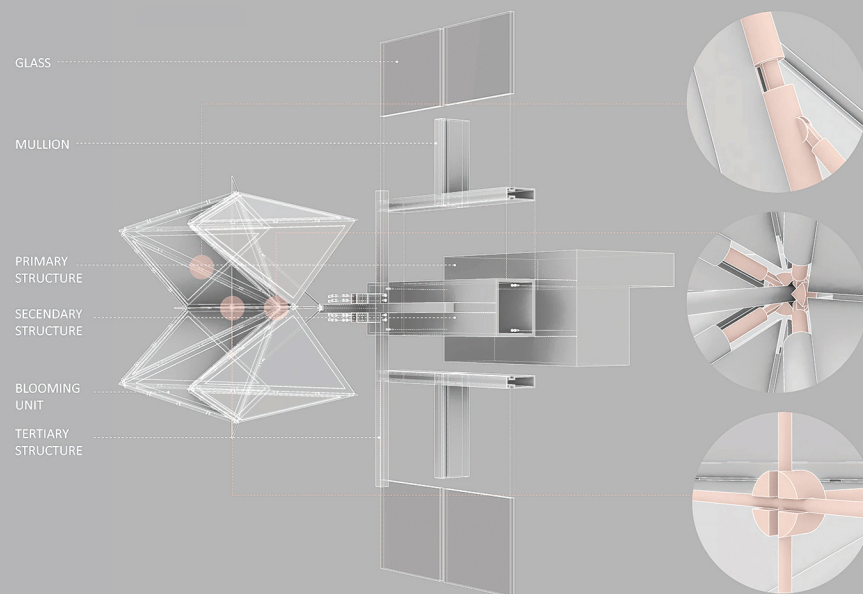
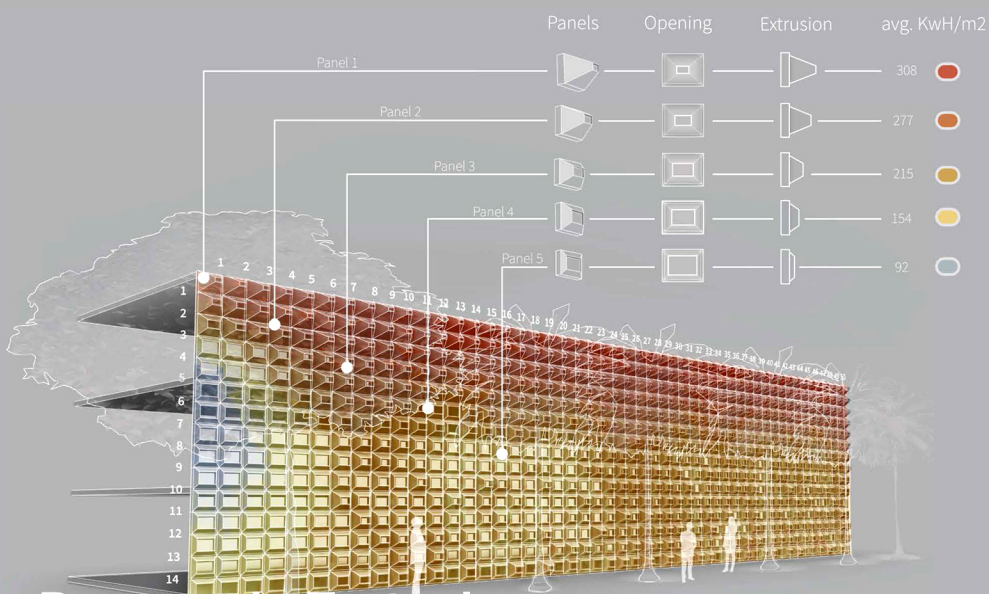
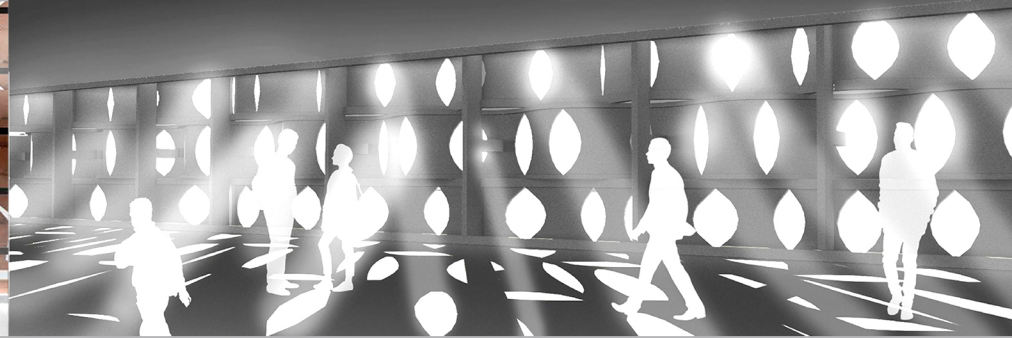
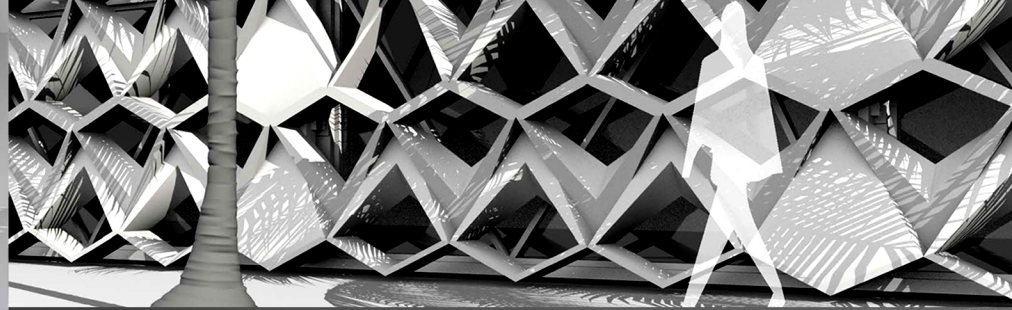
course description

ARC 559/659: SUSTAINABILITY AND LEED EXAM PREP

1 credit, professional elective

M 6:25-9:05p.m.

August 19 - September 20th



Parametric Tectonics

The course will focus on the study and production of facade prototypes derived from a precise, parametric based approach to design. Students will work with several media including digital parametric software, image editing software, and fabrication tools. At the end of this 3-credit course, each student should understand the benefits of parametric tools for accurate climate analysis and iterative design explorations. As a parallel component to the course, students will be exposed to different graphics techniques and methods of representing data.