

**TISHK INTERNATIONAL UNIVERSITY**  
**FACULTY OF ENGINEERING**  
**Department of ARCHITECTURE,**  
**2021-2022 Fall**  
**Course Information for ARCH 411 ARCHITECTURAL DESIGN V**

<b>Course Name:</b>	ARCHITECTURAL DESIGN V				
<b>Code</b>	<b>Regular Semester</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Credits</b>	<b>ECTS</b>
ARCH 411	7	2	10	7	12
<b>Name of Lecturer(s)- Academic Title:</b>	Omar Abdulwahhab - MSc Shad Sherzad - Assistant Lecturer				
<b>Teaching Assistant:</b>	Tara Fadhil, Fatma Omar				
<b>Course Language:</b>	English				
<b>Course Type:</b>	Main				
<b>Office Hours</b>	sunday9.00Am-4.00Pm,Wednesday9.00Am-4:00 Pm				
<b>Contact Email:</b>	omar.abdulwahhab@tiu.edu.iq shad.sherzad@tiu.edu.iq  Tel:07710239472 07704187666				
<b>Teacher's academic profile:</b>	MSc Urban Design - University of Technology-Iraq BSc. Architectural Engineering - University of Technology-Iraq Master in Architecture				
<b>Course Objectives:</b>	This course aims to expand the view of the students and help them to move from thinking about the design of a single building with a specific function to go out into multi functional building with different departments or parts and how to link the project parts with visual and movement paths. Also this course aims to teach students balancing Form and Function; Components of a Hospital. Introduction to Evidence Based Healthcare Design. Inter-Departmental relationship in a hospital. and Balancing Factors. This course enables students to deal with different structural systems of the general services of the buildings such as the cooling and heating systems and the health sanitary and energy saving systems. last through this course students will understand how the current complexities within KRG's health system create systemic challenges for patients, providers, and administrators.				
<b>Course Description (Course overview):</b>	This course aims to expand the view of the student and help him to move from thinking about the design of a single building with a specific function to go out into the whole city and how to link the project with visual and movement paths in it.				

**COURSE CONTENT**

Week	Hour	Date	Topic
1	2	4-7/10/2021	Welcoming and explanation of course syllabus & project (Historical review on hospitals, health buildings)
2	2	10-14/10/2021	healthcare plan and classification of hospitals and health buildings
3	2	17-21/10/2021	The general hospital and its activities, site selection, area of the land, general layout, master plan and hospital departments
4	2	24-28/10/2021	Site planning criteria
5	2	31/10-4/11/2021	2D and 3D zoning and detailed functional relationships
6	2	7-11/11/2021	Structural system and building form in hospital design
7	2	14-18/11/2021	Midterm Exam
8	2	21-25/11/2021	Midterm Exam
9	2	28/11-2/12/2021	Detailed drawings for the hospital departments (main entrances, pharmacy, vertical circulation, hospital street, and administration)
10	2	5-9/12/2021	Diagnostic department, CT radiology, laboratories, physiotherapy, pharmacy and blood bank
11	2	12-16/12/2021	Surgery department, central sterilization department , morgue department
12	2	19-23/12/2021	Emergency dep. Maternity dep. with external services for each one and their relationship with other parts

13	2	26-30/12/2021	Central kitchen and laundry Stores Engineering services
14	2	2-5/1/2022	Requirements of the project final, further to the presentation and details.
15	2	9-13/1/2022	Final Exam
16	2	16-20/1/2022	Final Exam

### COURSE/STUDENT LEARNING OUTCOMES

- 1 Learning how to collect data and design multi function health care buildings
- 2 Identifying the the relationship between general hospital departments.
- 3 Identify the main issues that should be considered in space diagram, functional requirement and design method.
- 4 Recognizing the main criteria for site analysis. students will be able to master plan hospital site planning.
- 5 Learning the Structural importance in design and the system of circulation.

### COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES

(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced )

#### Program Learning Outcomes

	Cont.
1 Apply problem-solving skills in the architectural context.	A
2 Demonstrate knowledge of architectural history, theory, and practice in solving architectural design problems.	
3 Utilize freehand drawing, architectural graphics, and model building skills in solving architectural design problems.	I
4 Utilize the computer as a tool in a wide range of documentation and presentation applications, using CAD, 3-D visualization and rendering, electronic image composition and editing software.	A
5 Apply knowledge of mathematics, science, engineering and technology in solving architectural design problems.	
6 Develop designs that meet desired needs within realistic economic, social, political, and cultural constraints.	I
7 Develop designs that fulfill the environmental, health & safety, and sustainability considerations.	A
8 Demonstrate team-working skills and show the ability to work collaboratively with various design teams involved in the building industry, and collaborate and negotiate with clients.	
9 Demonstrate the necessary knowledge for applying laws, codes, regulations, standards and practices in relation to building construction systems.	I
10 Show their ideas through high quality drawing skills and artistic sense.	
11 Utilize their skills to address professional and ethical responsibilities, diversity and commitment to the work field.	
12 Suggest solutions and techniques for engaging in life-long learning and knowledge about contemporary issues.	

#### Prerequisites (Course Reading List and References):

•Neufert, Ernst, Neufert Architecture Data, July 2000, (3rd edition) •Chiara, Joseph De, (Editor), Crosbie, Michael J.(Editor), Time-Saver Standards for Building Types.(4th edition).

#### Student's obligation (Special Requirements):

Students are required to do studio and homework according to the teaching program. They are obligated to attend to the lecture as this lecture is all related to practicing techniques to improve architecture design skills as well as all trail tests and exam.

#### Weekly Laboratory/Practice Plan:

Week	Hour	Date	Topics
1	1	4-7/10/2021	Projects allocated to students
2	1	10-14/10/2021	Similar Examples Analysis
3	1	17-21/10/2021	Site analysis, factors determining site capacity, environmental factors (Daily sketch)
4	1	24-28/10/2021	Concept Discussion (Daily sketch)
5	1	31/10-4/11/2021	Concept Submission
6	1	7-11/11/2021	Ground floor design (class work)
7	1	14-18/11/2021	Ground floor design with structure (class work)
8	1	21-25/11/2021	1st Prelim submission

	9	1	28/11-2/12/2021	First Floor and In patient building design (class work)
	10	1	5-9/12/2021	First Floor and In patient building design with structure (class work)
	11	1	12-16/12/2021	Design Facades and Design Sections (Daily sketch)
	12	1	19-23/12/2021	Design the basement floor plan, services, morgue, and landscape (class work)
	13	1	26-30/12/2021	3D modeling and form (class work)
	14	1	2-5/1/2022	Pre final submission
	15	1	9-13/1/2022	Final Submiton
	16	1	16-20/1/2022	Final Exam
<b>Course Book/Textbook:</b>	Joseph De Chiara: Time-saver standards for building types; Neufert, E. ,Architects data, McGraw-Hill Book Company. Arian mostaedi,Architecture Design - New Health Facilities, 2016. Saaid Ali Khatab, Hospital Design, 2006			
<b>Other Course Materials/References:</b>	from web sites <a href="https://iqra.ahlamontada.com/">https://iqra.ahlamontada.com/</a>			
<b>Teaching Methods (Forms of Teaching):</b>	Lectures, Practical sessions, Presentation, Project, Case studies, , ,			
<b>COURSE EVALUATION CRITERIA</b>				
<b>Method</b>			<b>Quantity</b>	<b>Percentage (%)</b>
Workshop			1	5
Seminar			2	5
Participation			2	5
Quiz			3	5
Midterm Exam(s)			1	20
Final Exam			1	40
<b>Total</b>				<b>100</b>
<b>Examinations:</b> concept submission, 1st submission , pre-final submission				
<b>Extra Notes:</b>				
<b>ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD</b>				
<b>Activities</b>	<b>Quantity</b>	<b>Workload Hours for 1 quantity*</b>	<b>Total Workload</b>	
Theoretical Hours	16	2	32	
Practical Hours	16	10	80	
Final Exam	1	20	20	
Workshop	1	16	16	
Seminar	2	10	20	
Participation	2	22	44	
Quiz	3	22	66	
Midterm Exam(s)	1	17	17	
<b>Total Workload</b>			<b>295</b>	
<b>ECTS Credit (Total workload/25)</b>			<b>11.8</b>	

**Peer review**

Signature:  
Name:  
Lecturer

Signature:  
Name:  
Head of Department

Signature:  
Name:  
Dean