



**FLORIDA
ATLANTIC
UNIVERSITY**

COURSE CHANGE REQUEST Undergraduate Programs

Department Architecture
College Arts and Letters

UUPC Approval 2/26/24
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

Current Course Prefix and Number ARC 3321 **Current Course Title**
Architectural Design 6

Syllabus must be attached for ANY changes to current course details. See Template. Please consult and list departments that may be affected by the changes; attach documentation.

Change title to:

Change description to:

Change prefix

From: **To:**

Change course number

From: **To:**

Change credits*

From: **To:**

Change grading

From: **To:**

Change WAC/Gordon Rule status**

Add Remove

Change General Education Requirements***

Add Remove

*See Definition of a Credit Hour.
**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines.
***GE criteria must be indicated in syllabus and approval attached to this form. See Intellectual Foundations Guidelines.

Change prerequisites/minimum grades to:
Existing Prerequisites: ARC 3091 and ARC 3320, or permission of department

Add ARC 3133 as new prerequisite

Change corequisites to:

Change registration controls to:

Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).

Effective Term/Year for Changes: Fall 2024

Terminate course? Effective Term/Year for Termination:

Faculty Contact/Email/Phone Francis Lyn / FLyn1@fau.edu / 6-5608

Approved by

Department Chair
College Curriculum Chair
College Dean
UUPC Chair Korey Sorge
Undergraduate Studies Dean Dan Meeroff
UFS President _____
Provost _____

Date
1/29/2024
5 Feb 2024
2/8/24
2/26/24
2/26/24

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.



FLORIDA ATLANTIC UNIVERSITY

ARC 3321-001 12064

Architectural Design 6

Date: Monday, Wednesday 12:30 PM - 4:20 PM

Building: FAU BCC Higher Ed Complex FTL **Room:** 312

4 Credit(s)

Spring 2024 - 1 Full Term

Instructor Information

Shermeen Yousif

Email: syousif@fau.edu

Office: HEC Room 813

Office Hours: By appointment online (Microsoft Teams) or in person HEC Room 813 (TUE-THU 11:00am-12:30pm)

Phone: 5135801901

Course Description

Architectural Design 6

Prerequisites: ARC 3091, ARC 3320, and ARC 3133, or permission of department

This course focuses on the integration of structural expression and principles of architectural ordering and composition of space. Student projects develop a critical approach to the program and physical, social and historical context through research in order to develop a meaningful rationale for their design process.

Prerequisites/Corequisites

Prerequisite(s): All of the following:

- ARC 3320 Graduate / Undergraduate (Minimum Grade of C)

- ARC 3091 Graduate / Undergraduate (Minimum Grade of C)
- ARC 3133 Graduate / Undergraduate (Minimum Grade of C)

Teaching Methodologies

Studio Theme: DAYLIGHTING AS A STRATEGY FOR SPACE MAKING: This studio addresses environmental aspects of passive design strategies, specifically daylighting as informing architecture design. In this context, daylight emerges as a nuanced architectural medium, possessing an ethereal quality. It encapsulates the dynamic nuances of the sky's shifting conditions and the distinctive characteristics of a locale as it engages with the architectural structure, material composition, surface textures, colors, and reflective properties. The diverse and ever-evolving interplay of daylight and material and atmospheric influences possess the capacity to heighten the senses, thereby deepening our perceptual connection and intellectual engagement with the intricacies of the environment that envelops us. The objective of employing daylighting as a strategy to drive the design process is multifaceted, nuanced and goes beyond mere illumination. Integration of daylight in design serves various purposes: aesthetically enhancing spaces with dynamic patterns of shadow and illumination, influencing spatial perception to create diverse atmospheres, contributing to ecological design solutions and energy efficiency by minimizing artificial lighting, supporting circadian rhythms for occupant well-being, influencing the perception of materials and colors within a space, and establishing a connection to nature through views of the sky and landscape.

The course also addresses design as an exploration activity defined by interconnected process phases, formulated as a design workflow. This proposed design workflow will allow students to engage with several computational methods and principles for the generation and evaluation of design propositions, including strategies of generative deep learning models as means of design ideation and exploration, and environmental modeling techniques of daylighting for design evaluation and qualifying. The objective is to extend our design abilities and follow a design process structure that enables us to expand our creative exploration and identify methods of evaluating design.

Instructional Method

In-Person

Traditional concept of in person. Mandatory attendance is at the discretion of the instructor.

