



**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 130</b>	Course Title: <b>History of Architecture &amp; Technology</b>	Academic Year/Level: <b>1<sup>st</sup> year / 1<sup>st</sup> semester</b>
Specialization: <b>Architecture</b>	No. of Instructional Units	Prerequisite
	Credit <b>2</b> Lecture <b>2</b> Tutorial <b>0</b>	<b>None</b>

#### 2- Course Aim

This course includes definitions of architecture, character, and style with a chronological overview of the different architectural styles. The study begins with the first traces of prehistoric buildings and settlements in the Ancient World and covers:  
 Egypt: The Archaic period, the Old Kingdom, the Middle and New Kingdoms until the Ptolemaic and Roman periods.  
 Mesopotamia: Summer, Akkad, Babylon, Assyria and Persia.

**The course aims to:**

- Develop an understanding of the interrelation and influence between the organizations of the built environment and the social, political, cultural and technological aspects that shape the architectural character in the Ancient World period.
- Provide the student with knowledge of environmental responsiveness via underlining materials and techniques used in varied types of architecture from prehistory up to the conquest of Alexander the Great.

#### 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>• Distinguish between periods of architectural history and evaluation of architectural</li> <li>• Classify the different factors which affect architecture &amp; standards of successful architectural work (K4).</li> <li>• List the tools architects use to produce arch. which respects its place and time.</li> <li>• Demonstrate the identification of the history and theory of architecture from the Prehistoric period to Ancient Egyptian, Mesopotamian and Persian civilisations (K4).</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 the context such as the society, its structure, needs and the technological civilization, and their reflection on the architectural and design vocabulary (I7).</li> <li>• Examine and comprehend the fundamental principles present in relevant precedents of Ancient Egyptian architecture and to make choices regarding the incorporation of such principles into architecture and urban design projects (I5).</li> <li>• Form considered judgments about the spatial, aesthetic, technical and social qualities of a design within the scope and scale of a wider environment, and develop a critical awareness of current problems (I7).</li> </ul>
<b>c- Professional Skills</b>	<b>Through professional and practical skills, students will be able to:</b> <ul style="list-style-type: none"> <li>• Prepare architectural reports of social, economical, structural, constructional and environmental facts and circumstances related to the Ancient Egyptian period (P3).</li> <li>• Assess an architectural work and recognize its weaknesses and strengths based on his/her study of Ancient Egyptian architecture (P7).</li> <li>• Generate, develop and evaluate creative, innovative and appropriate solutions and proposals for societal problems (P1).</li> </ul>

	<ul style="list-style-type: none"> <li>• Prepare, develop and present drawings using an appropriate range of visual, verbal and written media (P2).</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>• Collaborate effectively in oral, graphic and written form within multidisciplinary team (G1).</li> <li>• Search for information and adopt life-long self learning (G5).</li> <li>• Work in stressful environment and within constraints (G2).</li> <li>• Listen and critically respond to, the views of others (G6).</li> </ul>

#### 4- Course Content

<b>Week No.1</b>	ARCHITECTURE, HISTORY OF ARCHITECTURE: Definition, Influences: geographical, geological, religious, economical, social factors, architectural character, style definition. Panoramic review of styles from prehistoric to post-modern architecture.
<b>Week No.2</b>	PREHISTORIC ARCHITECTURE, Paleolithic, Mesolithic, Neolithic, Chalcolithic Ages. Birth of civilization, civil, religious and funerary architecture, Prehistoric settlements, Prehistoric in Europe.
<b>Week No.3</b>	EGYPTIAN ARCHITECTURE: Influences: geographical, geological, historical, social and religious. The Archaic period: civil, religious and funerary architecture.
<b>Week No.4</b>	Old Kingdom: Third dynasty, civil, religious and funerary architecture, Pyramid of Saqqarah, Stepped Pyramids.
<b>Week No.5</b>	Old Kingdom: Fourth dynasty: Pyramids of Guizeh. Fifth and Sixth dyn. pyramids.
<b>Week No.6</b>	Middle Kingdom: Civil, religious and funerary architecture: Mentohotep funeral complex, 12th dyn. Pyramids, Beni Hassan Tombs.
<b>Week No.7</b>	Continuation of the previous lecture and evaluation.
<b>Week No.8</b>	New Kingdom: civil, religious architecture: Louxor, Karnak, Abydos, Aten Temples, Rock Hewn Temples.
<b>Week No.9</b>	New Kingdom: Funerary architecture: Tombs, Hatshepsut Temple. Siti I, Ramesseum, Ramses III Temples, civil architecture.
<b>Week No.10</b>	Ptolemaic Period.
<b>Week No.11</b>	Egyptian Art.
<b>Week No.12</b>	Continuation of the previous lecture and evaluation.
<b>Week No.13</b>	Mesopotamian art and architecture: religious, civil architecture.
<b>Week No.14</b>	Persian art and architecture.
<b>Week No.15</b>	Persian art and architecture.

