

**Florida Atlantic University  
School of Architecture**

**ARC3320 ARCHITECTURAL DESIGN 5**

Number of credits: 4

Fall 2019

Studio location: HEC 7<sup>th</sup> floor.

Monday and Wednesday 12:30 pm to 4.20 pm

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**Course Description**

This course focuses on the use of basic principles of design that reflect meaningful concepts related to use, materials, structure, experience, and surrounding physical and social context. This includes developing environmentally responsive solutions to regional climatic conditions, working at architectural scales from the detail to the landscape.

**Course Overview**

ARC3320 is the foundational upper division studio of the FAU School of Architecture. Project design and discussions are built around four essential categories of architectural concern: environment/context, function/use, materiality/structure, experience/sensation. There are numerous other architectural terms used in various historical periods of architectural pedagogy and discourse, but focusing on the four listed above ensures clarity of analysis. Each of these categories of analysis will be carried into to individual critique and group conversations throughout the semester. In addition, culture and symbolic meaning is an overarching category that influences all other categories and should be considered in the design process.

The semester is organized around two projects. Each project is designed to foreground two or more of the four categories listed above. At the same time, each project requires exploration and resolution of all four criteria and the interrelationships among them. A common theme to both projects—and all architectural work, moving forward—is using technical and other research as inspiration for a design process. Both projects will require you to conduct rigorous research into one or more topics as a starting point for making form and space. The aim is to work with relevant site- and program-based ideas to create form, instead of imposing form unrelated to the specific context of the design problem.

**Project 1: Sundial House**

For this project you are asked to develop a design for a small family residence for an artist connected to the Marin Headlands Center for the Arts (<http://www.headlands.org>). Working with these parameters offers the opportunity to consider different qualities of sunlight, as they relate to specific indoor (and outdoor) activities, solar heat gain, radiant energy absorption of materials, sensory qualities of light and temperature, on a site in Northern California.

**Project 2: New River Boating Center**

The final project asks you to design a boating center with launch into the New River, located at Colee Hammock Park in Fort Lauderdale. This project will immerse students into an exploration of the relationship of land to water, conditions of the tidal estuary, recreation in Fort Lauderdale, and consideration of bodily experience and movement on land, water, and in between. Additionally, students need to consider the surrounding urban context: on one side, the arrival, movement from the street, through the park, to the river's edge, and into the river; on the other side: views and other sensory experience from across the river and watercraft, and the needs of the navigable waterway.

Complete information for each project will be available in handouts.

**Course Objectives/learning outcomes**

- Learn graphic symbols and conventions to communicate design intentions and develop a strong understanding of how graphic representation translates into space, at the level of form and experience.
- Continue to develop proficiency in constructed (drafted) drawings, free-hand drawing, and sketching.
- Learn to analyze and represent conditions of site, building, and context.
- Understand and use basic principles of design that reflect meaningful concepts related to use, materials, structure, experience, and surrounding physical and social context.
- Develop a precise and varied vocabulary to describe design intentions.
- Develop creative and environmentally responsible responses to regional climatic conditions.
- Develop the ability to work at varying scales, from architectural details to the larger landscape.
- Develop understanding of and compliance with the laws and codes governing architectural design.
- Further develop a critical approach to the design of buildings and begin to create a method of providing feedback to peers.

**Pre- or Co-requisites:**

Prerequisites: Minimum grade of "C" in all preprofessional design studio courses. Completion of all required lower-division preprofessional and general education course work, and an approved portfolio.

**Student Performance Criteria:**

- A.4 Architectural Design Skills (primary)
- A.5 Ordering Systems (primary)
- D.5 Professional Conduct (primary)
- FA.1 Subtropical Architecture (primary)
- A.2 Design Thinking Skills (secondary)
- B.1 Pre-Design (secondary)
- B.2 Site Design (secondary)
- B.6 Environmental Systems (secondary)
- C.2 Integrated Evaluations and Decision-Making Process (secondary)
- C.3 Integrative Design (secondary)

Definitions of the above criteria can be found on the NAAB website. [NAAB.org/Conditions](http://NAAB.org/Conditions)

**Recommended Text and Readings:**

*Graphic Thinking for Architects and Designers* (3rd edition)  
Paul Laseau, Wiley  
ISBN-10: 0471352926

*Drawn to Design: Analyzing Architecture Through Freehand Drawing* (held in Resource Room)  
Eric J. Jenkins, Birkhauser  
ISBN-13: 978-3034607988

