

**New York City College of Technology – City University of New York**  
300 Jay Street, Brooklyn, New York 11201

**Department of Architectural Technology**

**ARCH 4710**

**ARCHITECTURAL DESIGN VII: URBAN DESIGN**

2 classroom hours, 6 lab hours, 5 credits

**Course Description:** This design course will cover a range of urban and architectural design issues. Students will explore both the theoretical and pragmatic aspects of design applied in an urban environment. As an advanced design class, this course will incorporate previous studio and lecture coursework to tie together topics of urban planning, architectural design, environmental sustainability and historic preservation.

Using New York City as an urban laboratory, there will be research assignments and design projects varying in focus, size and complexity. Students will address developing programs, the design of open public space, massing, and the analysis of larger scale projects. Students will work in a variety of formats: individually, in pairs, and in groups. Hand drawing, computer drafting and rendering, as well as physical and electronic modeling will be utilized for presentations.

**Prerequisites:** ARCH 3610 or ARCH 3630 with a grade C or higher or ARCH 3611 with a grade of C or higher

**Required Text:** The City Shaped: Urban Patterns and Meanings Through History by Spiro Kostof, Bulfinch Publisher [ISBN # 0821220160]

**Attendance Policy:** No more than two absences will be permitted during the semester. For the purpose of record, being late for class twice will be considered as one absence. Being more than 10 minutes late for class will be considered lateness. Exceeding this limit will expose the student to failing at the discretion of the instructor.

**Course Structure:** There will be design projects and research assignments. 2D and 3D drawings, and physical study models and final models will be utilized in program development, design and presentations. Throughout the semester, the review of historical precedents and selected cities will help to create a historical perspective.

<b>Grading:</b>	5%	Class Participation in Discussions
	5%	Neighborhood Analysis / Block Typology
	40%	Project 1
	40%	Project 2
	10%	Sketchbook and Final Portfolio

**A final grade of C or higher is required in this course to use it as a prerequisite for subsequent courses.**

**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.

## Learning Objectives

Upon successful completion of this course, the student will:

1. **Develop** multiple schematic design level proposals for the given site with drawings and models which satisfy given restraints including but not limited to zoning and design guidelines. (Knowledge)
2. **Research** zoning and building codes of the chosen site as well as the history, sociology, and infrastructure changes in the area and **integrate** research into design. (Knowledge)
3. **Apply** knowledge of building codes pertaining to egress, plumbing, and fire protection/suppression to design without compromising design aesthetics. (Knowledge)
4. **Demonstrate** knowledge of different societies' values regarding space and its social implications. (Knowledge)
5. **Distinguish** between media and **determine** the appropriate method and media required to complete a drawing or model. (Gen Ed)
6. **Generate** talking points for persuasive presentation of design. (Gen Ed)
7. **Write** analysis of zoning, design guidelines, and building codes. (Gen Ed)
8. **Research** precedents and implement information literacy. (Gen Ed)
9. **Apply** quantitative analysis to design. (Gen Ed)
10. **Collaborate** on group projects. (Gen Ed)
11. **Critique** written reports and oral presentations of fellow students. (Gen Ed)
12. **Produce** maps that show historical and zoning changes in the given area. (Skill)
13. **Produce** orthographic, axonometric, perspective, and architectural vignette drawings. (Skill)
14. **Synthesize** site circulation, zoning, urban context, and views to design. (Skill)
15. **Synthesize** construction types, circulation systems, hierarchy, and light to building design. (Skill)
16. **Apply** sustainable principles to development design and construction documents. (Skill)
17. **Analyze** and **reduce** complex media (print, visual, sites) to component parts. (Skill)

## Assessment

To evaluate the students' achievement of the learning objectives, the professor will do the following:

1. **Review** students' creative process (initial sketches through to the final project) by means of frequent pin-ups. (Los: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13-17)
2. **Assess** the students' use of professional vocabulary during oral presentations and written work. (Lo: 7, 8, 11)
3. **Review** students' ability to incorporate a research and their own creativity into their design work. (Los: 1)
4. **Evaluate** students' ability to analyze and report on zoning, design guidelines, and building code requirements and **review** students' effective use of information literacy skills. (Lo: 2, 7, 8)
5. **Evaluate** students' participation in class discussions regarding students written and oral presentations. (Lo: 11)
6. **Review** students' accuracy with applying quantitative information to a design scheme. (Los: 9)
7. **Evaluate** students' application of zoning, design guidelines, and building codes. (Los: 3, 9)
8. **Review** students' ability to synthesize circulation, zoning, urban context, and views into a design. (Lo: 3, 14)
9. **Review** students' ability to synthesize construction types, hierarchy, and light into building design. (Lo: 15)
10. **Review** students' ability to incorporate environmental systems and sustainable concepts into their design work. (Lo: 1, 2, 3, 14, 15, 17)
11. **Review** of group projects will be based on the completeness of the work as well as the effectiveness of the group's team work and communication skills. (Lo: 10)
12. **Evaluate** students' ability to diagram complex media. (Los: 17)

## Project Scope Description and Timeline

### *Neighborhood Analysis + Block Typology Study*

- **Duration:** 2 weeks
- Project Tasks: Analysis of Existing Urban Site, Defining Context, Identifying Key Issues.

