Salahaddin University

College of Engineering

Architectural Department

Subject: Architectural Design IV

Course book: 2nd stage

Lecture's name: Design Staff

Academic year: 2023-2024

Course Catalogue:

General information

1	Course name	**Architectural Design**
2	**Lecturer in charge**	Lecturer: Hadeel Salim Eshaq Dr. Roza Marouf Dr. Sweyda Abdulla Assistant Lecturer: Hawnaz Majeed Assistant Lecturer: Chra Hunar Ahmed Assistant Lecturer: Faten Radhwan Eng. Muhamed Eng. Beri Eng. Arazu
3	**Department/college**	Architecture/Engineering
4	**contact**	E-mail: hadeel.eshaq@su.edu.krd Tel. 07703068893 E-mail: chra.ahmed@su.edu.krd Tel. 07507066002 fatin.yaseen@su.edu.krd 07504476318 Sweyda.aziz@su.edu.krd 0750 813 5050
5	**Time (hr./week)**	[(Theory: 2 hr.) – (Practical: 8 hr.)]/week
6	**Office hours**	Availability of the lecturer to the student during the week
7	**Lecturers' academic profile**	**1- Hadeel Salim Eshaq:** I have a B.SC degree in architectural engineering, graduated from college of Engineering- Architectural department /Mosul university 2001, and completed my master's study at the university of Baghdad to get a master's degree in urban and regional planning 2005. Now a doctoral researcher/ member of the research

		group at the Faculty of Design Sciences, University of Antwerp/Belgium. I have been working at the university of Slahaddin/ Department of Architecture since 2006. **Area of Interest**: -Spatial Analysis using -Space Syntax Theory & GIS application, -Urban Mobility System and Social Behavior Studies in the Built Environment. 2- **Faten R. Yaseen**, finished her BSc. in architecture in University of Salahaddin at 2012. In 2019 continued MSc. degree in Salahaddin University with an Excellent degree in the thesis of "Biophilic Architecture". She worked as assistant between years 2012-2017 in SU. Then She started working in teaching staff as assistant lecturer in SU, also taught in other private universities. Interested in researches about sustainability and biophilic design approach. She has two publications in the field of biophilic design since 2018. Towards the Application of Biophilic Parameters in Local Buildings: a Case Study of Bilkent School, Erbil City- Iraq. Visibility of nature-connectedness in school buildings. An analytical study using biophilic parameters, space syntax, and space/nature syntax.

Project's Name: Primary School (Educational Architecture)

Course Objectives:

By the end of the course (Spring Semester), the students will be able to understand the following topics:

1- The basic components of Primary school. (indoor & outdoor)

2- The area of the different spaces in the school.

3- The nature of the relationship between the different spaces in the school.

4- The essential furniture for each space in the school.

5- To understand how users can influence the design.

6- To understand how location affect the design.

7- The necessary facilities in the school.

8- To understand how a smart building can be created.

9- To learn how to create architectural concepts according to architectural schools.

10. Understand the basic principles used by famous architects.

By this course, the students will be able to:

1. Identify and recognize a theoretical background about architectural schools.
2. Create the project space program in term of required facilities and its areas.
3. Analyzing the selected site plans.
4. Inspire the architectural concept from different levels.

Students' Obligations:

- All students are required to arrive at 9:00 AM o'clock. Allow the delay to be only ten minutes.

-Do not use the mobile phone during the lecture.

-Students are not allowed to leave the classroom under any circumstances unless necessary and with permission from the teaching staff.

-It is not permissible to chew gum or food in the class and during lectures, and students may eat during breaks.

-When the lesson ends, all students must remain in their seats until the teaching staff leaves.

-It is not permissible to speak loudly during the lecture because it causes confusion to the lecturer and students in general.

Forms of Teaching:

These lectures are designed to help students to improve their architecture design skills to present their ideas as best as possible. Forms of teaching will be identified according to students needs by using the following teaching methods:

- PowerPoint presentation for theoretical part.
- White Board.
- Group discussion.
- Individual Feedback.
- Studio work.
- Homework.
- Using AutoCAD and 3D Programs to rendering and presentation.
- Projects Hand in (Daily and Presentation in different stages).