*Analysing Architecture* (4th edition, 2014)  
Simon Unwin, Routledge  
ISBN-13: 978-0415719162

*The Architect's Studio Companion*  
Edward Allen and Joseph Iano, Wiley  
ISBN #: 0-471-39235-9

*Building Construction Illustrated* (3rd edition)  
Francis Ching, Wiley  
ISBN-10: 0471358983

*How Designers Think* (4th edition)  
Bryan Lawson, Architectural Press  
ISBN-10: 0750660775

### Supplemental Readings

To be distributed in class

### Grading Policy

The grading policy is established in accordance with Florida Atlantic University and the School of Architecture policies as outlined in the Florida Atlantic University Course Catalog. The following criteria supplements those policies and will be used to evaluate your work. You will be graded often and in a timely manner so you are certain of your academic standing in studio. Also note, that failure to follow verbal and written directions will negatively affect your grade.

### Course Evaluation Method

Grades for the semester will be distributed on the following percentage basis:

Project 1:	35%
Project 2:	50%
Lecture Series Attendance	5% (1pt per lecture; bonus for all 4)
<u>Work Ethic, including Class Participation*, and Improvement</u>	<u>10%</u>
	100%

\* Note: Group work, such as model making must be shared equitably; your grade will reflect your contribution, as evaluated by your instructor and peers.

**Grading rubrics for Projects 1 and 2** will be fully explained in the project handouts.

**Professionalism and Work Ethic** - Students must demonstrate professionalism and a strong work ethic through their actions in class, their preparedness for critiques, pinups or reviews, their engagement during presentations, and the completeness of their work. While we encourage a vibrant and dynamic learning environment in the studio, we also expect students to maintain a clean and organized work space. Students are also expected to respect their colleagues, and observe personal boundaries (spatial, auditory, sensory, etc.).

**Project Filing and Documentation** – Students must organize and document all process work during the semester. The majority of two-dimensional design development work should be done using tracing paper/overlay. Therefore, it is important that each student develop an appropriate filing system to organize their drawings of process and all versions of design, which must be available for review at any point during the semester. At the end of the semester, students must compile all process and final presentation material into a booklet that will be submitted for a final evaluation. All students are required to submit a CD documenting studio work throughout the semester.

### Semester Grading Rubric

In specific terms, each percentage point is equal to one (1) point, with a total cumulative value of one hundred (100) possible points for the course.

- |                 |                 |                   |
|-----------------|-----------------|-------------------|
| ○ A: 94-100 pts | ○ B-: 80-83 pts | ○ D+:67-69pts     |
| ○ A-: 90-93 pts | ○ C+: 77-79 pts | ○ D:64-66 pts     |
| ○ B+:87-89 pts  | ○ C: 74-76 pts  | ○ D-: 60-63 pts   |
| ○ B:84-86 pts   | ○ C-: 70-73 pts | ○ F: Below 60pts. |

Letter grades above indicate that students have achieved the following:

*A to A- Excellent Work*

Work of exceptional quality typically achieved through purposive self-direction, rigor, and expansive design investigations of the studio objectives. This work demonstrates a very high level of intellectual and material craftsmanship with results that are beyond the expectations established for a student at this level.

*B+ to B- Good Work*

Work of a high quality that exhibits insight, development, and academic performance above an average level. Work at this level exhibits a certain level of self-direction and discovery beyond a mere understanding of course content and objectives. Work is independently directed and demonstrates a high level of intellectual and physical craftsmanship.

*C+ to C Average Work*

Average work satisfies the objectives of the course, demonstrating an understanding of course content, and competence in concept production, design development, and craftsmanship in final work products. This work is typical and exhibits modest or normative intellectual and design ambition.

*C- to D- Marginal Work*

Marginal work is failing work, characterized by indifference and a marginal understanding of course content. This work is incomplete, manifesting little initiative, and lacking design development and integration of key concepts in the final work products. Students who earn a grade lower than a C typically do not read assigned literature, investigate relevant precedents, attend class, or maintain consistent progress in work production.

*F Failing Work*

Failing work is unacceptable and without substantive consideration of course content and/or satisfactory design development in work products. This work typically lacks synthesis of content, detail, specific course objectives, and/or is substantially incomplete. The work betrays incompetence and the inability to perform in a satisfactory manner at this level of study.

*I Incomplete Work*

Work that is Incomplete for a minor part of the course requirements due to an illness or other excused absence. An Incomplete is not intended to be an extension of the semester due to marginal performance. A passing grade is expected once the work is completed. An "I" is merely provisional and rolls over to an F in the following semester.

