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

AR442
Introduction to Urban Design
"Go Back to Walkability"
Spring 2021

Course Instructors:

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Course Description & Objectives

This course introduces undergraduate students to theories about how cities are formed and the practice of urban design and development. It is an introductory subject that examines both the evolving structure of the Egyptian metropolis and the ways that it can be designed and developed. It will survey the ideas of a wide range of people who have addressed urban problems and acted to alter cities, suburbs, and regions through urban design and development. Students will learn theories and principles of urban design and issues concerning process and practices. The course aims to develop an understanding of the different theories, principles, processes, and procedures of urban design. As well as, to enhance the student's practical skills in urban design in a variety of functional categories, such as housing, central business districts, and other activity centers. The course will look at designs for new towns and examine the ways that existing cities have spread and been redeveloped. The student will see how cities and suburbs have been changed in the past and how he and others may help change them in the future.

Lectures and discussions will be supplemented by videos and by field study which will present cases involving recent projects that illustrate the scope and methods of urban design practice and theory

Content and Structure

The course has several components: lectures and discussions, presentations, teamwork activities, assignments and one urban projects.

Class sessions will consist of the debates on a variety of research/ analysis techniques and students 'progress of their projects. They will also explore the potential for understanding design as a mode of research inquiry. Initially, this course will help to put many ideas regarding Urban Design, Housing, and Landscaping.

The course will help students to characterize the concept of urban space through understanding its different physical, human and temporal aspects. To describe the impact of professional architectural solutions on the society & the environment locally, regionally & globally. Students who take this course will learn the relationship between people & buildings & between buildings & their environments, and the need to relate buildings & the surrounding spaces to human needs & scale (contextual understanding.) The course will support students to define strengths and weaknesses and suggest plausible solutions to identified problems.

Course Readings

The course instructors will provide Readings which will be used throughout the term as illustrations of the concepts discussed in class. The course main Textbook:

Carmona et al. 2010 (2nd edition). *Public Places Urban Spaces: The Dimensions of Urban Design*. New York: Architectural Press, Routledge.

The Project

First Area: Downtown Cairo was designed by prestigious French architects who were commissioned by Khedive Ismail during his visit to Paris, and since then he wanted to make the Egyptian Kingdom capital better than Paris and to be the jewel of the orient. It was he who stressed the importance of European style urban planning in Cairo, to include broad, linear gridded streets, geometric harmony and modern European architectural style.

It was once home to the prosperous elite of late 19th and early 20th century Cairo. It is a relic of a bygone era Egypt's "Belle Époque" and demonstrates the vision for developing Egypt. Yet decades of neglect by the neighborhood's landlords and tenants following the burning of most of Cairo's buildings during the popular Cairo fire incident prior the 1952 Revolution led by Gamal Abdel Nasser, and the ensuing departure of the upper classes, have left the splendor of its ornate edifices mired in decay. Lax enforcement of laws and regulations gave way to the entry of commercial establishments into the neighborhood, mostly with no regard to maintaining aesthetic harmony or preserving the historic buildings of Downtown Cairo. Now, most of the historic buildings within the area were renovated by the ministry Of housing, utilities and urban development

Intro. to Urban Design

<u>Second Area:</u> 6th of October City, is a new satellite city in Cairo's outskirts. The settlement was established in 1979 by the 504th presidential decree of Egyptian President Anwar El Sadat. It is 17 km (11 mi) from the great pyramids of Giza and 32 km (20 mi) from downtown Cairo. The city has a total area of 482 km2 (119,200 acres) and, eventually, is expected to have 6 million inhabitants, although there are many unoccupied or incomplete buildings.

It was announced as the capital of the 6th of October Governorate in April 2008. Following the Governorate's dissolution in April 2011, in the wake of the Egyptian revolution, it was reincorporated into the Giza Governorate, to which it had originally belonged.

Accordingly, the staff has found these two locations reach with the urban dilemmas caused, eventually, by the different eras it passed through it. So, each group of work is required to analyze the two case studies from Mathew Carmona's urban dimensions. The staff will together to provide an auto-cad base-map for the study area. Then, each group will make the areas analysis based on the given lectures and the course's textbook. There will be six assignments sequentially asked to be submitted to cover all the urban area dimension

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 successfully 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.