Department of Architecture

College of Engineering
Salahaddin University – Hawler
Subject: Principles of Planning

Course Book –Year 2

1st semester (Fall Semester)

Lecturer's name:
Dr. Mohanad Rasam (Lecturer, PhD)
Shna Asaad (Assistant Lecturer, M.Sc.)

Academic Year: 2023 -2024

Course Book

1. Course name	**Principles of Planning**
2. Lecturer in charge	**Dr.Mohanad Rasam, (Lecturer, PhD)**
3. Department/ College	**Architecture/ Engineering**
4. Contact	**E-mail:**mohanad.rassam@su.edu.krd Tel:07504453934 Shna.muhammed@su.edu.krd. **Tel:07504490742**
5. Time (hr. / week)	**[(Theory: 2hr) – (Practical: 2hr)]/week**
6. Office hours	The Lectures are Available to enhance all student (5 days a week -nearby 30 hours in a week) at their offices inside the college and by contacting after official time if it necessary.
7. Course code	Principles of Planning 4113
8. Teacher's academic profile	➢ **(Mohanad Rasam)** I graduated (bachelor degree) from Mosul university at 1984 then started work as junior architect for 3 years, by 1987 then started as junior Eng. I had been appointed as engineer in university of Salahaddin until 1991 then started my master degree graduation in university of technology which completed by 1994 then continued work as lecturer assistant 1994-2000 in university of Salahaddin. I started my PHD studies by 1998 till 2004 in university of Baghdad when I got the title of lecturer in university of Salahaddin till now.I have continues practices in construction fields concerning design and projects executions. ➢ **(Shna Asaad Muhammed)** , I have been graduated in 2000 at Salahaddin University /College of Engineering /Architecture Department. I have been finished master degree in 2011 in the same university and worked in the same department since 2001 , I worked as assistant of head in architecture department for nearly 4 years and one of the teaching staff as assistant lecture till now. I taught many subjects in the same department (Architecture design 1st stage ,Architecture design 2nd stage ,Architecture design 3rd stage, Architecture design 4th stage, City planning ,Graphic drawings, Freehand drawings ,Urban design , planning principles ,Landscape Design, Conservation and Rehabilitation of heritage buildings).

9. Keywords	Urban Planning, Land Use Planning, History of planning , Types of planning, Historical cities, city models, Zoning , Regulation, Building form standards, Regulation of Land Use, Subdivision…….

10. Course overview:

This subject is part of architectural design as sequent of comprehensive urban design teaching through five-year study of architecture. The importance of this subject, which is based on the studio format, is that a comprehensive problem is given to students who first analyse it and then, through a synthetic process, reach a design scheme. Parallel to studio work, theory through lectures help to deliver information and knowledge concerning design standards, criteria and design methods, case studies exemplifies the studies of existing completed neighbourhoods and towns, delivering information either on the urban forms, or on the design streets itself, or on how a planner faced and solved specific problems.

11. Course Objective:

1. Collecting information and Knowledge about city planning, historical background and main principles of planning urban areas through theory and case studies.
2. Identifying the principle data in theory and practice through studying similar examples of different cities and updated case studies.
3. Learning how to analyse the existing data for a specific site integrated with the proposed requirements and concept.
4. How to specify the problems from general information and to adopt the design method for the required functions and real feasible project.
5. Prepare a project program and space allotment.
6. Create design concept on the understanding of other new updated concepts in the discipline; this should match the students' site plan.
7. The students work should include deep understanding of the subject in combination with others practices and viewpoint with student specialty in the final product.
8. Multi stage development of plan until final presentation.

12. Student's Obligation

- Regular attendance is required according to the university rules.
- The use of mobile phone during the class is prohibited.
- Only the students who are officially enrolled can attend the class, guests and children are not admitted.
- Daily participation and conducting assignments are required.

