

Course code: **ARCH 3612**
Course title: **Architectural Design VI –Housing Design Studio**
Class hours/credits: 1 lecture hour and 8 lab/studio hours, 5 credits
Semester: **Spring 2024**
Mode of Instruction: **In person**

Instructors: Jill Bouratoglou D484 Tues + Thurs 8:30AM- 12:15PM
 Frederic Levrat E475 Tues + Thurs 6:00PM - 9:45PM

Course coordinator: [academic year 2023-2024](#)
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Course Catalog Description:

This is an advanced design studio where the significance of public housing will be examined. The studio will research, evaluate analyze and investigate multi-family housing and urban redevelopment, and propose an exploratory approach to the planning and delivery of housing. The final project will consist of designing high density mixed –use housing and public space with community amenities.

Prerequisites: *(ARCH 3512 or ARCH 3510) with a grade of C or higher*

Equivalent to old course ARCH 3610

Co-requisite:
none required.

Recommended Text:

Density: New Collective Housing by Javier Mozas

Housing Design: A Manual 2nd ed. Edition by Bernard Leupen (Author), Harald Mooij (Author)

Floor Plan Manual 4th Revised and Extended Edition Edition
by Friederike Schneider (Author), Oliver Heckmann (Author)

Suggested Reference: [Interior Graphic Standards](#), 2nd Edition by [Corky Binggeli](#) and [Patricia Greichen](#) , published by John Wiley and Sons, Inc., 2010

Suggested Text: Texts will be assigned according to the subject covered that day.

Required Materials, Tools, and Software:

Rhino, Photoshop, InDesign Illustrator

Recommended Materials, Tools, and Software:

AutoCAD. Model Building

Course Context:

This is a sixth semester design studio that focuses on housing and the community. This studio will build on the relationship between all of the various systems involved in the assembly and design of buildings, while responding to their environmental contexts. Housing will be explored as a set of building typology with social and historical implications.

Attendance Policy:

No more than 10% absences are permitted during the semester. For the purposes of record, two late arrivals are considered as one absence. Exceeding this limit will expose the student to failing at the discretion of the instructor due to lack of class participation and mastery of class material.

Academic Integrity:

Students and all others who work with information, ideas, texts, images, music, inventions and other intellectual property owe their audience and sources accuracy and honesty in using, crediting and citation of sources. As a community of intellectual and professional workers, the college recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension and expulsion.

Student Accessibility:

City Tech is committed to supporting the educational goals of enrolled students with disabilities. If you have or think you may have a disability, you may be eligible for reasonable accommodations or academic adjustments as provided under applicable federal, state, and/ or city laws. You may also request services for temporary conditions or medical issues under certain circumstances. If you have questions about your eligibility and/or would like to seek accommodation services and/or academic adjustments, please contact the Student Accessibility Center. [web site: <https://www.citytech.cuny.edu/accessibility/> Email: Accessibility@citytech.cuny.edu]

Diversity and Inclusive Education Syllabus Statement:

This course welcomes students from all backgrounds, experiences and perspectives. In accordance with the City Tech and CUNY missions, this course intends to provide an atmosphere of inclusion, respect, and the mutual appreciation of differences so that together we

can create an environment in which all students can flourish. It is the instructor's goal to provide materials and activities that are welcoming and accommodating of diversity in all of its forms, including race, gender identity and presentation, ethnicity, national origin, religion, cultural identity, socioeconomic background, sexuality and sexual orientation, ability, neurodivergence, age, and etc. Your instructor is committed to equity and actively seeks ways to challenge institutional racism, sexism, ableism and other forms of prejudice. Your input is encouraged and appreciated. If a dynamic that you observe or experience in the course concerns you, you may respectfully inform your instructor without fear of how your concerns will affect your grade. Let your instructor know how to improve the effectiveness of the course for you personally, or for other students or student groups. We acknowledge that NYCCT is located on the traditional homelands of the Canarsie and Lenape peoples.

Alerts Reporting:

Use your official city tech e-mail for all correspondence. Check it regularly for class announcements and information. Throughout the semester, you may receive messages about achievements, goals, and requirements in this class. If the message indicates an issue, you may be contacted by the Student Success Center (<https://www.citytech.cuny.edu/ssc/student-success-services.aspx>). A Student Success Center Coach will reach out to you by phone, text, and email to offer support and suggest additional resources to support your achievements in this course.

Grading and course requirements:

Project research and development	25%
Site Visit and Analysis	
Precedent studies	
Program development	
Design Concept and Development	60% (Mid-term 25% Final Presentation 40%)
Presentation	
Completion and Resolution	
Participation in class discussions	10%

NAAB Student Performance Criteria Addressed:

- PC.2 Design
- SC.3 Regulatory Context
- SC.5 Design Synthesis

Topical Outline (percentage of time in course spent in each content area):

Integrated Design and Implementation:	60%
Code Analysis:	10%
Site Analysis:	10%
Program Analysis:	10%
Development of Site Integration:	10%

General Education Learning Outcomes / Assessment Methods	
Learning Outcomes	Assessment Methods
Upon successful completion of this course the student shall be able to:	To evaluate the students' achievement of the learning objectives, the professor will do the following:
1. Integrate Learning - Apply knowledge of building codes pertaining to egress and fire protection/suppression to design without compromising design aesthetics.	1. Review students' ability to synthesize circulation, zoning, urban context, views, construction types, hierarchy, codes, and precedents into their design.
2. Synthesize site circulation, zoning, urban context, and views to design. (Inquiry/ Analysis)	2. Review students' ability to incorporate knowledge from site analysis into design.
3. Demonstrate knowledge of different societies' values regarding space and its social implications. (Community/Civic Engagement)	3. Review students' integration of knowledge of community and living in housing design.
4. Show ability to contribute actively by applying knowledge to the identification and analysis of societal and professional problems to enact solutions. (Professional/Personal Development)	4. Evaluate final design presentation for key elements of professional knowledge integrated successfully into project.

