ARCH 3612   ARCHITECTURAL DESIGN VI
                    1 lecture hour, 8 lab/9 studio hours, 5 credits
Prof. Illya Azaroff   lazaroff@citytech.cuny.edu
Office V214(ON LINE ONLY)   Office Hours: T. & Th. One hour prior to class
Meeting Tuesday 2pm to 5:50pm and Thursday from 2:15 pm to 5:50pm via ZOOM

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
GeoLogics, Geographic Information Architecture by Vincente Guallart (Author)
https://issuu.com/actar/docs/geologics
The Green Studio Handbook, Environmental Strategies for Schematic Design 3rd ed. By Allison Kwon and Walter Grondzik P.E. (Author)
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 two design projects. 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:

- **Potential 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 research and experiences to the course work and design problem.
- **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, cultural 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	40%
Site Visit (Virtual) and Analysis	
Precedent studies	
Program development	
Design and Development based on Research	50%
Presentation	
Completion and	
Resolution	
Participation in class discussions	10%

NAAB Student Performance Criteria Addressed:

A.4   Architectural Design Skills
B.2   Site Design
B.3   Codes and Regulations

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 Building Assembly: 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) Students Performance Criteria (SPC)/ 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. (A.4) Architectural Design Skills [Reinforced] **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. (B.2) Site Design[Master] **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.
2. (B.3) Codes and Regulations [Master] **Ability** to design sites, facilities, and systems consistent with the principles of life-safety standards, accessibility standards and other codes and regulations.	3. **Demonstrate** the knowledge of life-safety standards, accessibility and other code and regulation in the developed design solution.

Weekly Course Outline:

WEEK 1   Introduction to course content. Needs vs. Desire, Housing in the 21st century.

Intro to ULI Urban Plan Guest lecture

WEEK 2   ULI Urban Plan Facilitation number 1 (Sept. 1) and team work (Sept. 3).

WEEK 3   ULI Urban Plan Facilitation number 2 (Sept. 8) and team work final proposal (Sept. 10).

WEEK 4   ULI Urban Plan presentation City Council (Sept. 15)
Pin-up: Precedent research and analysis, Redevelopment Statement final

Challenges and opportunities, Lecture 4D!

Assignment: Precedent research + Analysis Typology of Housing

WEEK 5   Introduction to the specific site. Discussion about approach, sun orientation, traffic, slope, zoning and other restrictions.   Reading Green Studio Handbook
Research: Site visit and Geographies of Site A, B, C
Site model.
Lecture Housing the next Billion, Rethinking our urban Footprint. Summary of Research

WEEK 6   Pin-up team presentations: Site analysis
Building Code and Zoning analysis. Strategy of redevelopment statement
Lecture + Guest: Building community and balancing investment
Community Narrative

WEEK 7   Diagrammatic Site layout showing ideas of unit configurations, including exterior spaces and orientation – show 4 different layouts (Macro)

WEEK 8   Pin-up: Programming development and Site Plan and Space planning.
Complete the program of your building determining uses, location and rough sizes of floor areas. Consider the use carefully: how is it appropriate to the site and check whether allowed by zoning.

WEEK 9   Pin-up: Formulation of site strategies and design Principles
Discussion of site selection and orientation of program on site.
Research as design determinant. Reading GeoLogics

WEEK 10   Mid-term review
Pin-up: Introduction to Individual Residential Unit. Interior planning design concepts and requirements. Discussion of furniture layout, space planning.

Layout of your Unit (micro)

WEEK 11 **Responding to Midterm review.** Pin-up: Design development –public space

WEEK 12 **Diagrams of Massing:** Generate a series of diagrams showing different variations of your unit with relation to the site. There should be at least ten different massings of your unit. They should be color coded or noted of which program is located in each container.

 Choose your final layout of site – and create diagrams of the first floor showing the common space, elevator/stair cores, how you will use the exterior spaces (walks, bbq areas, seating, gardening…. Specific to the needs of your family) Create site sections showing how these elements stack with the living spaces from you micro design.

 Site Configuration and Final massing Selection

WEEK 13 Plans, Sections and Massing of Unit and Flooring Selection. Exterior connections. Exterior Elevations; material glazing. landscaping and Exterior spaces.

WEEK 14 Board layouts, Pin up and project narrative.

WEEK 15 **Final Presentation Project 1:**