Required Texts/Materials

The Architecture of Natural Light

ISBN: 9780500290361

Authors: Henry Plummer

Publication Date: 2012-01-01



Recommended Readings and Materials



Computational Design Thinking

ISBN: 9780470665701

Authors: Achim Menges, Sean Ahlquist

Publisher: John Wiley & Sons

Publication Date: 2011-10-24



Genealogy of Modern Architecture

ISBN: 9783037783696

Authors: Kenneth Frampton

Publication Date: 2015-04-10



From Control to Design

ISBN: 9788496540798

Authors: Tomoko Sakamoto, Albert Ferré

Publisher: Actar

Publication Date: 2008-01-01

AAD Algorithms-Aided Design. Parametric Strategies Using Grasshopper

ISBN: 9788895315300

Authors: Arturo Tedeschi

Publication Date: 2014-01-01



Daylighting Handbook

ISBN: 9780692203637

Authors: Christoph Reinhart

Publication Date: 2014-01-01

The Art of Architectural Daylighting

ISBN: 9781786271648

Authors: Mary Guzowski

Publisher: Laurence King Publishing

Publication Date: 2018-06-26

The Architect's Studio Companion

ISBN: 9781119092414

Authors: Edward Allen, Joseph Iano

Publisher: John Wiley & Sons

Publication Date: 2017-01-17

Course Objectives/Student Learning Outcomes

This design studio explores different approaches to the design of gallery typologies, investigating new possibilities of designing such spaces. Importantly, students will analyze and synthesize strategies of how daylight informs design, as well as experimenting with changing its parameters to define spatial characteristics conducive to intended experiences. The project's design process is divided into five different stages which address particular design objectives and/or scales. These are complemented by short skills building workshops which address design, modeling and analysis procedures.

ARC3321 is the second of two foundational upper division studios in the FAU School of Architecture. Continuing from D5, project design and discussions are built around four essential categories of architectural concern: environment/context, function/use, materiality/structure, experience/sensation. Each of these categories will be central to critique and group conversations throughout the semester. The course objectives include achieving the following:

- **THEORETICAL FRAMEWORK:** Students will formulate their design philosophy informed by studio agenda and understanding of intellectual framework.
- **CRITICAL THINKING:** Students will apply the theoretical framework and utilize precedent analysis into new design propositions.
- **DESIGN THINKING:** Overall, students will learn about topics of: landscape/site design (context), urban morphology, analysis, historic response, and habitation. The focus will be on the architectural design process through understanding and using basic principles of design that reflect meaningful concepts related to use, materials, structure, experience, and surrounding physical and social context.
- **TECHNICAL KNOWLEDGE:** Students will learn the required knowledge of building design considering topography, structure, and enclosure.
- **REPRESENTATIONAL KNOWLEDGE:** Students will learn and develop skills to incorporate different media in the design process, and utilize both analog and digital representation tools to communicate their design. Students will develop the ability to work at varying scales, from architectural details to the larger landscape.

Faculty Rights and Responsibilities

Florida Atlantic University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. To ensure these rights, faculty members have the prerogative to:

- Establish and implement academic standards.
- Establish and enforce reasonable behavior standards in each class.
- Recommend disciplinary action for students whose behavior may be judged as disruptive under the Student Code of Conduct [University Regulation 4.007](#).

Disability Policy

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/.

Course Evaluation Method

Studio Schedule & Grade Distribution (These dates may be slightly adjusted depending on project details)

WEEK		GRADE VALUE
1-2	Module 01: Research and Analysis	15%
3-4	Module 02: Experimentation and Design Exploration	10%
5-7	Module 03: Design Conceptualization	25%
8-10	Module 04: Design Qualifying and Evaluation	20%
11-15	Module 05: Design Development	25%

Project Documentation/Archiving

A closeout procedure will be given upon completion of the final review (including design revisions and submission of digital material from the whole semester) and will be due by April 30th, 2024. Final grades will be withheld until this material is turned in. 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 criterion supplements those policies and will be used to evaluate your work.

Outside of class time, it is expected that, on average, each student will work a minimum of 20 hours per week on readings, homework assignments, research papers, interactive tutorials, study groups or projects. As this class is a design studio course, the hours required may end up being considerably more than the minimum stated above. The students are expected to develop competence in integrating explicit computational methods in design workflow.

For this course, group work shall account for the entirety of your grade. Within group projects, students may have an opportunity to comment on the quality, content, and volume of work of their fellow group members. These comments shall be taken into account when assigning a final grade for

participation and engagement at the discretion of the instructor. Though the grading rubric above will be used in evaluation of student performance, please keep in mind that each week is essentially worth a percentage of your grade. You will be graded often in a timely manner, so you are aware of your academic standing in the studio. Failure to follow verbal and written directions will negatively affect your grade.

- Ability to analyze precedents and extrapolate principles for design application
- Ability to integrate computational methods in design decision making
- Ability to synthesize knowledge from prior design modules into a proposal by articulating various systems (organizational, structural, environmental, contextual, etc.) in reference to given context (physical, cultural, etc)

Course Grading Scale

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. In general terms, letter grades 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 of study.

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.

Code of Academic Integrity

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 [University Regulation 4.001](#).

Attendance Policy Statement

Students are expected to attend all 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.

Each unexcused absence shall result in a penalty of 5 points from your final cumulative point total. Students absent more than THREE classes without serious reasons (medical or otherwise) given in writing in advance of the class will automatically fail the class. Students who have not signed in 10' after the start of class will be marked as late. Students joining late (after 10') will receive a 3-point penalty from their final cumulative point total. Students absent from a required presentation, assignment, or examination will receive, without exception, an F for that presentation, assignment, or examination. 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. In case of absence, it is the student's responsibility to contact someone from the class to get information on the material covered and assignments. Enforcement of the attendance is at the discretion of the instructor.

