

# Interim Progress Report

University of Miami  
School of Architecture

Bachelor of Architecture  
(171 undergraduate credit hours)

Master of Architecture  
Track I (preprofessional degree + 60 graduate credit hours)  
Track II (undergraduate degree + 105 graduate credit hours)

*Year of the previous visit: 2017*

**Chief administrator for the academic unit in which the program is located:**

Dean Rodolphe el-Khoury, Ph. D

**Provost:** Jeffrey Duerk, Ph. D

**President of the institution:** Julio Frenk, Ph. D

**Individual submitting the Interim Progress Report:**

Carie Penabad, Director of the BARCH program and Allan Shulman, Director of the MARCH program

**Name of individual(s) to whom questions should be directed:**

Carie Penabad and/or Allan Shulman

**Current term of accreditation:** 8 years with a next visit in 2025

Text from the most recent VTR or APR is in the gray text boxes. Type your response in the designated text boxes.

## 1. Progress in Addressing Not-Met Conditions and Student Performance Criteria

### B.3 Codes and Regulations

**2017 Visiting Team Assessment:** In both the B. Arch program and the M. Arch program, this criterion is Not Met. For the B. Arch program, the projects cited as “High Pass” in the team room were deficient in primary life-safety (egress) issues. For the M. Arch program, the projects shown to the team were deficient in primary life safety (egress) issues, and the “Low Pass” projects were deficient regarding ADA issues. Additional material was asked for on the first, second, and third days of the visit. The additional material provided by the program did not demonstrate that the criterion was met in either program.

#### University of Miami, 2019 Response:

For the B. Arch program, ARC 306, Integrated Design Studio has included a Life-Safety/Egress assignment to be able to demonstrate ability in this criterion for all projects. In addition, the undergraduate curriculum has included a parallel requirement for Life-Safety/Egress in ARC 305, the design studio prior to the Integrated Design Studio. ARC 305 has introduced a new lecture and life safety assignment, in effect doubling the exposure to this criterion in design-oriented problems.

On the M. Arch side, the deficiency has been addressed in changes to several courses. The Integrated Design Studio ARC 608\* has affirmed Life-Safety/Egress and ADA accessibility diagrams as a presentation requirement. A Life-Safety data sheet detailing pertinent building and fire code information has also been required (the Spring 2019 syllabus is attached).

In addition, as the standard for this criterion is ‘ability’, a parallel emphasis on Life-Safety/Egress and ADA accessibility has been required in both a new core Technology Studio ARC 607\* (M.Arch 1 cohort) and the Inaugural Studio ARC 607\* (M.Arch 2 cohort), in effect doubling the studio exposure to this criterion in design-oriented problems. In the M.Arch 1 studio, principles of Accessibility, Life-Safety and ADA have been specifically reviewed during the schematic design phase of project development. In both cohorts of ARC 607, diagrams of Accessibility, Life-Safety & Egress have been required for the final presentation. (The current ARC 607 M.Arch I and M.Arch II syllabi are attached).

*\* Note: since the team visit, the curriculum code designations of ARC 608 Integrated Design Studio and ARC 607 (Technology/Inaugural Studio) have been revised.*

### B.4 Technical Documentation

**2017 Visiting Team Assessment:** In the B. Arch program and in the M. Arch program, this criterion is Not Met. After careful searching by the team and both programs, evidence of student preparation of outline specifications was not found in either program. In addition, in the construction of physical models in the M. Arch program, the team did not find consistent evidence of student outcomes that illustrated and identified the assembly of materials, systems, and components of building design. Additional material was asked for, but the additional material provided by the program did not demonstrate that the criterion was met.

#### University of Miami, 2019 Response:

In the B. Arch program, the content delivered to students related to specifications in ARC 452, Management of Professional Practice has been expanded to more broadly cover the topic of specifications. In addition to a series of new exam questions, a new assignment has been added to the current curriculum. This project requires students to analyze a case study building and write an Outline Specification for a specific building system.

In the M.Arch program sequence, Outline Specifications have been covered in ARC 652, Management of Professional Practice, which is now modeled identically to ARC 452 and is taught by the same instructor (the current semester course syllabus is attached).

Multiple additional adjustments aim for a more consistent demonstration of ability in assembly of materials, systems, and components of building design. Drawings and written narratives detailing building construction components and systems have been reinforced in the Integrated Design Studio ARC 608\*. Here, detailed wall sections and building systems have been re-emphasized, and brought more deeply into focus (see attached Spring 2019 syllabus).

In the M.Arch I track, the graduate curriculum has added the Technology Studio ARC 607\* to the core design sequence. The Technology Studio, an important curriculum change that emphasizes building construction systems and technology, specifically engages issues of building façade systems, including assembly of materials, systems and components of wall and building enclosure systems. The studio also includes a forensic reconstruction of the detailed construction of the envelope of an existing, generally high-tech wide span building, in which students draw or build models of the structural and cladding systems of an assigned example at ½"-1'-0". Detailed wall sections or models have also been added as a requirement in the presentation of final designs. Students will also be tasked with writing an outline specification of their building enclosure system in this studio. The new emphasis in ARC 607 is meant to engage students more deeply in these issues and to prepare them for the Integrated Studio, ARC 608, the primary studio engaging the assembly of building components and systems (see current ARC 607 M.Arch I semester syllabus attached).

Further, technical documentation has been strengthened in ARC 663 Environmental Building Systems II where M.Arch I students have been asked to construct detailed digital models and engage in precedent study, research and documentation to examine light, reflectance, refraction in existing buildings, and construct wall sections at a scale of ½"=1'-0" and 1 ½" to 3"=1'-0".

M.Arch II students in the Inaugural Studio ARC 607\* (M.Arch II sequence) have also been asked to document the assembly of building materials, systems and components, with a required large-scale wall section for the final presentation (see current ARC 607 M.Arch II semester syllabus attached).

*\* Note: since the team visit, the curriculum code designations of ARC 608 Integrated Design Studio and ARC 607 (Technology/Inaugural Studio) have been revised.*

## **B.10 Financial Considerations**

**2017 Visiting Team Assessment:** In the B. Arch program, this criterion is Not Met. No evidence was found in student work regarding project financing methods and feasibility, operational costs for constructed projects, or construction scheduling.

In the M. Arch program, this criterion is Not Met. Evidence of student achievement at the prescribed level was not found in student work prepared for ARC 652 Management of Professional Practice.

For both programs, additional material was asked for on the first, second, and third days of the visit. The additional material provided did not demonstrate that the criterion was met in either program.

**University of Miami, 2019 Response:** Lectures have been added to the B. Arch required course, ARC 452, to broaden coverage of topics related to Financial Concerns. These now include more information related to project financing and feasibility and project operational costs. Similarly, detailed discussions related to construction scheduling and the Architect's responsibilities for monitoring progress against a project's schedule has been provided within lectures on Project Management skills. All the above are focused on providing students with a general understanding of these issues and how they affect projects and client services. Evidence of such

understanding has been developed through additional exam questions focused on demonstrating student understanding of these concepts.

In the M.Arch program sequence, ARC 652 is now modeled identically to ARC 452 and taught by the same instructor. The class similarly includes broadened coverage of topics related to Financial Concerns, more information related to project financing and feasibility and project operational costs, and detailed discussions related to construction scheduling and the Architect's responsibilities for monitoring progress against a project's schedule.

## **D.2 Project Management**

**2017 Visiting Team Assessment:** In the B. Arch program, this criterion is Met at the understanding level as evidenced by student work prepared for ARC 452 Management of Professional Practice.

In the M. Arch program, this criterion is Not Met. Evidence of student achievement at the prescribed level was not found in student work prepared for ARC 652 Management of Professional Practice. Additional material was asked for on the first, second, and third days of the visit. The additional material provided by the program did not demonstrate that the criterion was met.

