

1. COURSE

AR3D1. Design Studio VII (Mandatory)

2. GENERAL INFORMATION

2.1 Course	:	AR3D1. Design Studio VII
2.2 Semester	:	7 th Semester.
2.3 Credits	:	4
2.4 Hours	:	4 HT; 4 HP;
2.5 Duration of the period	:	16 weeks
2.6 Type of course	:	Mandatory
2.7 Learning modality	:	Face to face
2.8 Prerequisites	:	AR2D3. Design Studio VI. (6 th Sem)

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

Urban Design Studio VII: Public Space and Landscape shifts the sequence's scale of operation from the single building, the focus of Design Studio VI (AR2D3, prerequisite), to the city: streets, blocks, public space, and the urban tissue that frames every building the students have designed so far. Students analyze the morphology of an existing urban fabric and the planning frameworks (zoning, master-planning, contemporary urban theory) that shape it, then propose an urban design and landscape intervention at the scale of a public space, a street, or a neighborhood. The course is the foundation for Design Studio VIII (AR3D2), the first of the two more specialized, higher-complexity studios that close the sequence.

5. GOALS

- Analyze the morphology of an existing urban fabric – streets, blocks, plots, and urban typologies – as the basis for an urban design proposal.
- Apply contemporary planning methods and urban theory (zoning, master vs. strategic planning, public participation) to a real urban design problem.
- Design public open space and landscape – parks, plazas, streets – integrating ecological, social, and cultural functions.
- Apply landscape design principles (site analysis, spatial organization, circulation) and the integration of landscape with urban green infrastructure.
- Design across urban design scales – from the regional structure down to the block and the street – applying the design guidelines appropriate to each.

6. COMPETENCES

- AG-A01)** Evaluates the impact of architectural solutions on sustainable development, economy, health and safety, the legal framework, architectural-urban heritage, and the environment. (Usage)
- AG-A13)** Demonstrates knowledge of the means to achieve ecologically responsible design and environmental conservation and rehabilitation. (Usage)
- AG-A15)** Understands the relationship between people, buildings, and their environment, and the need to relate buildings and spaces to human scale and needs. (Usage)

7. TOPICS

Unit 1: Urban Form and Morphology (8 hours)	
Competences Expected: AG-A01	
Topics	Learning Outcomes
• Kevin Lynch's city image elements: paths, edges, districts, nodes, and landmarks; their role in legibility and wayfinding; application to urban design analysis and intervention • Street, block, and plot systems: typologies (grid, radial, organic, cul-de-sac), block dimensions and permeability, plot subdivision, • Urban building typologies: single-family detached, row house (townhouse), courtyard building, slab, point tower, and linear block • Morphological analysis methods: Conzenian (burge cycle, fringe belts), space syntax (integration, connectivity, choice), and figure-ground diagrams for reading urban form • Urban fabric layers: plot subdivision history, street network evolution, land use succession, and the persistence of plot boundaries over centuries as a design constraint	• Identify the key morphological elements of a city - streets, blocks, plots, buildings - and describe the relationships among them that define urban character [Familiarity] • Apply morphological analysis tools (figure-ground, space syntax) to an urban sector, identifying its legibility, connectivity, and typological diversity [Usage] • Evaluate the morphological coherence and permeability of a proposed urban design, comparing block sizes, street connectivity, [Assessment]
Readings : [KropfMorphology2017]	

Unit 2: Contemporary Planning Methods and Theory (10 hours)	
Competences Expected: AG-A01	
Topics	Learning Outcomes
• Planning methods: zoning (Euclidean, form-based, performance-based), master planning vs. strategic planning, public participation (charrettes, community workshops) • Smart growth and new urbanism: principles (transit-oriented development, walkability, mixed-income housing, urban growth boundaries), Andrés Duany's transect, • Contemporary urban theory: Lefebvre's production of space, Harvey's right to the city, Sennett's open city, and the role of informality, participation, • Integration of civil engineering technical constraints (structural, geotechnical, utility infrastructure, and transportation) into urban planning and architectural design frameworks; the collaborative role of civil engineers in multidisciplinary building and urban project teams	• Apply a planning method - such as form-based coding or scenario planning - to a specific urban site, producing land use or built form regulations that align with stated policy [Usage] • Evaluate a current urban plan or zoning code against contemporary planning principles (walkability, mixed-use, transit orientation, social equity), identifying strengths [Assessment]
Readings : [Jacobs1961], [Gehl2010]	

