



**University/Academy:** Arab Academy for Science, Technology & Maritime Transport  
**Faculty/Institute:** College of Engineering & Technology  
**Program:** B.Sc. Architectural Engineering and Environmental Design

### Form no. (12): Course Specification

#### 1- Course Data

Course Code: <b>AR 233</b>	Course Title: <b>History &amp; Theory of Architecture 3</b>	Academic Year/Level: <b>2<sup>nd</sup> year/4<sup>th</sup> semester</b>
Specialization: <b>Architecture</b>	No. of Instructional Units Credit <b>3</b> Lecture <b>2</b> Tutorial <b>2</b>	Prerequisite <b>None</b>

#### 2- Course Aim

<p><b>(a) History:</b> This course is meant to introduce the students to the history and design of Islamic Architecture. Students begin by examining the formation and development of architectural, artistic, and urban traditions of the Islamic World. They are then introduced to the ideas and cultures that shaped the architectural character of the Islamic Era. Students learn from selected examples of religious, civic and residential Islamic Architecture in a chronological order.</p> <p><b>The course aims to:</b></p> <ul style="list-style-type: none"><li>• Provide the student with the main knowledge regarding the history of Islamic Architecture.</li><li>• Develop an understanding of the evolution of Islamic design in correlation with Islamic history.</li></ul> <p><b>(b) Theory:</b> This course is an introduction to architectural design. Students begin by studying buildings and their location as well as the design process and methodology. Next, they study design approaches, types of design processes, character and environment. Finally, they study principles of house design, various educational buildings such as nurseries and schools. Students learn how to design using proper methods and steps, while bearing in mind the appropriate design criteria.</p> <p><b>The course aims to:</b></p> <ul style="list-style-type: none"><li>• Produce graduates equipped to tackle any design problem logically and systematically.</li><li>• Develop an understanding of design criteria concerning the most prominent building types.</li><li>• Enhance the student's practical skills in data collection and analysis.</li></ul>
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#### 3- Intended Learning Outcomes

<b>a- Knowledge and Understanding</b>	<b>Through knowledge and understanding, students will be able to:</b> <ul style="list-style-type: none"><li>• Summarize the evolution of architectural theory from the past up to recent times.</li><li>• Explain the basis of architecture and architectural design.</li><li>• Illustrate the effect of prevailing conditions in each environment on the design outcome.</li><li>• Draw connections between gathered information and design solutions.</li></ul>
<b>b- Intellectual Skills</b>	<b>Through intellectual skills, students will be able to:</b> <ul style="list-style-type: none"><li>• Analyze influencing factors &amp; the surrounding environment and take them into consideration during the design process.</li><li>• Integrate architectural design with the various architectural trends and historical theories</li><li>• Analyze the old and recent architectural works and make use of them</li><li>• Determine the reflection of the society &amp; civilization on the architectural design components and formation</li></ul>

<b>c- Professional Skills</b>	<p><b>Through professional and practical skills, students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Design through systematic, logical and creative thinking.</li> <li>• Collect information from different resources to support scientific thinking and opinions in architectural discussion</li> </ul>
<b>d- General Skills</b>	<p><b>Through general and transferable skills, students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Write structured research in accordance with the standard scientific guidelines.</li> <li>• Present reports in seminars or group meetings, discuss findings, defend his/her ideas, and communicate effectively in writing, verbally and through drawings and models.</li> <li>• Work coherently and successfully as part of a team in projects, assignments, etc.</li> <li>• Independently seek knowledge, set aims, targets, objectives and plan to meet them with a deadline (time management).</li> <li>• Adopt an open-minded approach in the appraisal of design issues, requirements and opportunities.</li> <li>• Listen and critically respond to the views of others.</li> <li>• Transfer techniques and solutions from one field of architecture to another.</li> </ul>

