



Florida Atlantic University
Dorothy F. Schmidt College of Arts and Letters
School of Architecture

Course Number: ARC 3320 CRN 11619

Course Title: ARCHITECTURAL DESIGN 5

Number of Credits: 4

Course Term / Year: FALL / 2023

Class Location and day/time (and/or Online): HEC 7th Floor, Monday and Wednesday 12.30pm to 4.20pm

Pre- or Co-requisite: Pre-requisites: Minimum grade of "C" in all preprofessional design studio courses.

Completion of all required lower-division preprofessional and general education course work, and approved portfolio.

Co-requisite: ARC 3133

Instructor Names:

Jean Martin Caldieron, Diego Camargo, Aaron Gabriel, and Heather Ligler (coordinator)

Office hours & Location: by appointment

Phone number: 954-762-5654

E-mail address:

Jean Martin Caldieron jcaldie1@fau.edu

Diego Camargo dcamargo@fau.edu

Aaron Gabriel gabriela@fau.edu

Heather Ligler hligler@fau.edu

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.

Instructional Method In-Person. There is no remote option for this course. All students are required to work in studio.

Course Objectives/Student Learning Outcomes

Upon successful completion of this studio, students will be able to:

- _ Appreciate the potential of systems and generative methods in architectural design.
- _ Formulate a critical and creative research agenda for design informed by analyses of precedents, context, and culture.
- _ Discuss the history and logic of regional building forms and urban typologies.
- _ Develop a constructive verbal and visual vocabulary to represent design logic in a clear and compelling way.
- _ Understand and comply with foundational laws and codes governing architectural design
- _ Apply principles of design to synthesize spatial, climatic, experiential and tectonic systems at a range of scales..
- _ Specify a formal design method in a systematic way with rules and grammars.
- _ Generate families of designs and articulate a rationale for selection of the “best fit” for a given program and site.
- _ Build physical models with craft and technical skill using the resources of the FabLab.
- _ Design and provide design feedback collaboratively in groups.

NAAB Program and Student Criteria

Upon successful completion of this studio, students should demonstrate an awareness of:

PC2: Design

PC3: Ecological Knowledge and Responsibility

PC7: Learning and Teaching Culture

SC5: Design Synthesis

FA1: Environment

Course Evaluation Method

Part 1 / Research + Design:	45%
Part 2 / Design + Research:	45%
Final Revisions + Portfolios:	<u>10%</u>
	100%

Course Grading Scale

A	94-100	B-	80-83	D+	67-69
A-	90-93	C+	77-79	D	64-66
B+	87-89	C	74-76*	D-	60-63
B	84-86	C-	70-73	F	0-59

* Please note that the minimum grade required to pass the course is a C.

Letter grades above indicate that students have achieved the following:

- A *Excellent Work*: Consistent production of exceptional quality, insight, and rigor. "A" work demonstrates a high level of creativity, criticality, and craft.
- B *Good Work*: Consistent production of high quality, thought, and development. "B" work demonstrates an above average level of creativity, criticality, and craft.
- C *Average Work*: Consistent production of satisfactory quality, understanding, and effort. "C" work demonstrates a competent level of creativity, criticality, and craft.
- D *Marginal Work*: Inconsistent production of mediocre quality, characterized by incompleteness or indifference. "D" work demonstrates a low level of creativity, criticality, and craft.
- F *Failing Work*: Inconsistent and incomplete production of unacceptable quality. "F" work does not demonstrate creativity, criticality, or craft at the level expected of students in the course.

Policy on Make Ups/Late/Incompletes

Make up and late work will not be accepted, except by prior agreement with your instructor, based on legitimate reasons for an extension. If you will be absent for participation in FAU-approved activities or religious observance, please let your instructor know in advance so that reasonable accommodation can be arranged. A semester grade of "I"/incomplete is reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances, such as a medical or family emergency and/or other prolonged unexpected absence. An "I" is a provisional grade only offered for extreme circumstances and with a limited time frame – it rolls over to an "F" if work is not completed at a passing level in a timely manner.

Required Text and Readings

To be distributed with assignments.