Unit 3: Urban Design at Multiple Scales (10 hours)	
Competences Expected: AG-A15	
Topics	Learning Outcomes
- Regional and city scale: transit corridors, green belts, growth boundaries, satellite towns, and the relationship between density - Neighborhood scale: walkability (5-10 minute walking radius), mixed-use zoning, social infrastructure (schools, clinics, community centers), and the 20-minute neighborhood concept - Block and street scale: block length for pedestrian permeability (80-120 m max), street section design (lane widths, sidewalks, bike lanes, street trees, furniture zone), - Public space design: squares, plazas, parks, pocket parks, and streets as public space; William Whyte's elements of successful public space (sittable space, sun, food - Urban design guidelines: building setbacks, height limits, architectural character, facade articulation, signage, lighting,	- Describe the key design considerations at each urban scale - regional, neighborhood, block, street, and public space - [Familiarity] - Develop a set of urban design guidelines for a specific neighborhood or street typology, integrating density, building height, block length, street section, [Usage] - Evaluate an urban design project for its multi-scale coherence, assessing how well it integrates regional transit, neighborhood walkability, block permeability, street safety, [Assessment]
Readings : [Lynch1960]	

Unit 4: Landscape and Open Space Design (8 hours)	
Competences Expected: AG-A13	
Topics	Learning Outcomes
- Park types and their urban roles: pocket parks, neighborhood parks, district parks, regional parks, linear parks (greenways), waterfront parks, and national urban parks - Green infrastructure in urban design: bioswales, rain gardens, permeable pavements, urban forests, and green roofs - Placemaking for public space: Project for Public Spaces criteria (sociability, uses/activities, access, comfort/image) - Integration of landscape and urban form: view corridors, public space networks, park-to-park connections, and the role of open space in structuring urban density and walkability - Equity in open space access: distributional equity (distance, size per capita), quality equity (facilities, safety, maintenance),	- Describe the typologies of urban open space and their appropriate spatial distribution, programming, and ecological functions [Familiarity] - Design a public open space (plaza, park, or greenway) that integrates stormwater management, seating, shade, and circulation into a coherent spatial composition [Usage] - Evaluate a public space design using placemaking criteria (access, comfort, activities, sociability) and identify modifications to improve its use frequency and user diversity [Assessment]
Readings : [Booth1983]	

Unit 5: Landscape Design Principles and Process (10 hours)	
Competences Expected: AG-A13	
Topics	Learning Outcomes
• Site analysis for landscape: topography (slope, aspect), soils (texture, drainage, fertility), hydrology (surface flow, groundwater, flood zones), vegetation, microclimate (sun) • Spatial organization in landscape design: rooms (outdoor rooms), edges (soft vs. hard), sequence (entry, discovery, culmination), focal points (gazebo, sculpture, specimen tree) • Circulation in landscape: primary (vehicular, bike), secondary (pedestrian), service (maintenance), accessible routes (ADA gradients, surface firmness), • Landscape architectural drawing: site plans, grading plans, planting plans, irrigation plans, construction details (walls, paving, water features), • View analysis and visual impact: key views (from building, from approach), framed views, borrowed views, screening of undesirable views, and the use of massing	• Describe the elements of landscape site analysis and the spatial organization principles of outdoor rooms, edges, and circulation [Familiarity] • Produce a landscape design concept for a small site, integrating site analysis data into a spatial layout with defined outdoor rooms, circulation, and focal points [Usage] • Evaluate a landscape design for its responsiveness to site conditions (topography, hydrology, vegetation) and user needs, identifying strengths and weaknesses in circulation [Assessment]
Readings : [Booth1983]	

Unit 6: Urban Landscape and Green Infrastructure (8 hours)	
Competences Expected: AG-A13	
Topics	Learning Outcomes
• Green infrastructure types at urban scale: green roofs (extensive, intensive, biodiverse), rain gardens, bioswales, permeable alleys, street tree trenches, constructed wetlands • Urban forestry: street tree species selection (structural integrity, salt tolerance, root behavior), spacing and placement for shade • Water-sensitive urban design: integrating stormwater management with landscape aesthetics, water reuse for irrigation, • Urban heat island mitigation via landscape: cool pavements (high albedo), shading from street trees and green structures, evapotranspirative cooling from green roofs • Green networks and ecological corridors: connecting parks and open spaces for wildlife movement, integrating greenways along waterways,	• Describe the types of green infrastructure used in urban landscapes - green roofs, rain gardens, bioswales, tree trenches - [Familiarity] • Design a green infrastructure intervention for an urban site (plaza, street, rooftop) that manages a specified stormwater volume, reduces surface temperature, and provides amenity [Usage] • Evaluate the performance of an existing green infrastructure installation against design goals (stormwater capture, plant survival, user acceptance) [Assessment]
Readings : [Gehl2010]	

8. WORKPLAN

8.1 Methodology

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

8.2 Theory Sessions

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

8.3 Practical Sessions

The practical sessions are held in class where a series of exercises and/or practical concepts are developed through problem solving, problem solving, specific exercises and/or in application contexts.

9. EVALUATION SYSTEM

***** EVALUATION MISSING *****

10. BASIC BIBLIOGRAPHY