**University of Miami, 2019 Response:** Graduate students are intended to meet this criterion through work in ARC 652 Professional Practice. The previous instructor of ARC 652 (Professor Mark Reeves) ran the course as a discussion group only, identifying the instruction method as "*Lectures, discussions and interactive negotiations... Case presentations and interactive exercises are considered the equivalent of examinations.*" This methodology allowed and provided no evidence at the time of the team visit.

The School has implemented two main changes to address these deficiencies. First, the M.Arch required course, ARC 652, Management of Architectural Practice is now modeled after the undergraduate ARC 452 course, sharing a common syllabus and taught by the same instructor (Professor Mike Rodriguez). Since this criterion was met in that course, we believe the changes in ARC 652 will resolve the issues encountered during the prior visit. Second, the course has been updated to reinforce attention to the content deemed deficient during the team visit, including Project Management. A revised topics list includes particular attention to the role and qualifications of a project manager. A condensed version of the current semester course syllabus (ARC 652) is attached.

Beyond these changes, the School initiated a new Master of Construction Management program in Fall 2018. This program, directed by Armando Montero, brings additional faculty expertise, curricular emphasis, School resources and visibility to the issues of project management. We are in the process of exploring creative intersections between the Master of Architecture program and Master of Construction Management program. Discussions have included joint workshops, MCM involvement in M.Arch design studio projects (a model for this already exists between M.Arch and the Master of Real Estate Development Program), and merging classes or class components for more synergy. While the development of creative synergies is underway, the School recognizes both critical opportunities and a responsibility to make this happen.

## **D.3 Business Practices**

**2017 Visiting Team Assessment:** In the B. Arch program, this criterion is Met at the understanding level as evidenced by student quizzes in ARC 452 Management of Professional Practice.

In the M. Arch program, this criterion is Not Met. In ARC 652 Management of Professional Practice, the team did not find evidence of an understanding of business practices within a firm, including financial management and business planning, marketing, and entrepreneurialism. Additional material was asked for on the first, second, and third days of the visit. The additional material provided by the program did not demonstrate that the criterion was met.

**University of Miami, 2019 Response:** Similar to the deficiency in D2 Project Management (see above), the previous course methodology of ARC 652 provided no evidence at the time of the team visit; and the Business Practice criterion was covered adequately in only one of three required practice electives. The M.Arch required course, ARC 652, Management of Architectural Practice is now modeled after the undergraduate ARC 452 course, sharing a common syllabus and taught by the same instructor (Professor Mike Rodriguez). Since this criterion was met in that course, we believe the changes in ARC 652 resolve the issues encountered during the prior visit. The course has also been updated to reinforce attention to the content deemed deficient during the team visit, including Business Practices. A revised topics list includes particular attention to business planning and models, legal frameworks, marketing and business development, financial considerations, and risk management and dispute resolution. (The current semester course syllabus is attached).

## **2. Changes or Planned Changes in the Program**

*Please report such changes as the following: faculty retirement/succession planning; administration changes (dean, department chair, provost); changes in enrollment (increases, decreases, new external pressures); new opportunities for collaboration; changes in financial resources (increases, decreases, external pressures); significant changes in educational approach or philosophy; changes in physical resources (e.g., deferred maintenance, new building planned, cancellation of plans for new building).*

### **University of Miami, 2019 Response:**

There has been great activity on multiple fronts at the University of Miami School of Architecture since the last NAAB visit.

**New Faculty:** In the Spring of 2018, U-SoA conducted an international faculty search that resulted in 5 appointments (4 tenure-track Assistant Professors and 1 lecturer)

**New Physical Resources:** In Fall 2018, U-SoA inaugurated the new Thomas P. Murphy Studio Building. The 20,000 sq. ft. building is LEED-certified and includes 2 large, open studio spaces (accommodating 130 desks), review spaces, offices, an outdoor workspace, an outdoor jury area, and a digital fabrication lab. The various collaborative working spaces are transforming the culture of the studio environment and promoting synergies between core and upper-level students while the FabLab expands existing technological resources (including a robotic arm in January 2020).

The new B.E. & W.R. Miller BuildLab, was inaugurated in the Spring of 2018. The building supports the Design/Build program by providing shelter and infrastructure for full-scale construction. The building is composed of a 1, 300 sq. ft., double – height room and perimeter storage for tools and equipment and functions as a hub where modular projects are assembled, disassembled, shipped and then reassembled on site.

Beyond the new building projects, renovations continue in the historically designated buildings including new computer labs, classrooms and an incremental replacement of the original fenestration with new, operable, steel casement windows. The Architecture Research Center opened in Fall 2019, doubling the space of the existing library with the addition of seminar, research and archive facilities.

Finally, U-SoA has initiated a new building project: the Center for Resilient Building Technology and Construction. It consists in a variety of research labs, making spaces, and studios attached to a high-bay facility designed to accommodate large-scale experiments with materials, fabrication, and building construction. The project is currently in the design stage.

**Enrollment:** For the Fall 2019 semester, U-SoA experienced a dramatic increase in enrollment in both the Undergraduate and Graduate programs. For the BARCH program, the incoming freshman class increased from 56 to 106; and the MARCH I and II programs increased from 12 to 29 incoming graduate students.

**New Programs:** In Fall 2019, U-SoA established a new Master of Construction Management, an interdisciplinary program open to graduates from Architecture, Engineering and Construction backgrounds and intended to

broaden educational and career options for students. In addition, new certificates were added for the Masters of Architecture program in a variety of areas including: Hospitality Design; Design for Health and Well-being; Sustainable and Resilient design; Construction Management; Urban Design; and Real Estate Development. Lastly, U-SoA will be launching a new Masters in Historic Preservation in the Fall of 2021.

**3. Appendix** (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses)

**University of Miami, 2019 update:** [Click here to enter text.](#)

## **GERMANE DAVID BARNES**

### **Courses Taught**

ARC 102, 204, 407/408, 509/510, 609, 610, 699

### **Educational Credentials**

Woodbury University, Masters of Architecture, 2012  
University of Illinois at Urbana-Champaign, B.S. Architecture, 2008

### **Teaching Experience**

University of Miami School of Architecture,  
Assistant Professor Tenure Track, 2019-Present  
Senior Lecturer, 2018-2019  
Lecturer, 2016-2018  
Adjunct, 2013-2016

Woodbury University, Teaching Assistant, 2010-2012

### **Professional Experience**

Studio Barnes, Miami, FL, Director, 2015-Present  
Bonner+Stayner, Project Manager, 2011-2015  
Catherine Garrison Architects, Design Intern, 2012-2013  
Francois Perrin Architects, Design Intern, 2012

**Licenses/Registration** Florida, In-progress

### **Selected Publications and Recent Research**

"Unbound", A production grant distributed by Oolite Arts to study Le Corbusier's When the Cathedrals Were White & Rashad Shabazz' Spatializing Blackness, secured 2019.

"Porch Portrayals", A research grant distributed by University of Miami to create an exhibition and course investigating the porch as a social conduit, completed 2019.

"False Prophets", An ACSA Conference Panel which examines the architectural literary cannon and projects critical theorist in the future, completed 2019.

"Sacred Stoops", A research grant distributed by The Graham Foundation which interrogates the role of the porch in black communities across critical cities of the Great Migration, completed 2018.

"[Housing] Destruction", A research project published by the Journal for Architectural Education (JAE), completed 2017.

"Reproducing Race Project", An interdisciplinary research grant distributed by University of Miami, completed 2017.