Religious Accommodation Policy Statement

In accordance with the rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs regarding admissions, registration, class attendance, and the scheduling of examinations and work assignments. University Regulation 2.007, Religious Observances, sets forth this policy for FAU and may be accessed on the FAU website at www.fau.edu/regulations.

Any student who feels aggrieved regarding religious accommodations may present a grievance to the executive director of The Office of Civil Rights and Title IX. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

Time Commitment Per Credit Hour

For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of out-of-class student work for each credit hour. Equivalent time and effort are required for Summer Semesters, which usually have a shortened timeframe. Fully Online courses, hybrid, shortened, intensive format courses, and other non-traditional modes of delivery will demonstrate equivalent time and effort.

Course Grading Scale

Letter Grade	Letter Grade
A	95 - 100%
A-	92 - 94%
B+	88 - 91%
B	84 - 87%
B-	81 - 83%

Letter Grade	Letter Grade
C+	77 - 79%
C	73 - 76%
C-	70 - 72%
D+	67 - 69%
D	63 - 66%
D-	60 - 62%
F	Below 60

Grade Appeal Process

You may request a review of the final course grade when you believe that one of the following conditions apply:

- There was a computational or recording error in the grading.
- The grading process used non-academic criteria.
- There was a gross violation of the instructor's own grading system.

[University Regulation 4.002](#) of the University Regulations contains information on the grade appeals process

Policy on Make-up Tests, Late work, and Incompletes

Late work will not be accepted. Students must inform the instructor, in writing, prior to absence. Medical reasons for absence require a letter from a physician or clinic. Other serious reasons for absences, such as participation in University-approved activities, must be given in writing in advance of the class and accepted by the instructor. It is the student's responsibility to stay abreast of all course activities. If you miss a class, it is your responsibility to learn and complete missed work/material. Missed projects or class activities due to an unexcused absence will result in a ZERO for that activity. At the instructor's discretion, such projects could be made up within a time frame approved by the instructor. Students cannot be penalized for participation in University-approved activities such as athletic events, theatrical or musical performances, etc. In general, decisions about penalties for absences and late work are the discretion of the instructor.

Special Course Requirements

The students in this course are expected to participate in a local field trip. Details will be provided at the beginning of the semester.

In regard to software requirements, students are required to have:

- Modeling software (Rhino 3D). Options to download Rhino for free (demo version for 3 months) or purchase for educational purposes can be found.
- Adobe Suite: including Acrobat Pro, Photoshop, Illustrator, and InDesign. Link: <https://www.adobe.com/creativecloud/plans.html>

Additional required software will be discussed in class.

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject.

Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited.

Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

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/>

Student Support Services and Online Resources

- [Center for Learning and Student Success \(CLASS\)](#)
- [Counseling and Psychological Services \(CAPS\)](#)

- ♦ [FAU Libraries](#)
- ♦ [Math Learning Center](#)
- ♦ [Office of Information Technology Helpdesk](#)
- ♦ [Center for Global Engagement](#)
- ♦ [Office of Undergraduate Research and Inquiry \(OURI\)](#)
- ♦ [Science Learning Center](#)
- ♦ [Speaking Center](#)
- ♦ [Student Accessibility Services](#)
- ♦ [Student Athlete Success Center \(SASC\)](#)
- ♦ [Testing and Certification](#)
- ♦ [Test Preparation](#)
- ♦ [University Academic Advising Services](#)
- ♦ [University Center for Excellence in Writing \(UCEW\)](#)
- ♦ [Writing Across the Curriculum \(WAC\)](#)

NAAB Program Criteria

PC.2 Design—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

PC.7 Learning and Teaching Culture—How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

SC. 5 Design Synthesis—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Course Topical Outline

Week	Modules and Topics	Important Dates and Activities
Week 1, 2	Research and Analysis: [Assignment 1: PRECEDENT ANALYSIS]	Assignment 1 Due: January 22

Week 3, 4	Experimentation and Design Exploration: [Assignment 2: AI- DRIVEN DESIGN IDEATION]	Assignment 2 Due: February 5
Week 5, 6,7	Design Conceptualization: [Assignment 3: CONTEXTUALIZATION MASSING STUDIES]	MIDTERM REVIEW and Assignment 3 due: February 21 Class Field Trip (Location to be confirmed) Midterm grades by March 12
Week 8, 9, 10	Design Qualifying and Evaluation [Assignment 4:ENVIRONMENTAL EVALUATION: DAYLIGHT SIMULATIONS]	Assignment 4 Due: March 18 Last day to drop and receive a grade of "W": March 22
Week 11, 12, 13, 14, 15	Design Development [Assignment 5: DESIGN ARTICULATION]	PRELIMINARY FINAL REVIEW (Design Freeze) APRIL 8 FINAL REVIEW and Assignment 5 due: APRIL 17 Final grades by May 6