Assessment Scheme:

Fall Semester [Private Independent House]	
Practical Part includes: Define project components, Relationships (Matrix & Bubble diagram), Space Program and analysis, Similar Example, Site Analysis, Day Sketch: Preliminary Submission Pre-final Submission	**25%** **20%** **25%**
Final Submission	**30%**
Total	**100%**

Course Contents:

12Weeks with 24 lectures: From the 10th of September to 7th of December			
Week	**Theoretical Part**	**Practical Part**	**Tasks for students**
1st lecture	Coursebook and terms definitions.	Introduction to the architectural design process and group formations.	Data Collection
2nd lecture	Define project components.	The area of the different spaces.	Students should define the area according to Standards.
3rd lecture	Project Components	Discussing students' work.	Students put this level in the final stage.

4th lecture	Explaining the relationships between different spaces	Zoning, Matrix & Bubble diagram	These techniques are applied by different groups.
5th lecture	Study the furniture used for each space	Presenting furniture standards and required spaces.	Students must prepare furniture for each space in the school.
6th lecture	How can the user influence the design? (children)	The design caters a range of ages (6-11years)	Students must take into account kid's requirements
7th lecture	Site Plan Analysis (SPA)	Identify the site's potential and limitations and how they may affect the design.	Students must choose one location to apply the analysis.
8th lecture	Similar Example Analysis	Discussing students' work.	Students put this level in the final stage.
9th lecture	Starting the concept & design strategies	Apply design strategies	Develop initial ideas.
10th lecture	Architectural schools	School design summary with different style	Students should flow a specific school
11th lecture	Introducing the world's leading architects-Part I. - Richard Meier - Le Corbusier - Kisho Kurokawa	Define the principles for each architect and how can apply in the design.	Students should adopt one architect.
12th lecture	Introducing the world's leading architects-Part II. - Peter Eisenman - Zaha Hadid - Frank Gehry	Define the principles for each architect and how can apply in the design.	Studio work

13th lecture	Introducing the world's leading architects-Part III. - Frank Lloyd Wright - Norman Foster - Bernard Tschumi	Define the principles for each architect and how can apply in the design.	Studio work
14th lecture	Introducing the world's leading architects-Part IV. - Richard Rogers - Rem Koolhaas - Renzo Piano - Philip Johnson	Define the principles for each architect and how can apply in the design.	Studio work
15th lecture	Day Sketch (Concept Stage)		
16th lecture	Develop initial ideas.	Criticism	Studio work
17th lecture	Develop ideas.	Criticism	Studio work
18th lecture	Preliminary Submission (concept)		
19th lecture	Study the technical level of the building.	Criticism	Studio work
20th lecture	How can a smart building be created?	Criticism	Studio work
21th lecture	Prefinal Presentation (Site, Plans, Elevations, Sections, 3D-Model)		
22th lecture	Develop ideas.	Criticism	
23th lecture	Develop ideas.	Criticism	
24th lecture	Final Presentation (will be determined by Exam committee) (Site, Plans, Elevations, Sections, details, perspectives, 3D-Model)		

Course Program:

According to the design standards (Time Saver/ or Neufert), all ideas will be used to create a healthy environment for kids and improv the quality of life. The strategy describes how architectural design can contribute towards creating a smart building that entice students to study and play. The projects should meet children needs. The outcomes represent the things that are important to our communities and help guide official authorities and private companies.

Course Reading List:

Main Reference

-De Chiara Joseph; Callender, John 1987. **Time Saver Standards for Building Types**. 2nd edition. McRAW-Hall International Editions.

- "**Architects' Data (3rd Edition)**" **Ernst Neufert** , **Peter Neufert** , **Nicholas Walliman** , 2002.

- Chiles, Prue. **Building Schools: Key issues for contemporary Design.**

Note:

- This syllabus may be subject to changes, i.e, we may take either longer or shorter time to finish a topic.
- Final submission will be determined by the examination committee.