## Professional Memberships

Black Space  
Miami Dade County Public Art Committee  
Greater Miami Chamber of Commerce

## JOEL D. LAMERE

### Courses Taught

ARC 102, 584, 610, 629, 699

### Educational Credentials

Harvard Graduate School of Design, Cambridge, MArch (2006)  
Boston University, Boston, Bachelor of Arts in Philosophy (1998)

### Teaching Experience

University of Miami School of Architecture  
Assistant Professor, 2018- Present  
Massachusetts Institute of Technology  
Assistant Professor, 2012-2018  
Lecturer 3007- 2012  
Northeastern University  
Lecturer, 2008-2009

### Professional Experience

GLD Architects, Boston MA and Miami FL, Founding Partner, 2010- Present  
Utile Inc., Boston MA, Geometry and Design Consultant, 2009  
Anmahian Winton Architects, Cambridge, MA, Design Architect, 2003-2008

### Selected Publications and Recent Research

"Lost House," Built Project, N+T Public Art Accelerator, Boston. 2018.  
BSA Design Award, Hospitality Category, Boston Society of Architects. 2018.  
Lamere, J. and Cristina Parreno, eds. *Acadia 2017 Disciplines & Disruption: Projects Catalog*. Book. Delaware, ACADIA, 2017.  
TASTE Wine Bar, Built Project, Boston. 2017.  
CommonVines Retail Store, Built Project, Boston. 2017.  
Lamere, J. and Yung Ho Chang, eds. *Light, Cheap, Fast Museum*. Book. Beijing, Tongji University Press, 2016.  
*GLD: Thinness*. Solo Exhibition, Keller Gallery, Cambridge MA. 2016.  
A|N Best of Design Awards, Young Architects Runner Up. 2016.  
R+D Awards Honorable Mention, Architect Magazine. 2016.  
"Grove," Built Project, Boston Design Biennial, Boston. 2015.  
*Boston Design Biennial*, Group Exhibition, Boston. 2015.  
*International Design Expo*, Group Exhibition, Wuxi, China. 2015.  
"Chamber," (with William O'Brien Jr.) Built Project, University of Maryland, College Park. 2014.  
"Tough Puff," Built Project, MIT International Design Center, Cambridge MA. 2014.  
*Makers in the Making*, Group Exhibition, Boston. 2013.  
"Einheit Mihrab," Built Project, Vorarlberg Architecture Institute, Dornbirn Austria. 2013.  
"Einheit Muqarnas," (with Azra Aksamija), Built Project, AFO, Linz Austria. 2012.  
*Innensacht Suedost*, Group Exhibition, Linz, Austria. 2012.  
"Overliner," MIT Festival of Arts and Sciences, Cambridge. 2011.  
*FAST Light, MIT's Festival of Arts and Sciences*, Group Exhibition, Cambridge MA. 2011.  
Harbor Islands Pavilion (with Utile Architects), Built Project, Boston. 2011.  
*Simultaneous Presence, Evergreen Museum Sculpture Biennial*, Group Exhibition, Baltimore, MD, 2010.

## CHRISTOPER MEYER

### Courses Taught

ARC 203, ARC 306, ARC 363, ARC 663, ARC 407-510

### Educational Credentials

Harvard University Graduate School of Design - MArch II Post Professional Program – 2016

University of Arkansas Fay Jones School of Architecture + Design - BARCH, 2005

Rome Center for Architecture and the Humanities, FJSOA+Design, (Rome, Italy) 2004

### Teaching Experience

University of Miami School of Architecture, Assistant Professor, 2018-Present

Wentworth Institute of Technology College of Architecture, Design & Construction Management, Adjunct Faculty, 2017-2018 and 2014-2015

University of Arkansas Fay Jones School of Architecture + Design, Visiting Professor, 2016-2017

University of Minnesota College of Design, Adjunct Faculty, 2007 – 2010

### Professional Experience

Founding Principal, Atelier Mey Architects 2016 – Present

SALA Architects Associate Architect 2005 – 2014

**Licenses/Registration** Registered Architect Minnesota and Wisconsin U.S.

### Selected Publications and Recent Research

Autodesk Build Lab Residency, 2019-2020

Visiting Scholar Position Ryerson University Creative Technologies Lab 2019-2020 [*Fibrous Tectonics in Saline Environments*]

U.S. Forestry Department Wood Innovations Grant Recipient 2019-2021, Principle Investigator

Research + Design Partnership with Town of Surfside, FL, Climate Action Plan, Community Adaptation Toolkit and Strategic Development for Comprehensive Urban Communities

Hillbrand, Katherine, and Christopher Meyer. "Shadow Box." *Architecture MN*, 2017.

Menges, Achim. *Material Performance: Fibrous Tectonics & Architectural Morphology*. Harvard University Graduate School of Design, 2016. pages 76 – 93

Meyer, Christopher, and Shawna Meyer. "Cross Americas Probing Disglobal Networks." ACSA Press, *Cross Americas Probing Disglobal Networks*, 2016.

Meyer, Christopher Michael, Hemmendinger, Daniel, Meyer, Shawna. Pamphlet *Architecture 36 Buoyant Clarity*. Princeton Architectural Press, 2018



## FLORIAN SAUTER

### Courses Taught

ARC 102, 121, 407-510, 609, 610, 699

### Educational Credentials

Doctor of Sciences, ETH Zurich, 2010  
Master of Architecture, ETH Zurich, 2004

### Teaching Experience

Cornell University, AAP, Visiting Critic, 2019  
University of Miami School of Architecture, Lecturer, 2018- Present  
Porto Academy, Workshop Leader, 2018  
Technical University Munich, Visiting Professor, 2017-2018  
ETH Zurich, Assistant to Prof. Christian Kerez, 2014-2016  
ETH Zurich, Assistant to Prof. Dr. Josep Lluís Mateo, 2006-2014

### Professional Experience

Kunsthalle Basel, Architect-of-Trust, 2015-2018  
Sauter von Moos, Basel, Switzerland / Miami, FL, Director, 2010- Present  
Heinrich Degelo, Basel, Switzerland, Architect, 2005-2006  
Josep Lluís Mateo, Barcelona, Spain, Intern, 2003  
Christian Kerez, Zurich, Switzerland, Intern / Architect, 1999-2015

### Licenses/Registration Switzerland

### Selected Publications and Recent Research

Lecture, "Works and Thoughts in Pink and Blue," Architecture on Stage, The Architecture Foundation and the Barbican Centre, London, 2019  
Lecture, "Complete Works & Other Stories," Yale University School of Architecture, 2019  
*Auszeichnung Guter Bauten Basel* (Distinction – Villa Hammer), 2018  
*Painting the Sky Black: Louis Kahn and the Architectonization of Nature* (Warsaw / Berlin: de Gruyter Open, 2018)  
"Presença e Contínuo," in *MA* (FAU Porto, 2018)  
"Porto Surrealismo," in *Indexnewspaper*, July 2018  
Exhibition, *Readymades belong to Everyone*, Swiss Institute / Contemporary Art, New York, 2018  
Exhibition, *Make New History*, Chicago Architecture Biennial, 2017  
"Elemental Lessons," in Matteo Ghidoni, (ed.), *Fundamental Acts* (Milano: a+mbookstore, 2016)  
*Arc Award – Swiss Architecture Award 2015* (1<sup>st</sup> Prize 'Der erste Bau' – House with a Tree), 2015  
*Prix Lignum* (2<sup>nd</sup> Prize Region Nord – House with a Tree), 2015  
Exhibition, *Book for Architects*, gta Exhibitions, ETH Zurich, 2015  
*Earth Water Air Fire – The Four Elements and Architecture* (New York: ActarD, 2014)

### Professional Memberships

Federation of Swiss Architects (BSA) and Association of Swiss Architects and Engineers (SIA)

## **CHARLOTTE VON MOOS**

**Courses Taught** ARC 101, ARC 407-510, ARC 586

### **Educational Credentials**

1998-2004 Architectural Studies ETH Zurich, Master ETH Zurich with Prof. Hans Kollhoff

### **Teaching Experience**

2004-2005 Assistant Prof. Valerio Olgiati, Accademia di Architettura Mendrisi

2011-2015 Assistant Prof. Herzog & de Meuron, ETH Studio Basel

2014 Assistant Prof. Herzog & de Meuron, Harvard GSD Studio Abroad Basel 2016 Head Assistant Prof. Herzog & de Meuron, ETH Studio Basel

2017-2018 Visiting Professor in Architecture, TU Munich

2018 Workshop Leader Porto Academy

2018- Present, Assistant Professor, University of Miami

### **Professional Experience**

2005-2010 Architect Herzog & de Meuron, Basel

2010 Office Sauter von Moos, Basel/ Miami

### **Licenses/Registrations** Switzerland

### **Selected Publications and Recent Research/Awards**

2006-2010 VitraHaus, Weil am Rhein, GER (Office Herzog & de Meuron – project leader design and execution)