#### 5- Teaching and Learning Methods

The course comprises a series of lectures, and the material discussed and presented is recorded and illustrated in a history notebook which forms the basis for assessment and serves as a future reference for students. Field visits to Cairo and some historical sites of Guizeh and Saqqarah are organized.

## 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	Notebook	Knowledge and understanding	1	5	10%
2	Written exam.	Knowledge and understanding		7	20%
3	Research	All skills	1	9	10%
4	Written exam.	Knowledge and understanding		12	10%
5	Notebook	Knowledge and understanding	1	14	10%
6	Written exam.	All skills		16	40%
<b>Total</b>					100%

## 8- List of References:

<b>a- Course Notes</b>	Notes are handed out to the students regularly.
<b>b- Required Books (Textbooks)</b>	<ul style="list-style-type: none"> <li>• WILKINSON, Richard, <i>The Complete Temples of Ancient Egypt</i>, Thames &amp; Hudson, New York, 2000.</li> </ul>
<b>c- Recommended Books</b>	<ul style="list-style-type: none"> <li>• CRUIKSHANK, Dan, <i>Sir Banister Fletcher's A History of Architecture</i>, 20<sup>th</sup> edition, Architectural Press Books, 1996.</li> <li>• D'AVENNES, E. Prisse, <i>Atlas of Egyptian Art</i>, American University, Cairo, 1997.</li> <li>• FRANKFORT, Henri, <i>The Art and Architecture of the Ancient Orient</i>, Yale University Press, New Haven, 1996.</li> <li>• JAMES, T.G.H., <i>A Short History of Ancient Egypt: From Predynastic to Roman Times</i>, Libraire Du Liban, Beyrut, 1995.</li> <li>• JANSON, H.W., <i>History of Art</i>, 5<sup>th</sup> ed., Thames &amp; Hudson, London, 1997.</li> <li>• KOSTOF, Spiro, <i>A History of Architecture</i>, Oxford University Press, New York, 1985.</li> <li>• LEHNER, Mark, <i>The Complete Pyramids</i>, American University in Cairo Press, 1997.</li> <li>• MOFFET, Marian, FAZIO, Michael, WODEHOUSE, Laurence, <i>A World History of Architecture</i>, Laurence Publishing, London, 2003.</li> <li>• RAYMOND, Andre, <i>The Glory of Cairo: An Illustrated History</i>, American University in Cairo Press, Cairo, 2000.</li> <li>• SILIOTTI, Alberto, <i>Guide to the Pyramids of Egypt</i>, American University in Cairo Press, Cairo, 1997.</li> <li>• SILIOTTI, Alberto, <i>The Discovery of Ancient Egypt</i>, American University in Cairo Press, Cairo, 1997.</li> <li>• WILDUNG, Dietrich, <i>Egypt from Prehistory to the Romans</i>, Taschen's World Architecture, Sierlin, 1997.</li> <li>• عكاشة، د. ثروت – الفن الإغريقي – الهيئة المصرية العامة للكتاب ١٩٨٢</li> <li>• لمعي، د. صالح- عمارة الحضارات القديمة – دار النهضة العربية – بيروت ١٩٨٣</li> <li>• علام، نعمت إسماعيل – فنون الشرق الأوسط والعالم القديم- دار المعارف – القاهرة ١٩٨٨</li> </ul>
<b>d- Periodicals, Web Sites, etc.</b>	N/A