National Architectural Accrediting Board (NAAB) Program and Students Criteria (PC/SC)/ Assessment Methods	
Learning Outcomes	Assessment Methods
Upon successful completion of this course the student shall be able to: (Realm . Number) title [depth]	To evaluate the students' achievement of the learning objectives, the professor will do the following:
1. (PC.2) (SC.5) Design/Design Synthesis Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.	1. Review students process of developing their design ideas through graphic and written assignments.

<p>2. (SC.3) Regulatory Context Ability to design sites, facilities, and systems consistent with the principles of life-safety standards, accessibility standards and other codes and regulations.</p>	<p>3. Demonstrate the knowledge of life-safety standards, accessibility and other code and regulation in the developed design solution.</p>
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National Architectural Accrediting Board (NAAB) Students Performance Criteria (SPC)/ Assessment Methods	
Learning Outcomes	Assessment Methods
<p>Upon successful completion of this course the student shall be able to: (Realm . Number) title [depth]</p>	<p>To evaluate the students' achievement of the learning objectives, the professor will do the following:</p>
<p>3. (PC.2.) Design Evaluate 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.</p>	<p>1. Review students Process of Developing their design ideas through graphic and written assignments.</p>
<p>4. (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</p>	<p>2. Evaluate through assignments the ability to logically formulate program from a specific use along with ordering the spaces based on adjacency, and Demonstrate the needs of the user in the design based on research, programing and site analysis.</p>

File Naming:

All digital files must be submitted in the following format:

Course number semester/year_Professor initials _Project Name_ Student Name (file number)

For example: ARCH3612_ SP24_JB_SiteStrategy_John Smith (01)

Course structure:

A series of problems will be assigned to be developed by the student and presented to the class through architectural drawings and/or models. Ongoing critiques and final jury presentations will be an integral part of the course.

Weekly Course Outline: [tentative subject to change by the instructor]

Course Outline:**Week 1: Introduction to Course, Housing and Site.****Introduction to Site: Visit – Inventory & Analysis – (Team)**

Consider Circulation, (Pedestrian/Vehicular /Private/Public), Views (to the site/ from the site), Environment (Noise, Odor, Vegetation, Winds, Sun), Land Use & Zoning, Demographics, Cultural, Educational, Service Facilities, etc. Divide the work and put together a cohesive presentation. Introduction of 3D site model. Zoning Envelope and requirements. Land Use and documentation.

Week 2: Site Analysis & Introduction to Site Strategy and Beginning of Housing Precedents

Activities include: Presentations of Site Analysis and Inventory, Zoning + Site Strategy Diagram. Presentations of Housing Precedents, Create list of site amenities from precedent studies, Individual Site Bubble Diagram overlaid on site strategy diagram

Week 3: Introduction to Concept

Activities include: Collages + Concept Models, Hybrid Models, Hybrid Model on Site to Scale

Week 4: Parti and Site Development

Activities include: Review of final hybrid model on site selection of Site Amenities. Development of site concept based on parti emphasizing public/private, circulation, solar, views, et al.

Week 5: Introduction to Amenities & Bubble Diagrams_

Activities include: Review of Typologies of Housing – Precedent Studies, programming and research into space planning, Program Matrix and Bubble Diagram Presentation, discussion of affordable housing

Week 6: Introduction to Residential Units

Activities include: Interior planning design concepts and requirements. Discussion of furniture layout, space planning, unit layouts, light and air requirements. Discussion of housing, communal

living, community NYCHA sf requirements. NYC Dept of Buildings Code: Light + Air Calculations for habitable rooms.

Week 7: Introduction to ADA Residential Unit and Requirements + Travel Distance/Egress

Activities include: Development of ADA units based on NYC Bldg Code and ADA Building codes, fire stairs, travel distances, core development. Egress Diagrams + ADA Building Pathway – street to Unit via ADA Route

Week 8: Design Development

Activities include: Development of project massing, core, site, units. Finalize typical Floor plans with egress + Blow-ups with Light +Air Calcs

Week 9: Mid-Semester Presentation

Activities include: Mid-Semester presentation with professor and guest jurors, *Rework typical plans, massing, site layout and development of amenities based on review from Mid-Semester Presentation*

Week 10: Introduction to Ground floor plan – lobby and relationship to site

Activities include: Individual review of Site Plan with exterior amenities, Further development of project massing, core, site and lobby. Development of lobby and connection to site- entrances, parking, service, mail, deliveries....

Week 11: Project Development

Activities include: Further development of Plans, Building Sections, Exterior Elevations and 3D Models – development of *Short site section and 1 long site section*, Landscaping and Site Amenities

Week 12: Introduction to Exterior Façade + Elevations

Activities include: Review of site sections. Development of exterior elevations and discussion of materials. Development of site plan and site amenities.

Week 13: Presentation Review

Activities include: Review of student work, Presentation Review, thumbnail diagrams for final presentations

Week 14: Final Presentations

Week 15: Final Summary Packet

Activities include: Collection of Work/Final Submission and Recap