2012-2013 House with a Tree, Basel BS, with Pierre de Meuron, design and execution

2014 Natural History Museum and City Archive, Basel BS, invited competition

2015 Urban Study Binningen Terraces, Binningen BL

2015 achtung; die Landschaft- Can one think of the City in different Terms? A first Attempt (Zurich: Lars Muller)

2015 Arc Award – Swiss Architecture Award (1st Prize 'Der erste Bau') 2015 Prix Lignum (2nd Prize Region North)

2015 Häuser Award (Distinction)

2016 Housing Studio Basel, invited competition, Basel BS

2016-2017 Panton Stube, Basel BS, design and execution

2016-2018 Villa Hammer, Basel BS, with Pierre de Meuron and Jacques Herzog, design and execution 2017-2019 Kindergarden De Bary, Basel BS, design development

2015-2018 Architect-of-Trust Kunstverein Basel

2017 Reduce / Reuse / Recycle > international, Accademia di Architettura Mendrisio, Exhibition

2017 Chicago Architecture Biennial, installation "Sonsbeek ready-made", Exhibition

2018 Swiss Institute of Contemporary Art, New York, "Readymades belong to Everyone", 2018 Centre Cultural de Belém Foundation, Lisbon, "Building Stories", Exhibition

2018 Moira Gemill Prize for Emerging Architecture (Shortlisted)

2018 Auszeichnung Guter Bauten Basel (Distinction: Villa Hammer) 2019 Design & Build Award ('Ones to Watch in Switzerland')

2018 "Presence," KTH Royal Institute of Technology, Stockholm, Lecture

2018 "Living: An Activity," University of Miami School of Architecture 2018 "Presence," Porto Academy, Lecture

2018 "Surreal Presence," Architekturforum Zürich, Lecture

2018 "Surreal Presence," Accademia di architettura Mendrisio, Lecture

2019 "Works and Thoughts in Pink and Blue," Architecture on Stage, London 2019 "On Building," Archi Summit, Lisboa, Lecture

**Professional Memberships** since 2019 Federation of Swiss Architects (BSA / FAS)

## ARC 305 ARCHITECTURAL DESIGN V FALL 2019 SYLLABUS

**Faculty** Roberto Behar (c) Wesley Kean, Frank Martinez, Veruska Vasconez



### **Studio project** *MIAMI BEACH MIX-USE MID-RISE SOCIAL HOUSING & FACILITIES*

**Course Description** Typological and precedent investigation, programming, site documentation and analysis, and code review are vital components of the design process. A focus on pre-design is the necessary prelude to this semester-long design effort involving a real and evolving project type in Miami Beach.

**Course Goals and Objectives** Students will explore aspects of project initiation and development in a semester-long assignment focused on the development of a new Miami Beach social housing project in South Beach. The first part of the semester will emphasize pre-design skills like typological research, references and precedents study, code review, site analysis and programming. In the second part of the semester, the making of a mid-rise mixed-use housing project will bring into focus issues of structure, building service systems, building skin, environmental adaptation, social space, community building and the role of architecture in the construction of cities. Students will be challenged to develop designs that are sustainable, accessible, and code compliant with regard to life safety/egress and ADA requirements. Students will explore forms of visual and oral communication at every level of project development.

**NAAB Student Performance Criterion** **Primary B1** Pre-Design | **C1** Research | **C2** Integrated Evaluation & Decision -Making Design Process | **Secondary B3** Codes and Regulations and **C3** Integrative Design

### **Recommended Textbooks/Learning Resources**

Fernandez Per, Aurora, Javier Mozas & Javier Arpa. *This is Hybrid: An Analysis of Mixed-Use Buildings* by A+T. A+T Research Group. Vitoria-Gasteiz, Spain 2011.

Allen, Edward & Joseph Iano, *The Architect's Studio Companion*, 4th edition, John Wiley & Sons, 2007  
Stein, Benjamin & John S. Reynolds, *Mechanical and Electrical Equipment for Buildings*, 10th edition, John Wiley & Sons, 2006

Additional readings may be assigned by the critics. A bibliography is here included and ON RESERVE at the SOA library.

**Instructional Methodology** The course will consist of design studio (two days per week M-W 1:30-6:00PM), required readings, in-class lectures and discussions, special 'esquisse' or analytique exercises, project reviews and field trips. Each studio will realize a base model and a drawing set of contextual base drawings. The research part of the semester will be done individually; the design project will be realized in teams of two.

**Process Folder, Digital Record and Design Notebook** Design Teams are required to maintain a process folder containing all sketches, drawings, inspirational sources etc. Illustrating their design process throughout the semester. All phases of project development are to be included and catalogued accordingly; from preliminary ideas and schematic design to alternative parties and design development. It is also the responsibility of each design team to digitalize these documents. In addition, each student is required to maintain a Design Notebook throughout the duration of the studio. This notebook is to be used as a tool for collecting, analyzing, developing, editing and presenting your research and design proposals. Research exercises, graphic analysis and diagrams accompanied by analytical and descriptive text, are to be uploaded and maintained for the use of the studio. Faculty may collect these materials at the end of the semester. The completeness of the process folder, digital portfolio, quality of drawings and development of drawing skills will count toward the student's grade.

**Grading** Students will be evaluated based on their comprehension and execution of the principles discussed throughout the semester. Class participation, attendance, and graphic and communicative skills will also be considered as a component of the final grade. Class participation (10%) Analytique (15%) Pre-Design (20%) Process Folder & Notebook (10%) Project Design (45%) (Note: Project Design grade will be established by a committee of all faculty)

#### **CLASS SCHEDULE (key dates)**

Aug 19	First day of Classes
Aug 21	Site Visit, Miami Beach
Sept 9	Analytical research assignment due
Sept 11	Lecture: Miami Beach Zoning Code
Sept 16	Lecture: A Brief History of Collective Housing
Oct 14	MID TERM REVIEW
Oct 16	Lecture: Codes and Regulations, Life Safety and Egress (assignment)
Nov 22	Final Presentation Drawing Deadline
Nov 25- 30	Thanksgiving Recess
Dec 2	Final Jury Presentation (complete presentation)

#### **FINAL REQUIREMENTS**

Site Plan	1/20" = 1'-0"
Ground floor and typical floor plans	1/8" = 1'-0"
Typical apartment floor plans	1/4" = 1'-0"
Typical Life Safety/Egress plan	1/8" = 1'-0"
Elevations	1/8" = 1'-0"
Street Sections	1/8" = 1'-0"
Building Sections	1/4" = 1'-0" (minimum)
3D model	to create a minimum of (2) 3D exterior views and (1) interior view
Physical model and/or detailed 3D drawing	
Zoning: Site & program analytical drawings	
Codes: Life Safety/Egress and ADA, analytical drawings	
PowerPoint presentation with accompanying 500-word text	

course	<b>INAUGURAL DESIGN STUDIO</b>
code	<b>ARC 607 (Core Studio - M.Arch II program)</b>
semester	FALL 2019
credits	6
class hours	MONDAY & WEDNESDAY 1:30PM- 6:00PM
professors	ALLAN SHULMAN NIC BAKER III

## Course Description

The inaugural studio of the M.Arch II sequence is devoted to the urban and architectural possibilities of microHOUSING. Microhousing reflects and embodies a series of contemporary issues: the hyper-urbanization of leading metropolitan centers; the increased cost of land and construction in those centers and the consequent unaffordability of housing; social trends that arc away from ownership; aesthetic trends toward minimalism; and consciousness of the ecological footprint of our current lifestyles. In the commercial and civic heart of Miami Beach, students will develop a multi-use urban building that includes a secondary program that complements the project, site and district. Students will need to address the inter-related issues of climate, identity, history, site design, building typology, materiality, and the functional issues of lifestyle and culture that have affected the development of tropical architecture. In addition, as Miami Beach and the Lincoln Road district are at well-known risk of inundation by extreme rainfall, king tides, and storm surge (against a context of sea level rise), the project must take into account short, medium and long term effects of water.