At a minimum, in order to pass this course, students must be able to demonstrate that they meet the Student Performance Criteria listed above. For definition of the SPC's refer to the website NAAB.org.

### **Course Methods and Processes**

All students are required to work in studio, and are required to produce all drawings and models by hand for D5. All work shown in class and submitted as homework must reflect the student's own thoughts and efforts. All tools must be set up and ready for use by Wednesday, August 21, 2019.

Required tools include at a minimum:

- 36" parallel rule
- 12" roll tracing paper (white)
- Architectural Scale
- Engineering Scale
- Triangles 30/60 & 45/45 (8" or larger)
- Adjustable triangles
- Lead Holders
- Lead Pointers
- Leads
- Compass
- Fine and medium point black markers
- Cutting tools (X-Acto)
- Metal Ruler with cork back
- Chip board & model making materials

All students are required to have 12" roll of tracing paper available at all times. Students should develop a process of (re)iterative model-making and drawing. The method of tracing paper layering over previous designs enables continuous rethinking while maintaining understanding of earlier versions of the design.

### **Drawing and Drafting**

All students must develop proficiency in technically constructed, scaled, architectural drawings, including plan, section, elevation, site plan, and axonometric and perspective. This requires developing proper drafting techniques, using drafting tools correctly, measuring dimensions accurately, and acquiring complete skills of using line weight, line quality, and other graphic conventions and symbols. It also requires the right tools!

In addition, as noted above, students must learn to work using a free-hand drawing method, which is the technique of deliberative drawing (without parallel rule or other guide edges), to-scale, typically tracing overlaid on drafted drawings, in order to explore different iterations of a plan, section, or other form of representation. Keep in mind that your ideas do not exist outside of your representations of them. In other words, you must draw or model your ideas in order to understand and develop them.

### **Attendance Policy**

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance.

Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Students shall conduct themselves in a diligent and professional manner. Students are expected to arrive to class on time, prepared, and having completed all assignments. During individual and group desk critiques, all students are expected to work productively at their individual or group drafting tables. Students are also required to remain in class for the duration of class, unless excused by the instructor. Anyone leaving early without permission will be marked with an unexcused absence for that day.

Absences: Each unexcused absence shall result in a penalty from your final cumulative point total. Students absent more than six classes without serious reasons (medical or otherwise) given in writing in advance of the class will automatically fail the class. Students absent from a required presentation, assignment, or examination without demonstrated emergency, will receive, without exception, an F for that presentation, assignment, or examination. Attendance will be taken at the beginning (and sometimes end) of each class.

Tardiness: Students arriving after attendance has been taken shall be considered late, which will also result in a grade penalty.

Absence does not absolve the student from homework, assignments, or work progress due on the day of absence and the work due the following class. It is the student's sole responsibility to contact someone from the class to get information on the material covered and assignments given.

### **Policy on Make Up/Late/Incomplete Work**

Make up and late work will not be accepted, except by prior agreement with instructor, based on legitimate reasons. Incompletes will only be offered in cases of medical or family emergency.

### **Classroom Etiquette Policy**

Students are expected to conduct themselves in a collegial and professional manner. This includes respecting the opinions of others, being attentive during lectures, and reviews, and participating fully in all discussions. During individual and group critiques students are expected to work productively at their drafting tables. Electronic communications with persons outside of the classroom or studio (telephone, texting, social media, etc.) is prohibited. In case of extenuating circumstances, students must make prior arrangements with faculty. Disruptive use of electronic communication may result in instructor asking student to leave class which shall result in an absence for that class.

It is the students' responsibility to maintain a professional, clean and safe working environment in the studios at all times. At the end of the semester, the studio should be returned to state in which it was received at the beginning of the semester. The studio clean-up is the collective responsibility of the studio, and the individual responsibility of the student. All garbage, debris, drawing material, model making material and personal effects must be removed or placed in trash bins, and all floors and desk surfaces must be clean, with your assigned stool placed on top of your desk. Any student leaving material in the studio after final clean out date will have their final grade for the class withheld, until the studio is left in a satisfactory state.

**Special Requirements** (if applicable) such as mandatory field trips or purchase of course related materials. Students are required to provide all their own instruments and resource materials in the studio. Except in cases of medical reason, students are required to attend field trips.

### **Shop Requirements**

All students are required to take and pass the workshop safety orientation at the start of semester. Look out for emails with instructions for how to do this.

