Salahaddin University

College of Engineering

Department of Architecture



# **Urban Design Course book**

## Academic Year 2022-2023

# By Urban Design Staff:

Dr. Kayfi Akram Mawlan kayfi.mawlan@su.edu.krd
Mobile: 0750 445 4475
Alifa Babaker Muhammed
alifa.muhammed@su.edu.krd
Mobile: 0750 445 8238
Shna Asaad Muhammed
shna.muhammed@su.edu.krd

Mobile: 07503390174 Sakar Yousif Abdullah Mobile: +9647504941420 Sakar.abdullah@su.edu.krd

Academic Year: 2022 -2023

#### Course book

1. Course name	Urban Design		
2. Lecturer in charge	Dr. Kayfi Akram Mawlan		
3. Department/ College	Architecture / Engineering		
4. Contact	e-mail kayfi.mawlan@su.edu.krd		
	Tel: Mobile: 0750 445 4475		
5. Time (8 hr. / week )	Theoretical 2		
	Practical	6	
6. Office hours			
7. Units	7		

#### **Course overview:**

The courses cover recent urban design theory and criticism. The approach emphasizes the mutual influences between architectural and urban design theory, and the plurality of values underlying current approaches. The course is widely illustrated with examples of both built and unbuilt projects of varying urban scales.

Concerned with the collective form of urban and suburban environments, ranging from grouping of buildings to the entire city. This involves analysis of urban patterns and outdoor spaces as well as cultural and socio-economic context.

## **Course Objective:**

The primary objective of this course is to introduce students to prevailing ideas in the field of (Urban Design-UD) and to the anticipated challenges that will likely affect the evolution of cities. By the end of the courses students will expect to gain the following:

- 1. Introducing new models and theories which involve the latest literatures in urban design sciences such as hybrid urban space, a new theory of space syntax and sustainable form of urban design.
- 2. Direct experience in understanding, interpreting and applying theories of urban design.
- 3. A basic capacity to critique urban design

- 4. An understanding of urban design as a dynamic force integral to the evolution of cities.
- 5. An introduction to the language and terminology of land use and urban design.
- 6. A heightened awareness of the details of the built environment to foster lifelong design learning.
- 7. To familiarize the students with the movement structure of a city and (UD) concepts, standards, methods, procedures for sustainable mobility system and applying on the practical part of the lectures.
- 8. To provide students with skills and knowledge how to treat with the design of public spaces, knowing the relation between urban design and architectural design, appreciating the factors that are to be considered in (UD) and the open spaces requirements and aesthetics.
- 9. To examine the elements, concepts and methods of (UD), with emphasis given to the visual and spatial problems. Emphasis is placed on methods of analysing urban form, organizational and structural concepts, human, natural and physical elements of (UD) and methods of implementation.

#### **Student's Obligation**

- Regular attendance is required according to the university rules online and on campus.
- > weekly participation and conducting assignments are required.
- > All submissions to be at studio and on time.

## **Forms of Teaching**

- ➤ The courses include two parallel streams of activity; design action and design thinking.
- ➤ The semesters deal with a physical model of a real urban area, which students make changes, additions and modifications.
- ➤ The studio work includes presentations and interactive discussions about readings in (UD).
- Each week all teams of students make design changes to the model based on the previous week's discussions and present those changes to the class.
- > Students are additionally required to make presentations demonstrating an understanding and critical engagement of course readings and will

write critiques of other students' designs. The course will be enriched with quizzes, class and online activities, and Studio work evaluation.

#### **Curricular Context**

- ➤ The syllabus is designed to apply the contemporary thinking in urban design theory and methods to a real community setting.
- ➤ The class integrates the models of community based learning and problem based learning to foster a dynamic learning environment.

#### **DESIGN STUDIO**

The (UD) studio is where the synthesis of theoretical and practical aspects of urban analysis and design takes place. Using (UD) projects of different scales that deal with programming and design; the studio encourages the integration of political, social, economic, environmental, and physical concerns in the design of urban spaces. Through the exercises which will focus on most crowded corridors &its surrounding in the city and examining issues related to critical program development, urban conservation, the studio tutorial will assist the students in the methodology of conducting and urban design city study, Techniques of survey, analysis of information and presentation.

## **Practical Projects: Mixed Use Corridor**

## The study of Urban Space at most crowded areas in Erbil city.

This project involves some commercial streets to be studied and analysed at six levels which will be selected according to criteria of liveable streets:

- 1- The social dimension.
- 2- The morphological dimension.
- 3- The perceptual dimension.
- 4- The visual dimension.
- 5- The functional dimension.
- 6- The temporal dimension.

## The study includes main steps:

- 1- Data collection
- 2- Data Analysis
- 3- Strategies for urban development and evaluation of proposals.
- 4- Application of selected Strategy

# The main objective of the project is to develop Erbil corridors to guide the urban development in order to achieve:

- 1- The sustainable urban development of the corridor taking into consideration social, economic, ecological and cultural aspects.
- 2- Propose a land use and transportation framework for future urban development, and identify requirements for the provision of public facilities and utilities by developing the main corridors to achieved high connectivity and integrity with zones of city.
- 3- Extend the growth of big city along the corridor as new pole especially with variation facilities for creating attractive corridor to gather modern urban context by high rise building and unique towers as the land marks.