## Course Goals & Objectives

The work of the microHOUSING studio will engage the following objectives:

1. **Explore** the nature of microHOUSING through targeted case studies, producing an analytique of the program type.
2. **Identify (document and analyze)** a specific site appropriate for microHOUSING. Develop an attitude/approach to microHOUSING consistent with site selection.
3. **Elaborate (and refine)** a housing program appropriate for the site selected
  - Design 50-150 new microHOUSING units.
  - Develop complementary amenities that consider the needs of micro housing tenants, as well as the relationship to the street and adjacent neighborhoods.
  - Develop and implement a secondary program that enhances both the micro housing and its surroundings. For the purposes of this exercise, the secondary program is an entirely speculative proposal, and is not constrained by size, budget or other practical considerations.
4. **Mediate** the general and immediate urban context and ecology of the site
  - Address the public realm of the street, existing infrastructure, and the semi-public and private realms implicit to the housing program of microHOUSING.
  - Integrate contemporary structures within a neighborhood of mixed character, and in relation to existing landmarks.
  - Consider how the structure is conditioned by the tropical climate of Miami, and by contemporary issues of urban resilience.
5. **Develop** a coordinated architectural design proposal as a response to the above. The Project proposal must take into account Codes & Regulations and technical considerations, as well as lifestyle and design issues.

## NAAB Student Performance Criteria

**Primary:** A4 Architectural Design Skills; A8 Cultural Diversity & Social Equity; B1 Pre-design; **Secondary:** B3 Codes and Regulations; B4 Technical Documentation

## Course Goals and Objectives

Students will develop the project in three stages:

**Part 1: Pre-design:** Students should obtain a deep knowledge of the PLACE and the PROGRAM for the development of the project. A double "objective-rational" and "subjective-emotional" approach is suggested to fully engage the site conditions and possibilities:

- A. **Analytique:** microHOUSING precedent/typology research (to be completed individually, one per student). Each student will be responsible for examining one precedent, to be identified in class. The objective of this research will be to better understand models and trends in housing, and to investigate the way these structures work. Points of analysis may include, but are not limited to:

- Identify and describe the developer/housing (market segment, other projects, etc.)
  - Procure plans/section/elevations of the housing units, public spaces; include photographs
  - Analyze project location, context and site planning
  - Analyze project parti, massing, circulation, structural or building systems, construction, service, etc.
  - Analyze program
- B. Site Selection and Documentation:** Study the project location, select a site from the four available.
- As a group (each site will comprise a group):
- Participate in the development of the Lincoln Road Base Model
  - Develop base site plan/section/elevation/3d digital model of the context around the group site
  - Develop a scale model of the context around the group site (using 3d fabrication)
- As an individual:
- Explore the social, environmental, cultural, and technical conditions of the site.
  - Develop rational and personal analyses of the site in any form appropriate. Each student shall determine the best form of representation.
- C. Thematic Program Development:** Parallel to the Site Selection and Documentation, each student should develop a speculative idea about their microHOUSING. Although general program parameters are given in this document as a project brief, each student is responsible for individualizing the program to meet the objectives they set for their project. Accordingly, each student should analyze and refine the given programmatic objectives of the project, including:
- Public spaces
  - Amenities
- D. Secondary Program:** In addition, each student should develop a secondary program proposal that complements the given program objectives of their project, as well as the surrounding neighborhood. The form of the program development is individual to each student.

**Part 2 Preliminary Project Design:** Proceeding from the Pre-design work in Part 1, students will further elaborate an intellectual framework, or 'thesis', for their projects. Based on this thesis, they will demonstrate programmatic development, effective site design, and develop preliminary architectural studies. Deliverables at Preliminary Project Design include: Project Statement (50 words minimum); Site plan (scale to be determined); Building floor plans and sections (1/8"=1'-0"); 3-d context and building massing studies, including physical model at 1/32"=1'-0" and 1/8"=1'-0"; Diagrams; Project data, including square footages (8 1/2 x 11" format); Project book (see above - on-going & presented throughout semester, 8 1/2 x 11" format)

**Part 3 Final Project Design:** Final Project Design will demonstrate each student's vision for the micro housing project, in both urban and architectural terms. Deliverables at Final Project Design include: Project Statement (100 words); Site plan (scale to be determined); Building floor plans, sections and elevations (1/8"=1'-0"); Site and building renderings (four minimum, including at least one interior view of a living unit and one interior view illustrating public space); Physical 3-d model of building at 1/8"=1'-0"; Physical 3-d model of unit bay at 1/2"=1'-0", showing assembly of materials, systems and components of building design; Diagrams illustrating design and technical performance; Floor area by use | Circulation | Egress/Life Safety | ADA/Accessibility; Outline specification of materials and systems employed; Animated diagram, as may be developed in coordination with ARC 615; Project data, including square footages (8 1/2 x 11" format); Project book (see above – finalized and presents the complete development story of your project, 8 1/2 x 11" format).

## Evaluation

**Criteria for evaluation of the work the work will include:**

- development of research/design highlighting inventive and innovative capacities
- ambition and intention of the work
- content quality and conceptual clarity of the proposal
- resolution of the design proposal
- broad understanding of issues contained in the course
- overall outcome: quality presentation in in terms of precision, clarity, and craft

# ARC607 – ARCHITECTURAL DESIGN & THEORY

Code	<b>ARC 607</b>
Semester	Fall 2019
Credits	6
Faculty	DENIS HECTOR
NAAB criteria	Primary: <b>A4</b> . Architectural Design Skills; <b>A5</b> . Ordering Systems; <b>B1</b> . Pre Design Secondary: <b>B3</b> . Codes and Regulations; <b>B4</b> . Technical Documentation; <b>B5</b> . Structural Systems; <b>B6</b> . Environmental Systems; <b>B8</b> . Building Materials and Assemblies

## Course Description

An architectural design project that responds to the city's context, topography and site requirements. Focus on pre-design/programming and design, topography, accessibility, and visual communication.

## General Description

The fall studio for the graduate students focuses on the issues of programming, topography, accessibility, construction and structure. While the studio topics address fundamental design, the issues of interest in preceding studios supporting the role of architecture in culture and the effect of buildings on human behavior continue to be pertinent as do all of the learned and observed issues of building fundamentals.

## Instructional/Learning Objectives

1. Students write and develop the building program.
2. Students acquire knowledge of site conventions along with the skills and tools to document, analyze and design a building site and the building itself.
3. In addition to a familiarity with issues of topography, climate, and built context, students develop an awareness of structural systems and building envelope systems.
4. Research and the use of precedent.
5. Presentation methods include various forms of drawing, model-making, and public demeanor / presentation.

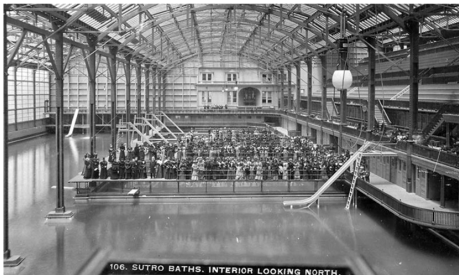
The studio specifically addresses a number of criteria outlined by the National Architectural Accrediting Board (NAAB), the group responsible for assuring the compliance of schools with professional standards in the process of granting professional degrees. The criteria specifically covered in the studio include the imparting of knowledge necessary for students to develop abilities in the areas of:

## Instructional Methodology

The studio is a partnership of students and faculty. Faculty members work closely with a small group of students through lectures, critiques and hands-on project development. Preparation for desk critiques requires completion of the assignment as well as necessary working materials including tracing paper, architecture and engineering scales, drawing tools, and any reference material or other related materials that the faculty member has requested of the class or student. Students without appropriate preparation for group or desk critiques will be considered absent. Each student will be expected to maintain project files that contain notes on class discussions, critiques, and readings, as well as research, drawings, sketches, and other evidence of the development of the design projects. This can be maintained in a file box or as a digital file if materials are scanned, labeled and cited appropriately.

