



Arab Academy for Science, Technology &
Maritime Transport
College of Engineering & Technology
Architectural Engineering and Environmental Design Department

AR 414
Architectural Design 4
Fall 2020

***“You are Not Your User”
Not Design for You is for Everybody***



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Architectural Design 4
Fall 2018

Saturdays 12:30-16:10
Mondays 08:30 – 12:10&12:30-16:10

Instructors:

Dr. Nancy Abd El-Moneim

Email: nancyabdelmoneim@aast.edu

Teaching Assistant:

Arch. Asmaa Medhat Arch. Mohamed Alaa

Email: Asmaa.medhat.11@gmail.com

Email: Muhammed-alaa@hotmail.com

Every Problem Contains & Suggests its Own Solution

Louis Sullivan

Course Description:

This course will be a reality-based architectural design studio, which will provide the students a venue for simulation of the thinking methods they will encounter later on in practical architectural projects and develop their design skills and behaviors. This curriculum encourages students to integrate new applications and discover knowledge outside the architecture discipline. Besides, the course will help the “expanding the scope of participatory design to the design of communities involves the participation of the community in the process. In this way, participatory design is more than a collection of design methods to influence the built form; it also has a human dimension and can engage the people who form the community in the process”(Tokman & Yamacli, 2007).

Studio Objectives:

This studio extends students’ understanding of how buildings are generated from a specific location and address diverse user needs and specific socio-cultural contexts. The course aims to enrich students with a greater understanding of physical context (character and style) and cultural context (social and behavioral environment) and their relationship. Therefore, the more planning is related to reality, the more successful it would be.

In this course, the design process is initiated through:

- a. Research involving a contextual analysis of the site.
- b. A socio-cultural analysis involving questionnaires to investigate user needs.

Content and Structure:

The course has several components: lectures and discussions, teamwork activities, research, presentations, assignments, and an individual design project.

Class sessions will discuss various human behavior research techniques and students' progress in their design project. They will also explore the potential for understanding design as a mode of research inquiry. Initially, this course will rediscover the built environment through the projects that the students will personally live.

The course will help students anticipate, identify, and resolve the challenges of designing and conducting architecture design based on social context dilemmas. Students who take this course will learn the principles of human behavior and their research methods by gaining more extraordinary humanitarian architecture skills.

Course Assessment:

All work submitted for this course must be original and developed for this course only. Assessment is based on a semester-long design project and class participation.

Assessment will be as follows:

Asses No.	Procedures used		Start Week No.	Sub. Week No.	Weighting of Asses.
	Type	To assess			
1	Research follow up	Knowledge and understanding All skills	1	2	5%
2	Research Presentation II		2	3	5%
3	Design Program Hand-in and Review	Knowledge and understanding All skills	3	4	10%
4	Design Sketch I, II & III		4	7	10%
Sub-Total 30%					
5	In-Class Design Development Exercises	Knowledge and understanding All skills	8	12	10%
6	Design Sketch IV	Knowledge and understanding All skills	8	12	10%
Sub-Total 20%					
7	Design Sketch V and Final Sketch	Knowledge and understanding All skills	12	14	10%
8	Final Project Hand-in	Knowledge and understanding All skills		15	25%
9	Final Exam	Knowledge and understanding All skills		16	15%

Grade Descriptions:

- A/A-: excellent
The output surpasses expectations regarding inventiveness, appropriateness, visual language, conceptual rigor, and personal development. Student pursues concepts and techniques above and beyond what is discussed in class. The project is complete on all levels.
- B+/B/B-: above average
The output is thorough, well presented, diligently pursued, and completed. Student seeks ideas and suggestions presented in class and puts in the effort to resolve the required dilemma. The project is complete on all levels and demonstrates the potential for excellence.
- C+/C: average
The output meets the minimum requirements. Suggestions made in class and not pursued with dedication and rigor. The project is incomplete in one or more areas.
- C-/ D/ F -: poor/ fail
The output is incomplete. A basic grasp of skill is lacking; visual clarity or logic of presentation are not level-appropriate. The student does not demonstrate the required competence and knowledge base.

Course Readings:

The course instructors will provide Readings, which will be used to illustrate the concepts discussed in class. Students should be thoroughly familiar with them and be expected to analyze a selection as part of several assignments (readings are mentioned in the course timeline.)

Project Description:

With a high rhythm of lifestyle in a new era, which is bustling, new challenges appear each day like climate change, growing migrant population, inadequate infrastructure, and pandemics. Hence, new approaches must be taken into consideration while designing to sustain the communities.

