

**FUE - Future University in Egypt**  
**Faculty of Engineering and Technology**  
**Department of Architectural Engineering**

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**Course Specifications**

ARC 323: Human Studies in Architecture (**Modified**)

Program (s) on which the course is given:	B.Sc. in Architectural Engineering
Major or minor element of programs:	(Not Applicable)
Department offering the program:	Architectural Engineering
Department offering the course:	Architectural Engineering
Academic Level / semester:	3 <sup>rd</sup> year – 5 <sup>th</sup> semester
Date of specification approval:	September 2019

**A. Basic Information**

<b>Title: Human Studies in Architecture</b>	<b>Code: ARC 323</b>
<b>Credit Hours:</b>	
<b>Lectures:</b>	<b>2 Hrs.</b>
<b>Tutorial/Lab:</b>	<b>0 Hrs.</b>
<b>Total:</b>	<b>2 Hrs.</b>

**Prerequisite:** None

**B. Professional Information**

**1- Catalog Course Description:**

The course looks at architecture within the framework of human sciences. The history of human sciences in architecture, Human theories and society formation, Environment relationship, Perception, behavior and culture, Behavior and the built environment, Human needs in relation to social concepts, Humanities in contemporary architecture, Sampling, data gathering and social research tools, Applied behavioral research.

**2- Overall aims of the course:**

- The role of humanities in Architecture and Planning.
- The mutual effects between human behavior and built environment which in turn have an impact on Architectural and Urban Design.
- The student's perception of both indoor and outdoor spaces depending on the behavioral and psychological factors, and hence supporting decision-making process.

### 3- **Intended learning outcomes of course (ILOs):**

#### *3.1. Program ILOs related to course:*

**A04.** Demonstrate knowledge and understanding of the principles and theories of architectural design and planning, as process and product.

**A05.** Demonstrate knowledge and understanding of design problems, list clients' needs & requirements and gather relevant information.

**A11.** Demonstrate understanding and appreciation to the social, environmental, ethical and economic considerations and human factors affecting the exercise of the architectural decisions

**A12.** Demonstrate knowledge and understanding of contemporary engineering topics

**B10.** Incorporate different dimensions of economy, society, environment, technology applicability, safety, site constraints, urban context and risk management in design

**B18.** Integrate community design parameters into design projects.

**B19.** Appraise the spatial, aesthetic, technical and social qualities of a design within the scope and scale of a wider environment.

**B21.** Analyze the range of patterns and traditions that have shaped and sustained cultures and the way that they can inform design process.

**C19.** Respect all alternative solutions; changes in original plan of the project, differences in style, culture, experience and treat others with respect.

**C21.** Respond effectively to the broad constituency of interests with consideration of social and ethical concerns.

**D07.** Search for information and adopt life-long self-learning

**D09.** Refer to relevant literatures.

#### *3.2. Course Detailed ILOs:*

##### **a- Knowledge and understanding:**

By the end of the course successfully the student should be able to:

- a1. Differentiate between Human Sciences and Natural Sciences.
- a2. Define Environmental Psychology as a relevant discipline.
- a3. List the physical common traits in human perception.
- a4. Outline the common psychological structures and responses.
- a5. Explain individual differences and preferences.
- a6. State the difference between the concepts of space and place.
- a7. List people's psychological needs in open spaces.
- a8. Define space ideality and the narrative concept.

##### **b- Intellectual skills:**

By the end of this course the student should be able to:

- b1. Relate the discussed concepts with other relevant concepts.
- b2. Apply concepts on existing projects.

**c- Professional and practical skills:**

- c1- Respect differences in style, culture, experience and treat others with respect.
- c.2- Consider social and ethical aspects in design.

**d- General and transferable skills:**

By the end of this course the student should be able to:

- d1. Search for data effectively

The course ILOs are mapped to the program ILOs in Table (1) in the Appendix.

**4- Course Contents:**

Topics	Lec. (Hrs.)	Tutorial (Hrs.)	Total (Hrs.)
<b>-Introduction:</b> What is research? Literature Review, Research Design, Methods. Data Collection and Analysis	2	-	2
<b>-Behavior Topics:</b> The Multisensory Nature of Perception	2	-	2
<b>-Behavior Topics:</b> Symbolism and Aesthetic Response	6	-	6
<b>Behavior Topics:</b> - Familiarity versus Aesthetics	6	-	6
<b>Humanities Topics:</b> - Attributes of Residential Environments	6	-	6
<b>Humanities Topics:</b> - Functional Categories and Basic Human Requirements	6	-	6
The Logic of Space	2	-	2
Total	30	-	30

The course contents are mapped to the course ILOs in Table (2) in the Appendix.