**Technical Documentation:** The precedent study assignment Structure-Connection-Cladding in ARC607 is focused forensic reconstruction of the detailed construction of the envelope of an existing, generally high-tech wide span building. The objective of this project is to make evident the connection of the detailed wall section drawing with the physical material that is represented in the precedent. Wall sections and specifications are only pedagogically meaningful if they connect material assembly and drawing. The final presentation of the design project for this studio includes a 1/2"-1'-0" cladding detail that completes a pedagogical cycle of analysis-proposition-synthesis.

**Codes and Regulations:** Life Safety and ADA are specifically reviewed during the schematic design phase of project development of ARC607. The BOAF-AIA-FES Joint Task Force Has developed a sample Life Safety Plan which is reviewed with the studio and serves as the basis for planning and design. The principles and of accessibility and the specifics of circulation and service accommodation are reviewed with the studio throughout the design development.



The Sutro Aquatic Center  
@ Point Lobos, San Francisco

**Week 5 Site – continued & Programming**  
Sep 16 Site Analysis and Research Discussion\*\*  
Programming Precedent Analysis assigned  
Sep 18 Precedent Analysis & Programming Workshop

**Week 6 Programming & Part I**  
Sep 23 Finalization of Program & Initial Part I Workshop  
Sep 25 Part I Analysis & Site Selection Discussion

**Week 7 – Part I & Site Plan**  
Sep 30 Part I & Site Development Section & Plan  
Oct 02 Part I & Site Discussion & Viewport Selection  
Oct 03/06 Site Visit to San Francisco

**Week 8 – Schematic Design**  
Oct 07 Part I & Site Plan Confirmation & Response  
Oct 09 Volumetric, Circulation & Life Safety studies

**Week 09 - Design Development I – Form and Anatomy**  
Oct 14 Schematic Design Presentation\*  
Oct 16 Volumetric & Circulation & Response Desk-Crit

## Presentation Requirements:

**Concept Statement** – What is the idea behind your project?

**Program & Site Analysis Diagrams** – How do you understand and interpret the program in relation to your project and how did your analysis of the site determine the location of the building?

**Project Diagrams and developmental sketches**

**Site Plan and Section** 1/64" = 1' - 0"

**Building plans (in site)** 1/16" = 1' - 0"

**2 Building Sections** 1/8" = 1' - 0"

**Cladding / Detail** 1/2" = 1'-0"

**4 Perspectival Views**

**Massing Model** to fit in 1/64" site model



UNIVERSITY OF MIAMI School of Architecture

Course: **ARC 306 | 608 INTEGRATED DESIGN STUDIO | SPRING 2019**  
Class Hours: MONDAY & WEDNESDAY 1:30-6:00PM  
Professors: Juan Calvo, Steven Fett (c) Alice Cimring, Jose Gelabert-Navia, Carie Penabad, David Trautman

NAAB Criteria: BARCH Students  
**PRIMARY | C1 RESEARCH | C2 INTEGRATED EVALUATIONS AND DECISION-MAKING PROCESS | C3 INTEGRATIVE DESIGN | SECONDARY B3 CODES AND REGULATIONS**

MARCH students  
**PRIMARY | B3 CODES AND REGULATIONS | C1 RESEARCH | C2 INTEGRATED EVALUATIONS AND DECISION-MAKING PROCESS | C3 INTEGRATIVE DESIGN | SECONDARY A3 INVESTIGATIVE SKILLS | A4 ARCHITECTURAL DESIGN SKILLS | B4 TECHNICAL DOCUMENTATION**

*"Architecture is too complex for just one person to do it, and I love collaboration."* - **Richard Rogers** in *The Guardian*, July, 2013. (Above, Centre Pompidou, Paris)

**INTEGRATED DESIGN STUDIO**

Richard Rogers reminds us of two important points in his quote from *The Guardian*. First, Architecture is a profession that must engage with other disciplines, and second, architects benefit from collaboration. As architectural students, these are important lessons to understand and the studio aims to simulate this reality through the development of three primary skill sets:

1. Research: Understanding of the theoretical and applied research methodologies and practices used during the design process.
2. Integrated Evaluations and Decision-Making Design Process: Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.
3. Integrative Design: Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

Projects and assignments will focus on the acquisition of the above knowledge by focusing on the integration of building systems, including structural, mechanical, electrical, and plumbing (M.E.P.). Moreover, design strategies will be evaluated for appropriate code requirements including accessibility and life-safety /egress standards. In the end, the approach will be holistic; and context (both physical and environmental), will be considered when making design decisions.

The work over the semester will be divided into three parts:

*Part 1: Research Project (2.5 weeks)*

Students will work individually and choose from a list of pre-selected projects that exhibit the virtues of integrated design. Students will analyze site, environmental conditions and innovative approaches to energy efficiency. Structural assembly, MEP systems, and other uniquely distinctive features shall be examined. The Final presentation

requirements are a power-point presentation and two 24" x 36" composed drawing (or collection of drawings). The drawings should highlight the integrative features of the building.

### Part 2: Conceptual Project Development (7 weeks)

Faculty will distribute site, building use, and program information that will be unique to each studio. Students will discuss with their studio faculty the environmental consequences and design opportunities the location of the site presents. Thinking of the project holistically must happen during this phase of design. Conceptual ideas of how the building can take advantage of (or protect against) breezes, solar orientation, and the threat of natural phenomenon such as wind storms and climate change, will be a fundamental part of the project development. Furthermore, selecting an appropriate structural system that will attractively and effectively support the loads of the building, while accommodating the dimensional demands of MEP systems, must be conceptually investigated in this phase. Finally, initial plans will be analyzed for both accessibility and life-safety and egress requirements to ensure that the designs are code compliant.

### Part 3: Development of Integrated Systems (5 weeks)

Following the mid-term review, students will focus more directly on the technical requirements for the design of structural and MEP systems, as well as more detailed responses to relevant codes and regulations.

#### **REQUIRED READINGS**

Periodic readings will be distributed throughout the semester. Please refer to extended syllabi.

#### **FINAL PRESENTATION REQUIREMENTS**

**Location Map** with all relevant zoning code information

**Context Plan** 1/16" = 1'-0"

The overall project will be required to have a comprehensive yet concise analysis of solar orientation

**Floor Plans** at 1/4" = 1'-0"

**Reflected Ceiling Plan** at 1/4" = 1'-0"

This plan should indicate the distribution of lighting fixtures with the associated switching locations. Please take note of the fixture symbols and line types when creating the RCP. Refer to Architectural Graphic Standards.

**Building section(s)** at 1/4" = 1'-0"

The basic building section must show the relationship of natural light with the interior space. The drawing must answer the questions of: when is light entering the building, when is light not permitted to enter the building, how deep does light drive into the space, how is light filtered, altered, and bent to provide illumination to the interior space.

**Technical Wall section(s)** at 1 1/2" = 1'-0"

Wall sections should clearly present the materials which make up the floor, wall and roof systems. In addition, the wall section must indicate how light engages with the building envelope and should clearly depict the angle of solar exposure (the altitude) specific to the building orientation.

**Technical Plan Section** at 1 1/2" = 1'-0"

The plan section should be leveraged to show the solar angles in plan (the azimuth) specific to the building orientation. The plan section should act as a colleague to the vertical wall section to provide comprehensive information regarding how light interacts with the envelope of the building.

**Physical Model** ( scale will be determined per project)

The physical model will be a simplification of a portion of your building. All proposed building materials will be modeled in a simplified manner; and the model will be used to show how the building modulates natural light.

**Project Diagrams**

The diagram drawings will stand as a means to support the project ideas and will vary per project. These diagrams are generated by you, expression your critical analysis or insight of your precedent project

**Life Safety/Egress typical plan**

This drawing should clearly indicate all the critical components of your life safety/egress plan including exit path, exit distance, exit doors and maximum travel distances.

