

The American University of Kurdistan (AUK) College of Engineering Department of Architecture

Course Syllabus

ARC500Architectural Design Studio VIII

Course lecturers: Kawar Salih, and Serhan Hakgudener <u>Kawar.salih@auk.edu.krd</u>, <u>Serhan.hakgudener@auk.edu.krd</u> Spring 2021

Department:	Department of Architecture
Program:	BSc Architectural Engineering

Course Code – Full:	Course Code – Short:
ARC500	
Course Title:	Credit Hours:
Architectural Design Studio VIII	6

Semester:	Spring 2021
Academic Year:	2021-2022

Course Instructor:	Kawar Salih, MSc	Serhan Hakgudener, PhD		
Delivery Method:				
Lecture	Tutorial			
2 hour	4 hours			

Section 1 Course Syllabus:

2.1 Course Contents (Description)

The senior design studio VIII is a capstone course required of all students in the Architectural Engineering program. This is an independent study type course requiring extensive research, analysis, prototyping, testing, and evaluation. Students will have completed a wide variety of technical courses by their senior year and will have the background necessary for the completion of a comprehensive design project. A typical project starts with several weeks of intensive investigation and analysis. The initial investigation will be followed by a combination of conceptual design, engineering calculations, computer-aided drafting, analysis, material selection, building prototypes, testing, modifications, and detailed design. Students are required to prepare a final thesis with an appropriate portfolio and make an oral presentation to department faculty and other architectural students. Students are expected to maintain a logbook to document the progress and time invested in the project. A student is expected to spend a minimum of nine hours per week to successfully complete their project.

2.2 Course Objectives

The primary objective of this course is to students to work independently in a design and solve a problem in the field of architecture and to include teamwork, communication, economic and safety considerations in design. Another objective is to develop connection with professional partners whenever possible. In doing so, students will use methods developed for the design of architectural engineering systems and components, including problem definition, analysis, synthesis and optimization.

2.3 Course Objectives and learning outcomes:

LO Code	Learning Objective			
А	Demonstrate knowledge of contemporary ideas of architectural design.			
В	A recognition of the need for, and an ability to engage in life-long learning			
С	The broad education necessary to understand the impact of architectural solutions in a global and societal context			
D	Ability for effective oral and written communication			
Е	An understanding of professional and ethical responsibility			
F	Ability to identify, formulate and solve architectural engineering problems			
G	Ability to design a system, component or process to meet desired needs			
Н	Ability to design and conduct experiments, and to critically analyse and interpret data			

Ι	Demonstrate skills in developing the human environment with consideration of relationships between people and buildings and space.
J	Demonstrate readiness to start research work in the areas of urban design.

2.4 Weekly Plan (Teaching Schedule - Course Outline):

This course will be divided into two continuous parts. The first part (2 credits) will be specified for research to develop a solution for a real problem in an architectural project as a thesis topic. Then the thesis should be written with the specified timeline and submitted for the department on the due date. The thesis will be divided to chapters and each chapter will discuss certain aspects of the project starting with cases of studies and ends with minor details of the project and conclusions. The second part (4 Credits) will be specified for designing the project per the suggested plan of spaces and solutions found for the project through the research part. Table 1. Weekly plan for part one (thesis) in summer 2020

Week	Lecture	Topic	Description	Number of hours
1		Course Introduction		2 hours
		Research Proposal		2 hours
		Thesis: Introduction, Problem, Objective		2 hours
2		Literature Review: Cases of Studies		2 hours
		Functional Program		2 hours
		Thesis: Literature/Cases of study Functional Program		2 hours
3		Site Analysis, Site Visit		2 hours
		Site Analysis	Plans	2 hours
		Thesis: Site Analysis chapter, Functional Program chapter		2 hours
4		Concept		2 hours
		Concept		2 hours
		Thesis: Site Analysis Chapter		2 hours
5		Concept	First Plans	2 hours
		Concept	Drawing developing	2 hours
		Concept	Developing	2 hours
6		1 st Presentation	Concept	2 hours
		Developing Drawings	Plans	2 hours
		Thesis: Functional program, building Structure Chapter,		2 hours
7		Developing Drawings	Plans	2 hours
		Developing Drawings	Plans	2 hours
		Thesis: Structure Chapter		2 hours
8		Developing Drawings	Sections	2 hours
		Developing Drawings	Elevations	2 hours