Recommended Text and Readings

Architectural Graphic Standards

American Institute of Architects and Keith E. Hedges, Wiley

available online w/ FAU Libraries @ <https://ebookcentral.proquest.com/lib/fau/detail.action?docID=7104512>

Building Construction Illustrated

Francis D.K. Ching, Wiley

available online w/ FAU Libraries @ <https://ebookcentral.proquest.com/lib/fau/detail.action?docID=1629167>

The Buildings of Charleston: A Guide to the City's Architecture

Jonathan H. Poston, University of South Carolina Press

Charleston Fancy: Little Houses and Big Dreams in the Holy City
Witold Rybczynski, Yale University Press

The Four Books of Architecture

Andrea Palladio, R. Ware

available online courtesy of the Getty Research Institute @

https://archive.org/details/gri_33125011569684/page/n9/mode/2up

Green Building Illustrated

Francis D.K. Ching, Wiley

available online w/ FAU Libraries @ <https://ebookcentral.proquest.com/lib/fau/detail.action?docID=7104150>

The Logic of Architecture: Design, Computation, and Cognition

William J. Mitchell, MIT Press

Palladio Virtuel

Peter Eisenman and Matt Roman, New Haven: Yale University Press

Possible Palladian Villas (Plus a Few Instructively Impossible Ones)

George Hersey and Richard Freedman, MIT Press

available online w/ MIT Press Open Architecture and Urban Studies @

<https://mitp-arch.mitpress.mit.edu/possible-palladian-villas-plus-a-few-instructively-impossible-ones>

Shape: Talking about Seeing and Doing

George Stiny, MIT Press

Shapes of Imagination: Calculating in Coleridge's Magical Realm

George Stiny, MIT Press

available online w/ MIT Press Open Architecture and Urban Studies @

<https://direct.mit.edu/books/oa-monograph/5489/Shapes-of-ImaginationCalculating-in-Coleridge-s>

The Palladian Grammar

George Stiny and William J. Mitchell

Environment and Planning B: Planning and Design, 5(1), 5-18. doi:10.1068/b050005

Transformations in Design: A Formal Approach to Stylistic Change and Innovation in the Visual Arts

Terry W. Knight, Cambridge University Press

Special Course Requirements

Field trip Charleston, South Carolina; Weekend of October 14. Expected Costs: \$150-200.

All students must sign Release of Liability Waivers.

Special Material or Equipment All students are required to complete the online training for the FabLab orientation during the first week of studio. The in-person training must be completed by all students by the end of the second week of studio.

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 participating fully in all discussions, including design reviews. During studio time, students are expected to work productively at their studio desk. Electronic communication with persons outside of the classroom or studio (calls, texts, social media posts/messaging, email, etc.) is prohibited. If a situation arises where a student needs to communicate during studio time, students must make prior arrangements with faculty. Disruptive use

of electronic communication may result in the instructor asking the 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 the end of the semester, the studio space should be emptied out, cleaned up, and prepared for new use in the following 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 deck surfaces must be clean, with your assigned stool placed on top of your desk. Any student leaving material in the studio after the December 2023 clean out date will have their final grade for the class withheld, until their items have been removed and the space is ready for another student to use.

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.

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 scholarly manner. Students are expected to arrive to studio on time, prepared to discuss their latest progress, and having completed assigned work. During individual and group desk critiques, all students are expected to work productively. Students are also required to remain in studio for the duration of each class, unless excused by the instructor. Anyone leaving early without permission will be marked with an unexcused absence for that day.

Absences: Each student is allowed one "free pass" for an unexcused absence per semester. Beyond that, each unexcused absence shall result in a penalty of 4 points from your final cumulative point total. When a student is absent, they are responsible to contact someone from studio to get information on what they missed and be prepared to catch up with their work by the next studio meeting.

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 will receive, without exception, an F for that portion of their grade. Attendance will be taken at the beginning of each class.

Tardiness: Students arriving after attendance has been taken shall be considered late and will receive a 2-point penalty from their final grade.

Credit Hour Policy

Outside of class time, it is expected that, on average, each student will work a minimum of **24 hours per week** on readings, homework assignments, research papers, interactive tutorials, study groups or projects.

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/.

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 [University Regulation 4.001](#).

FABLAB Usage Protocols

For all new FAU School of Architecture Students, the FabLab Safety Orientation must be completed to gain access to any part of the FabLab. You can enroll yourself in this course through the following link:

<https://canvas.fau.edu/enroll/JEW9J6>

Course Topical Outline

please note: this outline may be subject to periodic revision over the course of the term. Updated schedules will be distributed via Canvas.