- Safety Orientation: The starting point for everyone is the Safety Orientation. Once it is completed, you will be able to complete the following in any order:
  - Laser Cutter Orientation
  - 3D Printer Orientation
  - Wood Shop Orientation

To complete an orientation, you will need to obtain a certificate of completion from Canvas.

### **Printing**

CONSERVE: Plan your plotting/printing so that you do not waste paper and ink. This costs the school money and goes against resource conservation ethics. Plan your printing so that you have work ready before class time. Plotter problems are not a legitimate reason for tardiness.

### **Counseling and Psychological Services (CAPS) Center**

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

### **Disability Statement**

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at [www.fau.edu/sas/](http://www.fau.edu/sas/).

### **Code of Academic Integrity Policy**

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high-quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see the Code of Academic Integrity in the University Regulations at [http://www.fau.edu/regulations/chapter4/4.001\\_Code\\_of\\_Academic\\_Integrity.pdf](http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf).

Plagiarism is unacceptable in the University community. Academic work that is submitted by students is assumed to be the result of their own thought, research, or self-expression. When students borrow ideas, wording, or organization from another source, they are expected to acknowledge that fact in an appropriate manner. Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass-off such work as one's own. Any student who fails to give full credit for ideas or materials taken from another has plagiarized. This includes all discussion board posts, journal entries, wikis, and other written and oral presentation assignments. If in doubt, cite your source! Cited work of others should be kept to a minimum in favor of your own analysis.

### **Outside Employment**

While the School of Architecture is sensitive to the financial and professional needs of our students, outside employment is not considered an extenuating circumstance in cases of poor performance, excessive absences or failure to submit assigned work on schedule. Students who fail to adequately fulfill course and curriculum requirements while maintaining outside employment may be required to carry reduced course loads. A longer period in residence may result from this reduction in course load.

### **Student Work**

The School of Architecture reserves the right to retain any and all student work for the purpose of record, exhibition, and instruction. All students are encouraged to reproduce all work for their own records prior to submission of originals to the instructor. In the event of publication, the author or the work will be recognized and receive full attribution.

### **General**

Information concerning academic regulations, student rights and responsibilities may be found in the current Florida Atlantic University Catalog and Student Handbook. Students are also encouraged to review the School of Architecture Student Handbook, available online at the school's website.

### **Schedule**

#### **WEEK 1**

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Monday, 8/19	Course Introduction, Assign Project 1: Sundial House <i>Site</i> lecture (Liebermann) Review syllabus (as time permits)
Wednesday, 8/21	Review sunlight scenarios; cross-class demonstration

#### **WEEK 2**

Monday, 8/26	preliminary pin-up or desk crit
Wednesday, 8/28	Desk crit or pin-up

#### **WEEK 3**

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Monday, 9/2	Labor Day Holiday
Wednesday, 9/4	<b>Project 1 mid-review</b>

#### **WEEK 4**

Monday, 9/9                      *Representation* lecture; Desk crit or pin-up  
Wednesday, 9/11 Desk crit or pin-up

**WEEK 5**

Monday, 9/16                      Desk crit or pin-up  
Wednesday, 9/18 Desk crit or pin-up

**WEEK 6**

Monday, 9/23                      **Project 1 Final Review;** Wednesday, 9/25  
Assign Project 2; Site visit, assign site analysis

**WEEK 7**

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Monday, 9/30                      *Function/Use* lecture; Project 2 preliminary pin-up or desk crit  
Wednesday, 10/2 Desk crit or pin-up

**WEEK 8**

Monday, 10/7                      *Experience/Sensation* lecture (Liebermann); Desk crit or pin-up  
Wednesday, 10/9 Desk crit or pin-up

**WEEK 9**

Monday, 10/14                      Desk Crit or pin up  
Wednesday, 10/16                      Desk crit or pin-up

**WEEK 10**

Monday, 10/21                      **Project 2 mid-review**  
Wednesday, 10/23                      Desk crit or pin-up

**WEEK 11**

Monday, 10/28                      Desk crit or pin-up  
Wednesday, 10/30                      Desk crit or pin-up

**WEEK 12**

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Monday, 11/4                      Desk crit or pin-up  
Wednesday, 11/6 Desk crit or pin-up

**WEEK 13**

Monday, 11/11                      Veteran's Day holiday  
Wednesday, 11/13                      Desk crit or pin-up

**WEEK 14**

Monday, 11/19                      Pin-up final review draft  
Wednesday, 11/21                      Desk crit or pin-up

**WEEK 15**

Monday, 11/25                      **Project 2 Final Review**

This syllabus may be revised. Check project handouts for the most current information.