



**Salahaddin University**

**College of Engineering**

**Architectural Department**

**Subject: Architectural Design III**

**Course book: 2<sup>nd</sup> stage**

**Lecture's name: Design Staff**

**Academic year: 2023-2024**

# Course Catalogue:

## General information

<u>1</u>	<b>Course name</b>	<b>Architectural Design</b>
<u>2</u>	<b>Lecturer in charge</b>	Lecturer: Hadeel Salim Eshaq Dr. Roza Assistant Lecturer: Hawnaz Majeed Assistant Lecturer: Chra Hunar Ahmed Assistant Lecturer: Sweyda Abdulla Assistant Lecturer: Faten Radhwan Eng. Hella
<u>3</u>	<b>Department/college</b>	Architecture/Engineering
<u>4</u>	<b>contact</b>	E-mail: <a href="mailto:hadeel.eshaq@su.edu.krd">hadeel.eshaq@su.edu.krd</a> Tel. 07703068893 E-mail: <a href="mailto:chra.ahmed@su.edu.krd">chra.ahmed@su.edu.krd</a> Tel. 07507066002 <a href="mailto:fatin.yaseen@su.edu.krd">fatin.yaseen@su.edu.krd</a> 07504476318 <a href="mailto:Sweyda.aziz@su.edu.krd">Sweyda.aziz@su.edu.krd</a> 0750 813 5050
<u>5</u>	<b>Time (hr./week)</b>	[(Theory: 2 hr.) – (Practical: 8 hr.)]/week
<u>6</u>	<b>Office hours</b>	Availability of the lecturer to the student during the week
<u>7</u>	<b>Lecturers' academic profile</b>	<b>1- Hadeel Salim Eshaq:</b> 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 Salahaddin/ 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: Independent house (Villa)**

### **Course Objectives:**

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

- 1- The basic components of the villa project? (indoor & outdoor)
- 2- The area of the different spaces in the villa.
- 3- The nature of the relationship between the different spaces in the villa.
- 4- The essential furniture for each space in the villa.
- 5- To understand how users can influence the design.
- 6- To understand how location affect the design.
- 7- The necessary facilities in the villa.
- 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 (Forest, desert, mountainous area, on the banks of a river, traditional area ..... etc.)
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]	
<p><b>Practical Part includes:</b>            Define project components, Relationships (Matrix &amp; Bubble diagram), Space Program and analysis, Similar Example, Site Analysis, Day Sketch:</p>	<b>25%</b>
Preliminary Submission	<b>20%</b>
Pre-final Submission	<b>25%</b>
<b>Final Submission</b>	<b>30%</b>
<b>Total</b>	<b>100%</b>

## Course Contents:

**12Weeks with 24 lectures: From the 10<sup>th</sup> of September to 7<sup>th</sup> of December**

Week	Theoretical Part	Practical Part	Tasks for students
<b>1<sup>st</sup> lecture</b>	Coursebook and terms definitions.	Introduction to the architectural design process and group formations.	.....

<b>2<sup>nd</sup> lecture</b>	Define project components.	The area of the different spaces.	Students should define the area according to ‘Time Saver’.
<b>3<sup>rd</sup> lecture</b>	Project Components	Discussing students’ work.	Students put this level in the final stage.
<b>4<sup>th</sup> lecture</b>	Explaining the relationships between different spaces	Zoning, Matrix & Bubble diagram	These techniques are applied by different groups.
<b>5<sup>th</sup> lecture</b>	Study the furniture used for each space	Presenting furniture standards and required spaces.	Students must prepare furniture for each space in the villa.
<b>6<sup>th</sup> lecture</b>	How can the user influence the design?	The design caters to a wide range of users	Students must choose a job as a villa owner and identify basic characteristics.
<b>7<sup>th</sup> lecture</b>	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.
<b>8<sup>th</sup> lecture</b>	Similar Example Analysis	Discussing students’ work.	Students put this level in the final stage.
<b>9<sup>th</sup> lecture</b>	Starting the concept & design strategies	Apply design strategies	Develop initial ideas.
<b>10<sup>th</sup> lecture</b>	Architectural schools	Villa design summary with different schools	Students should flow a specific school
<b>11<sup>th</sup> lecture</b>	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.

<b>12<sup>th</sup> lecture</b>	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
<b>13<sup>th</sup> lecture</b>	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
<b>14<sup>th</sup> lecture</b>	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
<b>15<sup>th</sup> lecture</b>	Day Sketch (Concept Stage)		
<b>16<sup>th</sup> lecture</b>	Develop initial ideas.	Criticism	Studio work
<b>17<sup>th</sup> lecture</b>	Develop ideas.	Criticism	Studio work
<b>18<sup>th</sup> lecture</b>	Preliminary Submission (concept)		
<b>19<sup>th</sup> lecture</b>	Study the technical level of the building.	Criticism	Studio work
<b>20<sup>th</sup> lecture</b>	How can a smart building be created?	Criticism	Studio work
<b>21<sup>th</sup> lecture</b>	Prefinal Presentation (Site, Plans, Elevations, Sections, 3D-Model)		
<b>22<sup>th</sup> lecture</b>	Develop ideas.	Criticism	
<b>23<sup>th</sup> lecture</b>	Develop ideas.	Criticism	



## Course Program:

According to the design standards (Time Saver/ or Neufert), all ideas will be used to create a healthy environment for human and improve the quality of life. The strategy describes how architectural design can contribute towards creating a smart building that entice people to want to live, work, play, and study. The projects should meet community 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.
- **“100 of the World's Best Houses”** , Catherine Slessor,2002.
- **“100 of the World's Best Houses”** , Robyn Beaver,2005.
- **“Another 100 of the World's Best Houses”** , Robyn Beaver,2005.
- **“Housing Technical & codes of practice for Iraq”** ,Warsaw/Poland ,1982.

- Some useful e-books that you can find it in our Department's Library:
    - Architectural Design - Education and Culture.
    - Architectural Design – Houses
  - Useful websites:
    - <http://www.architecture-page.com>
    - <http://www.richardmeier.com>
    - <http://www.architectmagazine.com>
    - <http://www.arab-eng.org> “good resource for e-books”
- [www.archdaily.com](http://www.archdaily.com),  
[www.freshome.com](http://www.freshome.com)  
[www.luxhomes.com](http://www.luxhomes.com)  
[www.desmina.com](http://www.desmina.com)  
[www.archspace.com](http://www.archspace.com)  
[www.dezeen.com](http://www.dezeen.com)

**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.