#### 11. Assessment tools

- \* Final exam 50% (theoretical exam 30%, practical Exam 20%)
- \* Total annual mark 50%

Assessment Tool	Description	Weight	(points)
Attendance	Encourage students to attend the class online or on campus		
Quizzes	quizze(s)		
Presentations	Students have prelim presentations, pre-final presentations and final presentations as groups		
Mid-term Exam	Theoretical		
Mid-term Exam	Practical (Final presentation mark to be considered)		

Report (Assignment)	Students have reports on their projects/individual work	
Projects submissions	students have one project to be done in groups and have different submissions according to existing situation and stages of urban design process; They are submitted in reports and drawings which are presented in a form of Power Point presentations (PPT) and Poster Presentations (PP).	
Final Exam  Total Projects submissions	Final submission of the project will be considered here for practical mark.	

## 12. Reading list

Carmona, Matthew,; Tiesdell, Steve; Heath, Tim; Oc, Taner, "Public Spaces Urban Spaces, The
<b>Dimensions of Urban Design"</b> 2 <sup>nd</sup> ed, Architectural Press, Oxford, 2010.
Cluskey, Jim. "Road Form and Townscape" Architecture Press, London, 1979.
Donald Watson "Time-Saver Standards for Urban Design", February 21, 2003.
Gordon Cullen , "The Concise Town Scape", Architectural Press, 1961.
Hillier, Bill & Hanson "The Social Logic of Space", Cambridge, Cambridge University Press 1984.
Krier, Rob, "Urban Space", Forewarded by Colin Rowe, New York: Rizzoli, 1979.
Larice, Michael, and Elizabeth Macdonald, eds., "The Urban Design Reader", Routledge, Urban
Reader Series, 1st edn, London: Routledge, 2006.
Lynch, Kevin " A Theory of Good City Form", Cambridge, Massachusetts, The MIT Press, London
1981.
Lynch, Kevin., "The Image of the City", Cambridge, Massachusetts, The MIT Press, London, 1960.

Morris, A.E.J., "History of Urban Form, Before the Industrial Revolutions", 3rd ed, Essex: Longman Group UK Ltd, 1994.

Rapoport, A., "Human Aspects of Urban Form, Towards a Man-Environment Approach to Urban Form and Design", Oxford: Pergamon Press Ltd, 1997.

Rapoport, Amos., "Human Aspects of Urban Form – Towards a Man Environment approach to urban form and design", Pergamon Press, U.K, 1977.

Rossi, Aldo, "The Architecture of the City", First, Cambridge: The MIT Press, 1982.

Salingaros, Nikos A," **Urban Space and its Information Field** ", Journal of urban design , Vol. 4 – Division of Mathematics , University of Texas at an Antonio, USA 1999 .

Spreiregen, P.D. "Urban Design: The Architecture of Towns and Cities", Mc- Graw Hill, N.Y, 1965.

#### **12. Course Content:**

#### **SEMESTER (14 week)**

## 2 hours for theoretical study /week 4 hours for practical study / week

Week	Theoretical Lecture hours: Sunday (11:00 am -01:00 am) Lecture hours: Wednesday (9:00 am -10:00 am)	Practical Lecture hours: Sunday (01:00 am -3:00pm) Lecture hours: Wednesday (10:00 am -1:00pm)	
1	Sunday 11,09,2022  -course book review -Discussing Group organisations and team work -giving an introduction about the semester Urban Design as a Distinguishing Discipline	-discussing the total process of submissions - Practical projects introduction - Student projects presentation grouping Home work: (exploring the mixed use Corridor in Erbil City)	
	Wednesday 14,09,2022	First Stage: Mixed use corridors of Erbil City Presentation	

2	Sunday 18,09,2022	Homework: Urban design Dimensions overview  Second Stage: Urban Design Dimensions investigation
	Urban Design Elements and Values	Students are required to present Urban dimensions' overview from urban design Readers provided by Lecturers
	Wednesday 21,09,2022	Students are required to present Urban dimensions' overview from urban design Readers provided by Lecturers Home work: similar projects
3	Sunday 25,09,2022  The Elements of townscape organization	Third Stage: Similar example Presentation of similar projects and submitting first site plan of the selected area. Homework: Similar to be continuous
	Wednesday 28,09,2022	Presentation of similar projects and submitting second revision of site plan of the selected area.  Homework: Data collection  Note: Students get feedback and review their work before submitting for final Mark.
4	Sunday 02,10,2022  The Morphological Dimension of Urban Design (Urban Morphology and Urban Form)	Third Stage: Similar example
	Wednesday 05,10,2022	Third Stage: Similar example Final presentation of Similar projects