The course theme is responding to the context. "The context is applied to the following two categories of ideas, which are community and communication. By referring to the context, Charles Moore's defines the term communication as follows "the making common of some property to a number of things"(Tokman & Yamacli, 2007). Also, "communication may also be between buildings or even between people and buildings"(Capon, 1999).

Capon characterizes the thought of Building "talking to each other" as the connection or communication of building with others and the surrounding areas. Such thoughts are shown within the concept of context. "It is not possible to enjoy an individual building if it does not belong to a suitable environment which constitutes the coherent picture" (Johnson 1994). Therefore, modern architecture methodizes formation in consonance with context; therefore, it is not as ignorant of context as it looks(Çizgen, 2012).

Accordingly, this fall, the studio will present a new approach to hit these two categories: **“Community and Communications.”** The course will introduce the theme of **“Humanitarian Architecture.”**

Humanitarian architecture seeks to enhance humanitarian issues- disaster relief, poverty, floods, earthquakes, disease. Given the fact of harsh relations and facts many people face worldwide, architects must serve to provide all the essential fundamental needs such as shelters, sanitary, clean water, and a place to build a family and a community.

The main aim of “Humanitarian Architecture” is to improve people’s lives and enhance community well-being. Accordingly, there are three main characteristics of successful Humanitarian Architecture, which are: Community Participatory, Using Local Materials, and Sustainable.

In this context, the course will be held in Aswan. Aswan governorate is located in Upper Egypt; it consists of 10 cities. The most affected areas are the villages at the torrent’s end and those on the Nile flats. The project will be held in Hesia Island, Aswan, as shown in the map below.

Students will investigate the physical context through previous analysis that will be provided and the social context. Due to the current situation (Covid-19), the student will observe the social life through videos and make structured questionnaires that will be done remotely within these villages. After the research and survey phase, students will suggest a set of projects from which, and according to analysis, the instructors will choose two projects to begin the design process. The instructors will provide students with the needed programs for each project.

General Studio Process:

The class will be run through discussion, where everyone in class must be involved. Also, there will be one to one feedback. Students are expected to prepare for their feedbacks. This means that they will go to read references about the upcoming assignments.

Be active; students are expected to participate in all class activities, group discussions, presentations, and so forth. Class participation will be monitored all the time and will affect students’ general evaluation directly.

As a creative pursuit, architectural design is rooted in the process. Process work emphasizes the path by which you solve any given problem rather than focusing solely on its final solution. By placing the act of design in the exploration, discovery, and transformation of process, the final product can become something more prosperous, more complex, and more rigorous than the initial idea or notion of the end product could achieve. The design process is thereby the most enriching and essential portion of the design education. Consequently, the process will be a critical issue of consideration in your grading.

Architectural design is an iterative process; ideas are repeatedly studied, transformed, edited, and rediscovered over time. This is the process that should happen between classes. At each step of your project’s development, you will be required to explore several options or ideas before settling on a given solution. It would be best if you were self-critical of your ideas; identifying each of them

is beneficial and has drawbacks. Each of your alternative ideas should be explored, tested, improved, and evaluated by going through several iterations of that idea before showing it in class. Your iterative process should be recorded (in sketches, drawings, and models), saved, and shown during desk critiques and pin-up reviews. You are required to present your design process; therefore, coming up with one idea for desk critiques is not sufficient.