13. Forms of Teaching:

These lectures are prepared to help students to improve their urban planning skills to present their ideas as best as possible.
Forms of teaching will be identified according to students needs using:
PowerPoint presentation for theoretical part
White Board
Group discussion
Individual Feedback
Studio work
Homework
Using AutoCAD and 3D Program to rendering and presentation
Projects Hand in (Daily and Presentation in different stages)

14. Assessment Scheme

Fall Semester [Student Efforts 40%]

- Theory Exam (midterm exam) 20%
- Daily work, and quizzes 5%
- Report, 15%
- Final Exam 60%

15. **Student learning outcome:** The primary outcomes of this course are to introduce students to prevailing ideas in the field of (Planning) and to the anticipated challenges that will likely affect the evolution of cities. By the end of the course students will expect to gain the following:

1. Introducing new models and theories which involve the latest literatures in city planning sciences .
2. Direct experience in understanding, interpreting and applying theories of urban planning
3. An understanding of urban planning & urban design as a dynamic force integral to the evolution of cities.
4. An introduction to the language and terminology of land use and urban planning
5. A heightened awareness of the details of the built environment to foster lifelong design learning.
6. To familiarize the students with the movement structure of a city and planning concepts, standards, methods, procedures for sustainable mobility system and applying on the practical part of the lectures.
7. To provide students with skills and knowledge how to treat with the design of spaces, knowing the relation between urban design and architectural design.

16. Course Reading List:

Main Reference

- Carmona, Matthew,; Tiesdell, Steve; Heath, Tim; Oc, Taner, **"Public Spaces Urban Spaces, The Dimensions of Urban Design"** 2nd 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.

Course Book

Week	Theoretical Part	Practical Part
1st Week	**What is Urban Planning?** - Theoretical knowledge Differentiations and integrations to other fields,	**Urban Planning, Introduction** ➢ Definition ➢ History ➢ Sustainable development and sustainability
2nd Week	**Land Use Planning and The Environmental Factors:** ➢ Definition ➢ Functions ➢ Geographic information system definition GIS ➢ Spatial decision support system SDSS ➢ Environmental Factors	**Social, Economic and Historical factors affecting the city**
3rd Week	**Land Use Planning Typologies** ➢ Types of planning (six main typologies) Comprehensive, Systems, Democratic, Advocacy & Equity, Strategic and Environmental planning typologies. ➢ Today successful planning ➢ Current land use planning processes	**Reports presentation, team working practice, (group workshop) on Historical cities (six examples) Part one**
4th Week	**The Urban to Rural Transect Theory** ➢ Definition of Zones ➢ Transect continuum character	**Reports presentation, team working practice, (group workshop) on Historical cities (six examples) Part two**
5th Week	**Smart Growth Theory** ➢ Principles of smart growth theory ➢ Compact Neighbourhoods ➢ Transect- oriented	**Zoning and Regulation of Land Use** Definition and purpose Scope

	development	Types in general (Five types) Standard Euclidean, Performance, Incentive and based form code zoning methods.
6th Week	**Form Based Code Zoning (FBC)** ➢ Scope ➢ History ➢ Emergence of modern FBC ➢ Recent developments ➢ Components of FBC ➢ Building form standards ➢ Implementation	**Report and review**
7th Week	**City Models (part one)** ➢ Concentric zone model ➢ Sector Model	**Reports presentation, team working practice, (group workshop on applications of city models) six examples; Part one**
8thWeek	**City Models (Part two)** ➢ Multiple Nuclei Model ➢ Liner city model ➢ Irregular pattern model	**Semester Examination**
9th Week	**City Models (Part three)** ➢ Grid Iron model ➢ Core frame model ➢ Urban Realm model ➢ Garden City model	**Reports presentation, team working practice, (Workshop on residential setting design) six groups**
10th Week	**Intelligent Urbanism Principles**	**Reports presentation, team working practice, (Workshop on residential setting design) six groups**
11th Week	Types of Roads (Vehicular City Systems)	**Reports presentation, team working practice, (Workshop on residential setting design) six**

		groups
12th Week	**Pedestrians and Neighbourhood Patterns** Privacy in urban pattern Synthetic characters of urban space(theories and practice)	**Reports presentation, team working practice, (Workshop on residential setting design) six groups**
13th Week	**Safety in Urban Planning**	**Reports presentation, team working practice, (group workshop on applications of city models) six examples; Part two**
14th Week	**Residential Land Use (Neighbourhood Types)** Residential Standards Social and technical infrastructure Housing types and criteria	**Final Reports presentation Evaluation, team working practice, (Workshop on residential setting design) six groups**
15th Week	**Housing Subdivision** Design Considerations of Subdivision (Part one) ➢ Design Considerations of Subdivision(Part two)	**Feedback and Final Report** **Sample questions and how to answer** ➢ **Discussion in General issues related to the subject** ➢ **Objections review**