Table 3: Weekly Plan

		Thesis: Environmental Consideration		2 hours
		Chapter		
9		Developing Drawings	Site	2 hours
		Developing Drawings	Site	1.5 hours
		Thesis: Environmental Consideration		
		Chapter		
10		Pre-Final Presentation		1.5 hours
		3D Visualization	Details	1.5 hours
		Thesis: Technical		
11		3D Visualization	Details	1.5 hours
	3D Visualization		Details	1.5 hours
		Thesis: Conclusion		
12		3D Visualization	Details	1.5 hours
		Final Sheet arrangement		
		Thesis: Finalizing		1.5 hours
13		Final Presentation		

* Dates and topics contained in this teaching schedule are subject to change. Any modification will be announced in the class and on the website. It is the responsibility of student to stay informed on any updates. If any of days above fall into a holiday, the class, including the exam dates will shift accordingly.

2.5 Educational Resources

Core materials:

- Neufert, Ernst, Peter Neufert, Bousmaha Baiche, and Nicholas Walliman. Architects' Data. Oxford: Blackwell Science, 2000. Print.
- In Callender, J. H. (1974). Time-saver standards for architectural design data. New York: McGraw-Hill.
- De Chiara, J. and Crosbie, M., 2001. *Time-Saver Standards For Building Types*. New York: McGraw-Hill.
- Old buildings, new architecture
- F G Dimes , J. Ashurst. 1998. Conservation of Building and Decorative Stone (Conservation & Museology). 1st edition. Routledge.
- Living Buildings Architectural Conservation, Philosophy, Principles and Practice
- https://www.buildingconservation.com/books/bookshop.htm

2.6 Methods of Teaching

The information below is provided as a guide to assist students in engaging appropriately with the course requirements.

This is a 4 unit course. Students in this course are expected to attend 6-8 hours of lecture/ tutorial/ workshop each week and allow for 18-22 hours of self-directed learning each week. That is a total of 30 hours a week for 8 weeks. The tutorials and other activities, including reviews of work in progress are an important component of learning in this course. The communication skills developed by regularly and actively participating in activities and discussions are considered extremely important by the School and are highly regarded by employers and professional bodies.

This course requires high participation for each class. The course will include verbal communication between the students and teachers as well as use of. There needs to be commitment from the students to do enough self-directed studies in order to participate in class.

- Lectures: Students are required to attend lectures as these will provide the initial basis for further discussion and critique toward development of assessable outputs. Lectures may not be recorded. PDFs of slides may be provided but these may not contain critical verbal explanations of visual material. A range of lectures will background the diverse range of understandings and practice of design thinking.
- **Tutorial**: time will be devoted to discussion of assessable assignment material and some exercises supporting delivery of the assignments. They are also the primary means to receive individual feedback via work-in-progress reviews. At this level of learning, peer review and commentary is encouraged as a valuable learning tool, both in offering comment on fellow-students' work and in receiving and responding to comment on your own work. It is considered desirable to change and evolve your position throughout the course. Tutorials involve discussion and revision of points of view.
- Workshop: It will be held in computer lab and time will be spent on developing the work on assignment material. They are also the primary means to receive individual feedback via work-in-progress reviews. At this level of learning, peer review and commentary is encouraged as a valuable learning tool, both in offering comment on fellow-students' work and in receiving and responding to comment on your own work.

• Small Group Discovery: There will be tasks undertaken as part of the 'small group discovery' mode of teaching & learning.

2.7 Course Requirements

In order to accomplish the learning outcomes of this course, the learner is required to

- Attend class lectures
- Participate in class activities
- Read and study assignments
- Do homework and class work assignments and design projects.
- Fulfill design project presentation requirements.

Personal business, such as travel, employment, family obligations, illness, weddings, graduations, and attendance at public events, is not an official, documented University conflict.