**5- Lab/Computer/Project Work:**

N/A

**6- learning/teaching methods:**

The learning/teaching methods are mapped to the course ILOs in Table (3) in the Appendix.

**7- Assessments:**

- a. Final exam: 40%
- b. Semester work: 60%
  - i. Reports 10%
  - ii. Assignments 20%
  - iii. Midterm exam 20%
  - iv. Participation 10%

The assessment methods are mapped to the course ILOs in Table (4) in the Appendix.

**8- List of references:**

- a. Textbook:  
Applications of Environment-Behavior Research: Case Studies and Analysis (Environment and Behavior), Cambridge University Press 1993.
- b. Lecture Notes and Handouts
- c. Recommended Readings:  
Sanoff, Henry. (1991) Visual Research Methods in Design, Van Nostrand Reinhold, USA.  
Smith, Peter. (1979). Architecture and the Human Dimension, The Pitman Press, UK.  
Rapoport, Amos. (1977). Human Aspects of Urban Form, Pergamon Press, USA.  
Hillier, Bill. (1988). The Social Logic of Space. Cambridge University Press, UK.

**9- Facilities required for teaching and learning:**

- a. White board
- b. Computer & Data Show for Presentations + Internet Connection.
- c. Architectural Library

<b>Course coordinator:</b>	Prof. Dr. Osama ElRawi	
<b>Head of Department:</b>	Prof. Dr. Samir Sadek Hosny	
<b>Date:</b>	September 2019	

## Appendix

Table (1): Course ILOs/ Program ILOs Matrix

	A04	A05	A11	A12	B10	B18	B19	B21	C19	C21	D07	D09
	Demonstrate knowledge and understanding of the principles and theories of architectural design and planning, as process and product.	Demonstrate knowledge and understanding of design problems, list clients' needs & requirements and gather relevant information	Demonstrate understanding and appreciation to the social, environmental, ethical and economic considerations and human factors affecting the exercise of the architectural decisions.	Demonstrate knowledge and understanding of contemporary engineering topics	Incorporate different dimensions of economy, society, environment, technology applicability, safety, site constraints, urban context and risk management in design	Integrate community design parameters into design projects	Appraise the spatial, aesthetic, technical and social qualities of a design within the scope and scale of a wider environment.	Analyze the range of patterns and traditions that have shaped and sustained cultures and the way that they can inform design process.	Respect all alternative solutions; changes in original plan of the project, differences in style, culture, experience and treat others with respect.	Respond effectively to the broad constituency of interests with consideration of social and ethical concerns.	Search for information and adopt life-long self-learning	Refer to relevant literatures
Course ILOs	a1	●										
	a2			●								
	a3											
	a4			●								
	a5			●								
	a6	●	●									
	a7		●									
	a8	●	●		●							
	b1					●	●	●	●			
	b2						●					
	c1									●		
	c2										●	
	d1											●

Table [2]: Course Content/ILO Matrix

Topic	Knowledge & Understanding								Intellectual Skills		Professional and practical skills		General Skills
	a1	a2	a3	a4	a5	a6	a7	a8	b1	b2	c1	c2	d1
Introduction	●	●				●		●					
The Multisensory Nature of Perception			●										
Symbolism and Aesthetic Response				●									●
Familiarity versus Aesthetics					●				●				●
Attributes of Residential Environments										●	●	●	
Functional Categories and Basic Human Requirements						●				●	●	●	
The Logic of Space							●	●	●	●	●	●	●

Table (3): Learning-Teaching Method/Course ILO Matrix

Learning/Teaching Method	Knowledge & Understanding								Intellectual Skills		Professional and practical skills		General Skills
	a1	a2	a3	a4	a5	a6	a7	a8	b1	b2	c1	c2	d1
Interactive Lecture	●	●	●	●	●	●	●	●					
Presentations							●	●	●	●	●	●	●

Table (4): Assessment Methods/Course ILO Matrix and Final Exam Blueprint

Assessment Method	Marks	Knowledge & Understanding								Intellectual Skills		Professional and practical skills		General Skills
		a1	a2	a3	a4	a5	a6	a7	a8	b1	b2	c1	c2	d1
Assignments	20%						●	●		●	●	●	●	
Reports	10%		●	●					●					●
Participation	10%					●						●	●	
Midterm exam	20%					●		●						
Final exam	40%	●		●	●	●		●						●
Marks Distribution		60%								20%		5%		15%