#### 4- Course Content

<b>(a) History:</b>	
<b>Week No.1</b>	The Islamic World: Introduction, Geographical and Historical introduction
<b>Week No.2</b>	Islamic House: Introduction. Social & religion factors. Study of the elements of an Islamic house. Architectural examples: Al Sehami House – Al Kredliah House –Al Zahabi House
<b>Week No.3</b>	Umayyad Period: Introduction. Social & Religion factors. Architectural examples: UMAYYAD Mosque (great Mosque)- Damascus. Dome of the Rock- Jerusalem
<b>Week No.4</b>	Umayyad Arch. In Spain & North Africa: Introduction Cordoba great Mosque. Quairawan great Mosque
<b>Week No.5</b>	Abbasid & Tulunid Periods: Introduction. Social & Religion factors. Architectural examples: Great Mosque –Samarra.Mosque of AHMED IBN TULUN- Cairo
<b>Week No.6</b>	Fatimid Period I: Introduction, Architectural examples: Cairo Gates, Al-Azhar Mosque – Cairo: Al-Aqmar Mosque -Cairo
<b>Week No.7</b>	Continuation of the previous lecture and evaluation.
<b>Week No.8</b>	Fatimid Period II: Architectural examples: Mosque of El-Guyushi – Cairo. Mosque of Al-Hakim – Cairo, Mosque of Al-Salih Talai – Cairo
<b>Week No.9</b>	Ayyubid Period: Introduction. Social & Religion. Factors. Architectural examples: Madrasa of al – Malik as Salih Najmad Al– Dim Ayyub, Salah El Din Citadel, Cairo
<b>Week No.10</b>	Bahrid – Mamluk Period: Introduction. Social & Religion factors. Architectural examples: Hospital Mausoleum and Madrasa of Qalaun, Cairo Examples: Funerary complex of Sultan Hassan, Cairo
<b>Week No.11</b>	Suljuq - Mamluk Period: Introduction. Social & religion factors. Architectural examples: Madrasa and Mausoleum of Sultan Barquq, Cairo. Madrasa and Mausoleum of Sultan Qayitbay
<b>Week No.12</b>	Continuation of the previous lecture and evaluation.
<b>Week No.13</b>	Ottoman Period – Muhammad Ali Period: Introduction. Social & religion factors. Architectural examples: Complex of Selimiye, Edirn. Complex of Suleymaniye Mosque, Istanboul. Mosque of Muhammad Ali – Cairo. Mosque of Sinnan – Cairo
<b>Week No.14</b>	Public Buildings: Introduction. Social & religion factors. Architectural examples:Islamic City (Bagdad, Cairo) - Wequalah – Public thermae – Sabil and Kottab
<b>Week No.15</b>	Public Buildings: Palaces, (Alhamrah) Citadels and Fortifications

**(b) Theory:**

<b>Week No.1</b>	Definition of architectural design.
<b>Week No.2</b>	Building types and their locations (the cluster, the neighborhood, the community, the city and the region).
<b>Week No.3</b>	Design process (data collection, programming, analysis, synthesis, ideas, evaluation, decision, optimal solution, revision, final design).
<b>Week No.4</b>	Design approaches: scientific approach and intuitive sense.
<b>Week No.5</b>	Principles of House Design.
<b>Week No.6</b>	Housing: types, users, planning. (Single family house, apartment building)
<b>Week No.7</b>	Continuation of the previous lecture and evaluation.
<b>Week No.8</b>	Housing: types, users, planning.
<b>Week No.9</b>	Public Buildings 1: Commercial buildings.
<b>Week No.10</b>	Public Buildings 2: Commercial buildings, restaurants and kitchen
<b>Week No.11</b>	Public Buildings 3: Educational buildings (introduction and types of schools).
<b>Week No.12</b>	Continuation of the previous lecture and evaluation.
<b>Week No.13</b>	Public Buildings 4: Museums (types and design principles).
<b>Week No.14</b>	Public Buildings 5: Health care (introduction and types).
<b>Week No.15</b>	Public Buildings 6: Health care (design criteria).

**5- Teaching and Learning Methods**

The course is delivered through a series of:  
Lectures, discussion sessions, site visits and project work.

**6-Teaching and Learning Methods for Students with Special Needs**

- Consulting with lecturer during office hours.
- Consulting with teaching assistant during office hours.
- Private sessions for redelivering the lecture contents.
- For handicapped accessibility, please refer to program specification.