		Presentation of similar projects and submitting
		second revision of site plan of the selected area.
		Homework: Data collection
		Note: Students get feedback and review their
		work before submitting for final Mark.
5	Sunday 09,10,2022	
	• , ,	- Forth Stage: Data Collection
	5-The functional dimension.	1-Site visit for each group location
	(ORGWARE).	2-prepare maps and satellite images for the
	-Public Space and the	selected corridors
	Public/Private Interface.	3- Regional identity (site description and
	-The social use of space.	
	- Privacy (visual and aural	historical background)
	privacy	4- Linkages to surroundings
		5- Local character that includes:
		5.1 take photos of the elevations of the corridor
		and determine the existing activities on both
		sides
		5.2 building uses.
		5.3 Building forms and features
		5.4 local material
	Wednesday 12,10,2022	- Forth Stage: Data Collection
	, , ,	1st level -The morphological dimension of
		the streets:
		the streets.
		- Checking data about morphological dimension
		of the streets, including:
		1- Urban block size.
		2- Spatial configuration of the zone.
		3- Spatial variety.
		4- Continuity & Active Frontage.
		Morphological data collection for your corridor
		locations which include (physical elements of
		the urban form (Plot, street, open spaces,
		constructed open spaces)
		1 setback, 2.plot coverage, 3.street width, 4.
		building type, and 5.building height
		functional dimension of the streets:
		Chapting data shout manufacturing 1
		- Checking data about morphological dimension
		of the streets, including:
		1- Urban block size.
	1	1
		2- Spatial configuration of the zone.

		3- Spatial variety.	
		4- Continuity & Active Frontage.	
6	Sunday 16,10,2022  3-The Social dimension The Social Production of	Checking data about Functional dimension of the streets  The Social dimension of the streets:	
	Space (SOFTWARE)People & Place -Jan Gehl studies The public realmNeighbourhood (size, boundaries, Social relevance and meaning)Fundamental process of human behaviour.	<ul> <li>Students will be asked to collect data about social life on the street. In other word:</li> <li>* How people use urban space in Erbil city?</li> <li>* What is the impression of people on the public spaces in Erbil?</li> <li>Checking data collection about social life on the streets.</li> <li>Checking all data for each student to reach final stage.</li> </ul> The Perceptual dimension of the streets	
	Wednesday 19,10,2022	The Visual dimension of the streets  The Temporal dimension of the streets	
7	Sunday 23,10,2022  The perceptual dimension -Environmental PerceptionBeyond the image of the citySense of Place.	Checking visual observation for each student to reach final stage	
	Wednesday 26,10,2022  Rational Decision Making: - How to analyse the data and evaluate the alternatives. *Goals Achievement Matrix (GAM). (SWOT Strengths, Weaknesses, Opportunities, and Threats., space syntax, GIS) techniques.	- Checking visual observation for each student to reach final stage	

8	The visual dimension. Aesthetic References Patterns and Aesthetic Order Positive and Negative SpaceThe StreetTownscape	- Checking visual observation for each student to reach final stage		
	Wednesday 02,11,2022	Final Presentation of Data Collection		
9	The Temporal Dimension of Urban Design Time CyclesThe time management of urban space The continuity of place.	- Third Stage: Data analysis		
	Wednesday 09,11,2022	- Third Stage: Data analysis		
10	Sunday 13,11,2022  The Concept of Integration in Urban Design .	Third Stage: Data analysis		
	Wednesday 16,11,2022	Third Stage: Data analysis		
11	Sunday 20,11,2022  ENVIRONMENTAL PLANNING and urban design	- Fourth Stage: Strategy (urban development process).		

	Wednesday 23,11,2022	- Fourth Stage: Strategy (urban development process).
12	Sunday 27,11,2022 sustainable urban design	- Fourth Stage: Strategy (urban development process).
	Wednesday 30,11,2022	- Fourth Stage: Strategy (urban development process).
13	Sunday 04,12,2022  The Concept of Integration in Urban Design	- Fifth Stage: Development of Best Proposal
	Wednesday 08,12,2022	- Fifth Stage: Development of Best Proposal Final Presentation of Strategies
14	Sunday 11,12,2022  The Traditional Open Spaces and alleys in Old Cities	- Fifth Stage: Development of Best Proposal
	Wednesday 14,12,2022	- Fifth Stage: Development of Best Proposal

Sunday 18,12,2022 Designing the Pedestrian Network FOOTPATHS	Students are Allowed to work for Final Presentation
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Wednesday 21,12,2022

# Final Presentation of Urban design Corridor

13. Guidelines on Grading Policy					
Grades	Letter	GPA	Grades	Letter	GPA
95-100%	A	4.0	65-69%	С	2.0
90-94%	A-	3.7	60-64%	C-	1.7
85-89%	B+	3.3	55-59%	D+	1.3
80-84%	В	3.0	50-54%	D	1.0
75-79%	B-	2.7	0-49%	F	0.0
70-74%	C+	2.3			
W	Withdrawal I Incomplete			nplete	
Passing			50%	1	
grade					