PART ONE // RESEARCH + DESIGN

RESEARCH: HOUSING TYPES + CHARLESTON

WK 1	INTRO // REDRAW + DIAGRAM // 2D		
	M 08.21	SYLLABUS // REIMAGINING CHARLESTON	FABLAB ORIENTATION
	W 08.23	DESK CRITS	VOCABULARIES + RELATIONS 2D
WK 2	VILLA / DOUBLE / SINGLE // CRITIQUE + MODEL // 2D/3D		
	M 08.28	ALL SCHOOL MEETING @ 1.00-3.00pm	VOCABULARIES + RELATIONS 2D/3D
	W 08.30	DESK CRITS	VOCABULARIES + RELATIONS 2D/3D
WK 3	VILLA / DOUBLE / SINGLE // CRITIQUE + MODEL // 3D		
	M 09.04	LABOR DAY HOLIDAY	NO STUDIO MEETING
	W 09.06	DESK CRITS + RULES TUTORIAL	FABLAB + CHARLESTON ASSIGNMENT

DESIGN: CHARLESTON PROTOTYPING / NEW HOUSE REMIX

WK 4	VILLA / DOUBLE / SINGLE // RELATIONS + RULE-FINDING M 09.11 DESK CRITS W 09.13 DESK CRITS	RELATIONS to RULES / RIFF ON PG RULES COMBINING / VARYING + MODEL 1
WK 5	VILLA / DOUBLE / SINGLE // RULE-FINDING + REGENERATE M 09.18 DESK CRITS + DERIVATION TUTORIAL W 09.20 DESK CRITS	REFINING RULES + SEQUENCING PROTOTYPING + MODEL 2
WK 6	VILLA / DOUBLE / SINGLE // ITERATE + SELECT M 09.25 DESK CRITS W 09.27 <u>MIDTERM REVIEW REQUIREMENTS</u>	ITERATING DESIGNS SELECTING + MODEL 3
WK 7	MIDTERM REVIEWS M 10.02 PRODUCTION W 10.04 D5 MIDTERM REVIEWS	MIDTERM SUBMISSION DUE

PART TWO // DESIGN + RESEARCH**DESIGN: REWRITE + EXPAND SYSTEMS TAILORED TO SITE / PROGRAM + CONTEMPORARY PRECEDENT**

WK 8	SITE / PROGRAM / PRECEDENT // REDRAW + DIAGRAM // 2D + 3D M 10.09 REIMAGINING CHARLESTON PART TWO INTRO W 10.11 DESK CRITS WEEKEND TRIP TO CHARLESTON, SOUTH CAROLINA	VOCABULARIES + RELATIONS / 2D VOCABULARIES + RELATIONS / 3D
WK 9	SITE / PROGRAM / PRECEDENT // RULE-FINDING + REWRITING M 10.16 DESK CRITS W 10.18 DIRECTOR'S MEETING W/ D5 STUDIOS @ 3.00pm	[CONTEXT / CLIMATE / CULTURE] SITE MODEL ASSIGNMENT NEW RELATIONS TO NEW RULES
WK 10	SITE / PROGRAM / PRECEDENT // REWRITING + REFINING M 10.23 DESK CRITS W 10.25 DESK CRITS	[MATERIALS / TECTONICS / STRUCTURE] DRAWING RULES + MODEL 1 REFINING RULES + GRAMMAR
	RESEARCH: PRODUCE DESIGN VARIATIONS; DEVELOP NARRATIVE CONCEPT [THEORY] FOR SOLUTION	
WK 11	SITE / PROGRAM / PRECEDENT // DESIGN GENERATION M 10.30 DESK CRITS W 11.01 DESK CRITS	GENERATING FAMILIES + MODEL 2 ITERATING + PROTOTYPING
WK 12	SITE / PROGRAM / PRECEDENT // DESIGN GENERATION M 11.06 DESK CRITS W 11.08 DESK CRITS	SELECTING + MODEL 3 CLARIFYING + SYNTHESIZING
WK 13	SITE / PROGRAM / PRECEDENT // PRODUCTION M 11.13 PRODUCTION W 11.15 PRODUCTION	[DESIGN + RESEARCH DEVELOPMENT]
WK 14	SITE / PROGRAM / PRECEDENT // PRODUCTION M 11.20 <u>FINAL REVIEW REQUIREMENTS</u> W 11.22 THANKSGIVING BREAK	[REPRESENTATION + CRAFT] NO STUDIO MEETING
WK 15	FINAL REVIEWS M 11.27 PRODUCTION W 11.29 D5 FINAL STUDIO REVIEWS @ 2.00-6.00pm	REVISIONS + PROJECT PORTFOLIOS

WK 16 SEMESTER WRAP-UP

M 12.04 READING DAY: NO STUDIO MEETING

W 12.06 READING DAY: NO STUDIO MEETING

F 12.08 REQUIRED CLASS MEETING @ 10.30am-1.00pm

FINAL SUBMISSION DUE