2.8 ASSESSMENT

- In-class activities: Students are expected to participate in multiple activities taking place in the classroom or lab.
- Assignments: Students required to study on certain cases of study and presents their findings inside class.
- Final project: this is detailing and drafting project that students should as part of the assessment method.

2.9 Assessment Methods

Activity	Points
Activities inside class	50
First Submission	50
Pre-Final Submission	150
Final Submission	250 points

Project:

Details of the Design Project (Project Brief) will be uploaded on Team and discussed with students during the class.

Grade	Points Collected	Percentage	Grade Points	Meaning of Grade
А	450-500	90.00 -100	4.00	Excellent
B ⁺	425-449	85.00-89.99	3.5	Very Good
В	400-424	80.00-84.99	3.00	Very Good
C+	375-399	75.00 -79.99	2.5	Good
С	350-374	70.00-74.99	2.00	Good
D+	325-349	65.00-69.99	1.50	Satisfactory
D	300-324	60.00-64.99	1.00	Pass
F	Less than 300	Less than 60	0.00	Fail
IP			0.0	The course is still in progress
Ι			0.0	Assigned for incomplete course

Final course grades will be assigned as follows:

2.10 Judicial Statement/Academic Misconduct

Academic misconduct is defined as plagiarism, cheating, fabrication, or facilitating any such act. For purposes of this section, the following definitions apply:

(1) Plagiarism: The adoption or reproduction of ideas, words, statements, images, or works of another person as one's own without proper acknowledgement.

(2) Cheating: Using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit or hours.

(3) Fabrication: Unauthorized falsification or invention of any information or citation in an academic exercise.

(4) Facilitation: Helping or attempting to help another to violate a provision of the institutional code of academic misconduct.

Academic misconduct will result in actions taken as defined by the AUK. In addition to other possible disciplinary sanctions that may be imposed through regular institutional procedures as a result of academic misconduct, the instructor has the right to assign an F or a zero for the work in question or to assign an F for the course. If a student believes he or she has been falsely accused of academic misconduct, and if his or her final grade has been lowered as a result, the student may appeal the case through the appropriate institutional procedures.

2.11 Drop/Withdrawal Policy and Dates

Drop and withdrawal are to be in accordance to AUK policy.

2.12 General conduct in class

The instructor has primary responsibility for control over all classroom behaviour and can direct the temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct which otherwise violates the general rules and regulations of AUK.

2.13 Online Classroom Rules For students:

- The online classes will be held according to the course timetable.
- Students who misses a lecture can watch the recorded session through the team group using their AUK accounts on Microsoft Stream.

Students who are receiving online courses are expected to:

- Have computers with sharable audio and video tools and proper settings.
- Make sure they have installed all of the requested software or digital tools requested by the instructor.
- Make sure they have installed Microsoft Teams application on their computer.
- Make sure they have proper internet connection and your computer is fully charged before joining any online lecture.
- Make sure they are added to the team group of the course they enrolled in.
- Make sure they get all of the notifications sent by the instructor of the course on the Microsoft Teams group.
- Choose a quiet space, free from distractions, to set yourself up for class. Turn off cell phones, TVs, etc. Exit other applications on your computer prior to entering the classroom.
- Dress appropriately. Remember this is still a classroom setting.
- Come to class on time.
- Login using their AUK accounts that shows their names and surnames clearly, and if any student joined any session from unknown accounts will be dismissed from the virtual classroom.
- Not record the screen, unless approved by the course Instructor/s.
- Share their Screens and allow the Instructor to control their screens ethically when requested.

- Make sure to enable both audio and video, and keep their video on for attendance purposes when they enter the online classroom.
- Mute their microphone during the lesson to avoid disturbing the class with any background noise.
- Be respectful.
- Participate. When any student have a question or comment, use the "Raise your Hand" button and wait to be acknowledged by the teacher before unmuting yourself to speak. (One person talks at a time.)
- Use the chat box responsibly. It is meant to facilitate conversation around the lesson topic, not for sideline discussions.
- Leave the classroom by closing the window when the class is over.