**ADA typical plan**

This drawing should clearly indicate all the critical components relating to ADA requirements including bathroom fixture requirements, exit corridor widths, turning radii etc.

**Lighting Calculations**

*The provided worksheet shall be completed with all relevant lighting information. In addition, please provide an output from AGI32 program defining the illuminance of the proposed lighting design.*

**Detailed Building Axonometric** (scale will be dependent on individual studio projects)

This drawing shall depict the overall design intent of the project as it relates to the integration of all critical building systems.

**Detailed Views** (to be determined by individual studio sections) Each student shall have a minimum of one exterior and one interior view of the project.

*\*Assignments to be worked on in conjunction with ARC 363/663*

**University of Miami School of Architecture**  
**Environmental Building Systems 02 Fall 2018**

Course Number ARC 663, Graduate Architecture

Instructor Name Christopher Meyer, AIA

Class Schedule Tuesday / Thursday 2:00 - 3:15 p.m.

Lecture/Lab/Total Credits 3/0/3

**COURSE DESCRIPTION:**

The lecture course Environmental Building Systems 663 will stand as a means to examine the potentials of energy to guide design principles inclusive of architecture lighting, acoustical aspects of interiority and general aspects of building enclosure. ARC 663 course content will widen its gaze inclusive of the origins of power, solar energy delivered from the sun. The course broadens one's understanding in the agency of energy to act as a design directive in order to drive architectural form making, spatial configuration and the surrounding context—natural and constructed. An underlying agenda of the course will be to interrogate lighting design in order to displace antiquated practices best defined as additive in favor of integrated and comprehensive approaches spanning across the entirety of the design process. Course exercises will investigate lighting across scales from the configurations of environmental conditions surrounding architecture to the intimate design of fixtures.

**COURSE OVERVIEW:**

ARC 663 will originate with a conversation of *Environmental Building Systems* focusing through a macro perspective that engages the students' understanding of system thinking. In particular the origin of energy as it lands on the earth's surface and the subsequent decisions designers choose to engage with the available energy. ARC 663 aims to expose the importance of obscure decisions architects encounter as part of the design process: material palettes, structural systems, glazing and apertures. Through these evaluations, the students will gain a greater understanding in the construction of buildings as holding great potential to produce significant ramifications within environment and ecological networks— both positively and negatively. The course will set forth an agenda for the future of architecture to formulate a more substantial and meaningful role for energy, both consumption and embodiment in the design of our constructed environment.

Course content and investigations conducted will parallel the integrated studio projects with the intent to put into action knowledge gleaned as part of the Environmental Building Systems courses ARC 662 and ARC 663.

**COURSE LEARNING OUTCOMES:**

At the completion of this course, the student should be able to:

Communication:

- Communicate graphically in a range of appropriate representational media.
- Communicate effectively through writing assignments focused on understanding the theories and application of research-based design.
- Cite images and sources in Chicago Manual of Style format.

Investigative Skills:

- The ability to locate, document and cite precedent information through a diverse set of sources.
- Develop the ability to decipher credible project information applicable to academic research projects.
- Understand fundamental theories, methods, and strategies of energy in architecture relative to architectural lighting.
- Understand fundamental principles of lighting design (natural and artificial) and acoustics.
- Understand the use of applied research as a factor in design and its impact on human conditions and behavior.

Applied Research:

- The applied aspect of the course will be through an alignment with the Integrated Studio project paralleling ARC 663.

Precedents:

- Comprehend and evaluate fundamental principles and strategies in architectural precedents and case studies and assess their relevance to design problems.

Workflow:

- Effectively use multiple digital platforms to create architectural drawings, diagrams and presentation materials.

**NAAB CRITERIA:**

Primary Focus Criteria:

B4 Technical Documentation; B6 Environmental Systems; B9 Building Service Systems

Secondary Focus Criteria:

A2 Design Thinking Skills; A3 Investigative Skills; A6 Use of Precedents

**INSTRUCTIONAL METHODOLOGIES:**

All citations and bibliographic references are required to conform to the “Notes-Bibliography” conventions of: The Chicago Manual of Style. 17th ed. Chicago: University of Chicago Press, 2017.

Class Participation: In addition, 10% of the grade will be assessed based on attendance, class participation, and Material Submissions. Each student is required to upload/submit all final work. Materials should include research, writing, and design work, including important study models and sketches. Faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in a usable format will result in a grade reduction in the final grade of the semester. Documentation of the work is essential for the accreditation purposes and assessment of the architecture program.

**Project 01: Light and The Section**

The extension of the definition of architecture past its core principle of shelter exposes the importance of atmosphere. The implication of light as the giver of space, places materiality and composition of material as the negotiator between interiority and exteriority, an open system of exchange. For architecture to engage in an active dialogue between interiority and exteriority, the articulation of the section becomes the agent defined by three traits: opacity, translucency and transparency. PR01 will interrogate a built architectural project through the lens of natural lighting techniques and their impact on the form (spatial definition). This project will serve as the foundation for future course investigations and discussions. Each student will choose a project from the list below in order to analyze the role of natural lighting through the research of project information as well as detailed documentation and drawing. The reproduction of architectural drawings will stand as the means of communication.

**Objectives:**

To document, analyze, and reproduce accurately wall sections and details of the selected precedent project; to build student competency of understanding and analysis in building assemblies and construction logics; to reinforce learned drawing skills and graphic representation of drafting standards; to build a knowledge base in the coupling of natural lighting techniques with architectural form making.

**Requirements and Deliverables:**

The final deliverable will focus on the construction of a wall section from the precedent project list using information gathered by the student through project research. The interrogation of the section will remain the focus, however, supporting information/drawings will be integral to a comprehensive understanding of and the communication of the project and section. Supporting information might include but not limited to: plan drawings, axonometric, technical detailed drawings, diagrams and images. Each student will be required to propose the location of the wall section to be agreed upon with the professor before creating the drawing. The proposed wall section must address the following:

- Ventilation, apertures, and/or glazing systems addressing natural lighting for interior space.
- The intersections of the ground – building as well as the building – sky.
- Wall section must illustrate the negotiation between the exterior environmental conditions and the interior ‘controlled’ environment.
- A clear understanding of natural lighting techniques through architectural form making.

The scale of the wall section drawings will be determined per project (project scale will be between 1/2” = 1’-0” and 1 6” = 1’-0”). All research work including imagery, text, drawings, diagrams and project information must be cited; any submitted information not cited will require the student to provide the citation or will be removed from the final submission materials. Both printed/plotted and digital submissions will be required.

## **Project 02: Natural and Constructed Light: Shaping Light Through Architecture**

ARC 663 is an exercise in interrogating and leveraging the light arriving to the surface of the earth through architecture. The integration of natural light [defined as luminance plus heat energy] requires a knowledge of place and inhabitation— coupling architecture environment. Negating the potentials of environmental specificity positions architecture in a precarious situation. Spatial definition is dependent upon the definition of interiority from exteriority— not to be confused with the compartmentalization or isolation of space. It is within differentiation of interiority from exteriority architecture enters a dialogue with light- an open and active exchange.

### **Objectives:**

The priority of PR02 will be to couple the foundational principles set forth in ARC 663 with each student's Integrated Studio project to address the role of natural and constructed light with design strategies.

- Comprehensive knowledge of the relationship between solar patterns with place and project siting— azimuth, altitude, summer solstice and winter solstice.
- Demonstrate a knowledge of how light engages surface geometry— angle of incidence and reflection patterns (mirrored reflections, specular reflections and diffuse reflections).
- Competency in the construction of a wall assemblies as related to building components and materiality with the passage of natural light.

### **Requirements and Deliverables:**

The final deliverables will be an extension of each student's integrated studio project focusing on the role of natural and constructed light. The associated work should be an extension of the knowledge gained from seminar lectures, the precedent project research and documentation. The work must address solar orientation through the azimuth and altitude as described from the Summer and Winter Solstices. Investigations will be conducted across scales from the project site to the detailed wall assembly. The proposed work must be addressed through the following deliverables (the list below does not limit investigation but should stand as a basis of deliverables):

- Icon Plan 1/8" = 1'-0"

The overall project will be required to have a comprehensive yet concise analysis of the solar orientation (azimuth and altitude). An Icon Plan (inclusive of basic site context information) will be required to explain solar information regarding the siting of your project within your giving site boundaries.