**7- Student Assessment**

Asses No.	Procedures used		Start Week No.	Subm. Week No.	Weighting of Asses.
	Type	To assess			
1	History: Written exam. Theory: Written exam.	Knowledge and understanding.	7	7	15% 15%
2	History: Written exam. Theory: Written exam.	Knowledge and intellectual skills.	12	12	10% 10%
3	Attendance & Researches Written exam.	All skills.	16	16	10% 40%
<b>Total</b>					100%

**8- List of References:**

<b>a- Course Notes</b>	N/A
<b>b- Required Books (Textbooks)</b>	<ul style="list-style-type: none"> <li>• GRUBE E.G. and Others, <i>Architecture of the Islamic World</i>, Thames &amp; Hudson Ltd., London, 1978.</li> <li>• NEUFERT Ernst, <i>Architects' Data</i>, Granada, New York, 1994.</li> </ul>
<b>c- Recommended Books</b>	<b>History</b> <ul style="list-style-type: none"> <li>• ABOUSEIF, Doris Behrens, <i>Islamic Architecture In Cairo: an Introduction</i>, 2nd Ed- Leiden: E.J.Brill, 1992.</li> <li>• BARRY, Michael, <i>Color and Symbolism in Islamic Architecture: Eight Centuries of the</i></li> </ul>

	<p><i>Tile-Maker's Art</i>, Thames &amp; Hudson, London, 1996.</p> <ul style="list-style-type: none"> <li>• BLAIR, Sheila S, <i>The Art and Architecture of Islam 1250-1800</i>, Yale University Pr, New Haven, 1994</li> <li>• CRUICKSHANK Dan, <i>Sir Banister FLETCHER'S: A History of Architecture</i>, 20th edition, Architectural Press Books, Oxford, 1996</li> <li>• GOODWIN Godfrey, <i>A History of Ottoman Architecture</i>, Thames &amp; Hudson, London, 1971.</li> <li>• HILLENBRAND Robert, <i>Islamic Art and Architecture</i>, Thames &amp; Hudson, Londond, 1999</li> <li>• HILLENBRAND Robert, <i>Islamic Architecture: Form, Function and Meaning</i>, Edinburgh University, Edinburgh, 1994</li> <li>• MICHELL George, <i>Architecture of Islamic World.</i>, Thames &amp; Hudson, Londond-1978</li> <li>• SERAGELDIN Ismail, <i>Architecture of the Contemporary Mosque</i>, London: Academic Pr, 1996</li> <li>• STEWART Desmond, <i>Great Cairo: Mother of The World</i>, American Univ. in Cairo Pr, 1981</li> <li>• WILSON, Eva, <i>Islamic Designs</i>, London: British Museum Pub, 1988</li> <li>- عكاشة، د. ثروت – القيم الجمالية في العمارة الإسلامية – دار المعارف.</li> <li>- علام، نعمة إسماعيل – فنون الشرق الأوسط في العصور الإسلامية - دار المعارف.</li> <li>- شافعي، فريد محمود – العمارة العربية الإسلامية – الرياض ١٩٨٢.</li> <li>- العمري، أمال – العمارة في مصر الإسلامية – القاهرة مكتبة الصفا والمروة ١٩٩٦.</li> <li>- خلوصي، محمد ماجد – عمارة المساجد – سجل العرب ١٩٩٨</li> </ul> <p><b>Theory</b></p> <ul style="list-style-type: none"> <li>• BRURAKER C. William, <i>Planning and Design Schools</i>, Mcgraw Hill, New York, 1998</li> <li>• CHING Francis D.K, <i>Architecture: Form, Space &amp; Order</i>, 2th Edition, Van Nostrand Reinhold, New York, 1996.</li> <li>• DE CHIARA Joseph, Panero, Julius &amp; Zelnik, Martin, <i>Time-Saver Standards for Housing and Residential Development</i>, Mcgraw Hill Inc., New York, 1995</li> </ul>
<p><b>d- Periodicals, Web Sites, etc.</b></p>	<p>N/A</p>