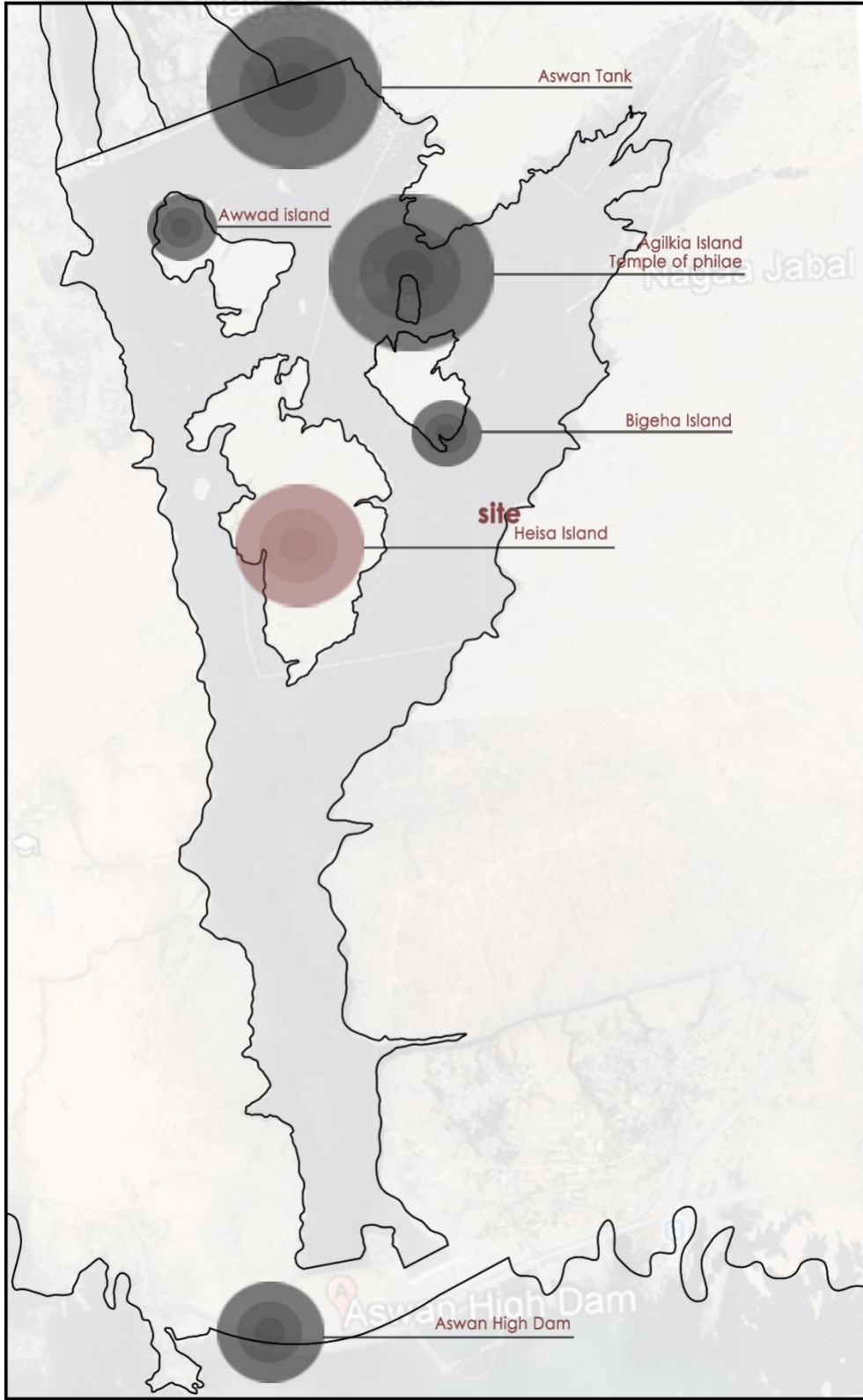
Classroom Etiquette:

Students are expected to adhere to the Academy's code of conduct as listed below:

- Arrive to class on time.
- Mute your cell phone, and put it away.
- Close down your email and social media sites.
- Design Dairy is Mandatory.
- Bring what you need to be productive.
- Do not eat in class.
- Contribute to the discussion.
- Avoid side conversations and other distractions.
- Address the instructor professionally.
- Be attentive in class.
- Contact the instructor directly when you have to miss class.

Attendance for this course is mandatory. Department rules regarding attendance will be strictly enforced. Punctuality is also essential. Students arriving late to class or leaving early might be considered absent.

Site



Schedule & Submissions

NOTE: In order to ensure equity, hand-in dates cannot be modified.

A hand-in date cannot be changed without permission from the course Instructor.

Week #	Mon.	Lecture Contents	Submissions	Readings
1	10/10	Introduction about the course/ Humanitarian Architecture	Questionnaire Draft Context Analysis (1) Precedents Analysis (1)	- Inquiry by Design: Ch. 11 Social Research, Socio-Economic Research, High-Dam Impacts
2	17/10	Readings discussion	Questionnaire final/ Context Analysis (2)/ Precedents (2)	Design like you give a damn - Quinta Monroy Housing Project Page 167 - Maurice D. Cox Bayview Rural Village Page 159 - Super Adobe page 107
3	24/10		Final Research Submission	Humanitarian Architecture - Chapter: Humanitarian Spaces (67) -Chapter: A vision for a new form of humanitarianism (75)
4	31/10	Staff Provides Projects Programs	Concept Submission (1)	
5	07/11		Concept Submission (2)	-Time Saver: Buildings Type
6	14/11		Final Concept/ Projections (1)	
7	21/11	The 7 th Submission:		
8	28/11		Projections Process	
9	05/12		Projections Process	
10	12/12		Projections Process	
11	19/12		Projections Process	
12	26/12	The 12 th Submission:		
13	02/01		Projections Process	
14	09/01	Pre-Final		
15	16/01	Final Submission		
16		Final Exam		