### *Project 1 Case Study, Urban Analysis and Master Plan Design*

- **Duration:** 6 weeks
- Project Tasks: Analysis of Existing Urban Site, Defining Context, Identifying Key Issues.
- Requirements: masterplan development documented in a physical model, site plan, site sections, axonometric (aerial views) and diagrams.

### *Project 2 Site Specific Design Development*

- **Duration:** 7 weeks
- Project Tasks: Developing the Master Plan from Project 1 including specific design development of selected sites including programming, zoning analysis, massing studies, ground floor plan, building and site section studies, and street level perspective vignettes.
- Requirements: Complex urban site with numerous constraints including zoning issues.

## COURSE OUTLINE

### WEEK 1: WHAT IS URBAN DESIGN?

**1a Class Discussion: What is Urban Design?, Course Requirements, Introduction to Neighborhood Analysis**

*1a Homework:* Neighborhood Analysis

*1b Lecture:* **Space in the City**

*1b Homework:* Neighborhood Analysis

### WEEK 2: NEIGHBORHOOD ANALYSIS

**2a REVIEW: Neighborhood Analysis, Introduction to Block Typology Study**

*2a Homework:* Block Typology Study

*2b Lecture:* **Sixtus V's Rome**

*2b Homework:* Block Typology Study

### **WEEK 3: BLOCK TYPOLOGY**

*3a Studio Work:* Block Typology Study

*3a Homework:* Project 1.1 Case Study

***3b REVIEW: Block Typology Study, Introduction to Project 1.1 Case Study***

*3b Homework:* Project 1.1 Case Study

### **WEEK 4: CASE STUDY**

*4a Studio Work:* Project 1.1 Case Study

*4a Homework:* Project 1.2 Masterplan Concept

***4b REVIEW: Project 1.1 Case Study, Introduce Project 1.2 Masterplan Concept***

*4b Homework:* Project 1.2 Masterplan Concept

### **WEEK 5: TEAM MASTERPLAN**

*5a Studio Work:* Project 1.2 Team Masterplan Site Analysis Diagrams

*5a Homework:* Project 1.2 Team Masterplan Site Analysis Diagrams

*5b Studio Work:* Project 1.2 Team Masterplan Diagrams

*5b Homework:* Project 1.2 Team Masterplan Revision

### **WEEK 6: TEAM MASTERPLAN**

*6a Studio Work:* Project 1.2 Team Masterplan Diagrams

*6a Homework:* Project 1.2 Team Masterplan Site Analysis Diagrams

***6b PROGRESS REVIEW: Project 1.2 Team Masterplan***

*6b Homework:* Project 1.2 Team Masterplan Revisions

### **WEEK 7: TEAM MASTERPLAN**

*7a Studio Work:* Project 1.2 Team Masterplan Revisions

*7a Homework:* Project 2.2: Massing Model Studies

*7b Studio Work:* Project 2.2: Massing Model Studies

*7b Homework:* Project 2.2: Massing Model Studies

**WEEK 8: TEAM MASTERPLAN**

**8a REVIEW: Project 1.2 TEAM MASTERPLAN**

8a Homework: Revise and Submit Team Masterplan

**8b Introduction Project 2.1 Site Selection, Parti Development**

8a Homework: Project 2.1 Site Analysis, Parti Diagram

**WEEK 9: URBAN BUILDING CONCEPT DEVELOPMENT**

9a Studio Work: Project 2.1 Parti Development

9a Homework: Project 2.1 Parti Development

**8a REVIEW: Project 2.1 Parti Development**

9b Homework: Project 2.2 Massing Model Study

**WEEK 10: URBAN BUILDING CONCEPT DEVELOPMENT**

10a Studio Work: Project 2.2 Massing Model Study

10a Homework: Project 2.2 Massing Model

**10b Progress REVIEW: Project 2.2 Parti and Massing Model**

10b Homework: Project 2.3 Building Structure and Section Development

**WEEK 11: URBAN BUILDING CONCEPT DEVELOPMENT**

11a Studio Work: Project 2.3 Building Structure and Section Development

11a Homework: Project 2.3 Building Structure and Section Development

**11b REVIEW: Project 2.3 Building Concept Development**

11b Homework: Project 2.4 Site + Building Design Finalization

**WEEK 12:**

12a Studio Work: Project 2.4 Site + Building Design Finalization

12a Homework: Project 2.4 Site + Building Design Finalization

12b Studio Work: Project 2.4 Site + Building Design Finalization

12b Homework: Project 2.4 Site + Building Design Finalization

**WEEK 13:**

**13a Progress REVIEW: Project 2.4 Site + Building Design Finalization**

*13a Homework:* Project 2.4 Site + Building Design Finalization

*13b Studio Work:* Project 2.4 Site + Building Design Finalization

*13b Homework:* Project 2.4 Site + Building Design Finalization

**WEEK 14:**

*14a Studio Work:* Project 2.4 Site + Building Design Finalization

*14a Homework:* Project 2.4 Site + Building Design Finalization

*14b Studio Work:* Project 2.4 Site + Building Design Finalization

*14b Homework:* Project 2.4 Site + Building Design Finalization

**WEEK 15:**

**15a FINAL REVIEW: URBAN BUILDING CONCEPT**

*15a Homework:* REVISIONS, PORTFOLIO

*15b Studio Work:* Portfolio Development, Course Reflection

**15a Homework: FINAL SUBMISSION, PORTFOLIO**