

Department of Architectural Technology

ARCH 3612 ARCHITECTURAL DESIGN VI

1 lecture hour, 8 lab/9 studio hours, 5 credits

Course 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.

Course Content:

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.

Prerequisites: ARCH 3512 or ARCH3510 either with a grade of C or higher

Suggested Textbooks:

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)

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.

Course Structure: The studio will be organized as a research studio with one design project. Research papers, 2D and 3D drawings, and physical study models and final models will be utilized in program development, design and presentations

Course will also include a combination of the following activities:

- **Field Trips / High Impact Learning Practices:**

Field trips will look to visit existing buildings and construction sites, tour newly constructed buildings and urban spaces or visit institutions, including but not limited to museums, churches, or other colleges with discussions led by either the instructor or on-site experts in the field or the subject.

- **Lectures:**

Lectures will be given by a qualified instructor and if warranted invited guest lecturers or experts in the field or subject.

- **Activities:**

Students will participate in activities that provide them with the opportunity to apply what is learned in a given subject.

Research Activities:

Students will be given directed readings and be required to correlate their readings with the lab exercises. Supplemental research will be encouraged to promote a greater analytical and critical understanding.

- **Presentations:**

Students will participate in written, oral and graphic presentation of course subjects and issues identified through their reading, writing, and lab work.

Grading:

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.
2. (PC.3) Ecological Knowledge + Responsibility Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.	2. Evaluate through assignments the ability to synthesize the site elements in to a clear understanding of the characteristics of the site and formulate knowledge to develop a design solution based on this information.

<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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Weekly Course Outline:

WEEK 1 Introduction to course content.

Precedent Studies on Special Zoning Districts in teams

Presentation of Special Districts +Zoning Case Study Massing Study

WEEK 2 Site visit and Data gathering. Site model. Zoning Development

Community Lecture and Development of a Special District

Assignment 3: Community + Development of Special District

Site Analysis/ Site visit. Group Site Analysis + Presentation

WEEK 3 Special District Zoning of proposed site

Special District Massing Studies

Site Analysis Presentations + Formulation of site strategies - amenities-lecture

WEEK 4 Precedent research + Analysis Typology of Housing

Programming and Space planning. Complete the program of your building determining uses, location and rough sizes of floor areas. Building Code

Typologies of Housing – Precedent Studies -3

Amenities, Lobby, common spaces, Programing diagrams, Matrix, Bubble Diagrams

WEEK 5 Concept Development

Concept collages in class and 4 concept models due by end of class

Assignment 9: Collages and 4 concept Models in class and Final Concept model due Class 10

Final concept model presented + Group Presentation of Site Zoning

Concept Model with site zoning in site + diagrams

WEEK 6 Formulation of site strategies and design Principles (parti ideas)

Development of site concept based on parti emphasizing public/private, open and closed spaces, circulation, views....

Site concept diagrams – plans and site sections

Continuation of site concept with building massings – models

Final Site Concept plan, site sections and model

WEEK 7 Introduction to Individual Residential Unit.

Introduction to Individual Residential Unit. Interior planning design concepts and requirements. Discussion of furniture layout, space planning, unit layouts, light and air requirements

Building code, fire stairs, travel distance, Core

Desk Crits

Development of buildings with core, fire stairs

WEEK 8 Design development

Development of project massing, core, site, units

Development of project massing, core, site, units

WEEK 9 Mid-term review

Development of project massing, core, site, units

MID TERM REVIEW

WEEK 10 Plans, Sections and Massing of Unit and Typical Floor layouts.

Further Development of project massing, core, site, units

Plans, Sections, elevations and 3d models – typical floor plans

WEEK 11 Lobby Floor Plan

Ground Floor Plan / Entrance at Site

WEEK 12 Exterior elevations, landscaping Desk Crits

Presentation Techniques/layout

WEEK 13 Desk Crits

Desk Crits

WEEK 14 Desk Crits

Desk Crits

WEEK 15 Final Presentation

Submittal of PDFs