- Technical Wall section (s) at 1 1/2" = 1'-0"

Wall sections should clearly present the materials which make up the floor, wall and roof systems. In addition, the wall section must indicate how light engages with the building envelope— the section should expose the way in which light is moving through, directed/reflected or stopped. The wall section should clearly depict the angle of solar exposure (the altitude) specific to the building orientation.

- Technical Plan Section at 1 1/2" = 1'-0"

The plan section should be leveraged to show the solar angles in plan (the azimuth) specific to the building orientation. The plan section should act as a colleague to the vertical wall section to provide comprehensive information regarding how light interacts with the envelope of the building.

- Physical Model (scale will be determined per project)

The physical model will be a simplification of a portion of your building. All proposed building materials will be modeled in a simplified manner reducing materiality to tones from light (white) to dark (black). The model will be used to show how the building modulated natural light.

- Project Diagrams

The diagram drawings will stand as a means to support the project ideas and will vary per project. These diagrams are generated by you, expression your critical analysis or insight of your precedent project

- Note: The work produced for ARC 663 should be generated from the Integrated Studio Project, however, if the ideas pursued for the ARC 663 deliverables are in direct conflict with studio group ideas it will acceptable to separate the investigation of studio from ARC 663.

course	<b>MANAGEMENT OF PROFESSIONAL PRACTICE</b>
code	<b>ARC 452/652</b>
academic calendar	2019-2020
semester	FALL 2019
credits	3
classroom	Perez Arch Center 130
class hours	452 - TUESDAY & THURSDAY 5:00PM- 6:15PM 652 – TUESDAY 6:25 – 9:15 PM
profesor/s	MIGUEL A RODRIGUEZ, FAIA
professor email	<a href="mailto:m.rodriguez7@miami.edu">m.rodriguez7@miami.edu</a> / miker@rodriguezarchitects.com
class hours	by appointment
NAAB criteria	primary B10. Financial Considerations (U) D2. Project Management (U) D3. Business Practices (U) D4. Legal Responsibilities (U) D5. Professional Conduct (U)  secondary B3. Codes and Regulations (A) B4. Technical Documentation (A)

## catalog description

**focus:** Management of Professional Practice

A study of practice and the profession, the course covers professional rules and ethics, licensing and regulation, business practices, contractual relationships, project management, cost controls and selected aspects of personnel, business and risk management.

**format:** Lecture with significant class participation. Three credit course.

## course description

This course helps students develop an understanding of various concepts related to entering the profession, architectural practice and the delivery of architectural services. Topics include business management and practices, professional and ethical conduct, licensure and regulation, entrepreneurship, leadership, public and client relations, contracts, management of projects, dispute resolution and risk management strategies, and administration of construction contracts.

Students will be presented different methods of practice: traditional and non-traditional and evolving models.

**prerequisites:** Architecture students only. ARC 306, graduate standing or permission from instructor

## course objectives

- To understand the history of the profession and reason(s) for regulation.
- Know the requirements for initial and continued licensure.
- Understand the basics of professional and ethical conduct.
- Learn the fundamentals of architectural practice management skills.
- Understand the delivery of architectural services.
- Be aware of the role of codes, regulations and other legal considerations in practice.
- Understand contracts, management of projects and the administration of construction contracts.

## course structure

**format:**

Lecture and engaged discussions are the primary method of presenting information. Students are expected to be prepared to engage the instructor and each other in discussion of relevant topics and concepts. Lectures will not focus on the specifics of the reading but rather give real practice and timely examples to illustrate broad concepts and their application. Guest lecturers may also be utilized.

### *class participation:*

A general outline of the class topics is presented at the beginning of the semester. Each student is required to read assigned subject matter prior to class. It is expected that each student will come to class prepared to discuss the topics for that particular class session and to answer questions relative to the topical subject matter.

### **topics**

#### ***The Profession:***

Architecture as a Profession  
Ethics and Conduct, Professional Standards  
Demographics of Practice and Diversity of the Profession  
Regulation, Entering the Profession and Career Paths

#### ***Practice:***

Planning for Success – considerations when starting your practice  
Business Models – legal structures  
Architects and the Law  
Getting Work – Marketing and Business Development  
Firm Financial Planning and Management  
Building a Quality Design Practice  
Risk Management and Dispute Resolution  
Why Practices Fail

#### ***The Project:***

Defining the Project  
Common Project Issues  
Project Development – Design Phases  
Project Development – Construction Documentation  
Bidding and Negotiation  
Construction Contract Administration  
Project Delivery  
Project Management and Controls  
Building Codes and Regulations

#### ***Contract and Agreements:***

Role of Contracts

### *class attendance and absences:*

Regular and punctual class attendance is mandatory and critical since the use of real-life examples guarantees that no two lectures will be alike, three unexcused absences constitutes grounds for dismissal from the course and/or a failing grade.

Excused absences require written notification and are granted by the instructor.

### ***course expected output***

Completion of a series of assignments is required in this course. In no particular order, assignments will consist of the following:

1. Cost Control Assignment: You are required to walk-through the steps in preparing a design phase estimate of construction cost, based on methodology discussed in class.
2. Value Analysis: In this exercise, you will run through a variety of scenarios designed to illustrate the various methods of comparative analysis of a project's overall costs, you will review financing and operating costs, and prepare a limited scope life cycle analysis.
3. Outline Specifications: You will write a brief outline specification detailing a building system for a simulated (but real) building project.



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Students will be provided more complete project descriptions and requirements for expected deliverables as the semester progresses and these topics are discussed in class. Individual work will be required but small groups may be used to solve for some of the assignments.

Each assignment will be scored according to the criteria contained within each description. Together, these 4 assignments will comprise 20% of your semester grade. Extensions for submission of your work WILL NOT BE ALLOWED!

## readings

### REQUIRED TEXT:

author	title	publisher
American Institute of Architects	The Architecture Student's Handbook of Professional Practice.	John Wiley & Sons, Inc., 2016, 15 <sup>th</sup> Edition

### SUGGESTED READINGS

The following books may provide additional or background information that will help you better understand the topics discussed in this course. They may also provide information for your use in preparation of some assignments. You are not required to purchase these, but rather to research them in the media center or through online resources.

author	title	publisher
Coxe, Weld	Managing Architectural & Engineering Practice	John Wiley & Sons, latest edition
Fisher, FAIA, Thomas	Ethics for Architects: 50 Dilemmas of Professional Practice	Princeton Press
Pressman, FAIA, Andrew Fisher, FAIA, Thomas	Professional Practice 101: Business Strategies	John Wiley & Sons, 2 <sup>nd</sup> edition
Wasserman, Barry Sullivan, Patrick	Ethics and the Practice of Architecture	John Wiley & Sons, latest edition
Stitt, Fred A.	Design Office Management	Arts & Architecture Press
Bachner, John Phillip	Practice Management for Design Professionals	John Wiley & Sons, latest edition

## Evaluation

Criteria for evaluation of the work the work will include:

- > the development of research/design inventive and innovative capacities.
- > the ambition and intention of the work.
- > the content quality and conceptual clarity.
- > broad understanding of scales and problems contained in the course.
- > overall outcomes quality presentation in terms of precision, clarity, and craft.

### COURSE GRADING CRITERIA

The semester grade is determined by the quizzes and assignments, which make up 100 percent of the final grade. However, class participation and attendance are important in the award of the final grade and may be worth bonus points.

<b>Quizzes #1 – 4 collectively</b>	<b>80 % of final grade</b>
<b>Assignments</b>	<b>20 % of final grade</b>

## student work

All academic work is the property of the University. Any original work identified by faculty as archival or as exhibits for accreditation may be collected by faculty for the duration of the accreditation period.